THE EFFICACY OF AN ANDRAGOGICAL INSTRUCTIONAL

METHODOLOGY IN BASIC POLICE TRAINING AND EDUCATION

Thesis submitted for the degree of

Doctor of Philosophy

at the University of Leicester

by

Robert F. Vodde, B.S., M.A., M.P.A.

Department of Criminology

University of Leicester

May 2008

ACKNOWLEDGMENTS

While many important people have provided me with the inspiration, support, and encouragement in this endeavor – some in spirit and others more actively engaged – no one has provided me with as much as Jan, my dedicated wife of 31 years. She has served as my best friend and mentor with her never-ending patience, guidance, and selfless support. I also want to thank my three children – Shaun, Dana, and Justin – for their patience and understanding during my conspicuous absence in times of reading, reflection, and writing.

Next to my wife and children, I want to thank Deborah Minervini, Patrick J. Reynolds and Jeffrey Burke, who have had to deal with my endless deliberations, and in a particular way, Dr. Richard Gray, who has painstakingly read and re-read every word that I have written and re-written.

Many personal friends and professional colleagues have also provided encouragement and support, not the least of who include: Superintendent of the New Jersey State Police, Carson Dunbar, *Ret*., Dr. Michael Adams, Dr. Nicholas J. Baldwin, Dr. Richard Bronson, Dr. Richard Celeste, Dr. Dario Cortes, Dr. Richard Gray, Dr. Joe Kiernan, Dr. James Kenny, Dr. Paula Mayhew, and Dr. John Snyder. In a special way I am indebted to Dr. Mike Rowe, my thesis supervisor, who provided me with the necessary guidance and encouragement during these past five years.

Last, but not least, are the dedicated faculty, staff, and the hundreds of recruits with whom I had the privilege of spending two years. It is my hope that the findings of this study may contribute in some small way to improving basic police training and the careers of those who dedicate their lives in the service of others.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES

ABSTRACT

The Efficacy of an Andragogical Instructional
Methodology in Basic Police Training and Education

Robert F. Vodde

The principle mission of policing in the United States, unchanged since its inception, serves to maintain social order and control. As society continues to grow, mature, and evolve, so too has the complexity of fulfilling this mission. Because today's sophisticated, fast-paced, and ever-changing society continues to experience unprecedented social, cultural, legal, political, economic, and technological changes, the expectations of its police have grown exponentially. With recruitment, the training of new police officers has broad implications for their ability to meet new and changing duties and responsibilities.

While a traditional, pedagogical, military model of training may have at one time served the needs and interests of police and society, its applicability and efficacy has been called into question. It is theorized that an andragogical (adult based) instructional methodology will serve as a more effective means for training police recruits.

Andragogy, rooted in the belief that adults learn differently than children, bases its practices on the needs, interests, readiness, orientation, experience, and motivation of the adult learner. Considering these needs, andragogy focuses on facilitating a holistic, integrative, and collaborative approach to learning that places a strong emphasis on experiential learning.

While anecdotal data suggests that andragogy yields greater outcomes in learning and competencies when compared to a traditional, pedagogical, military model, the absence of empirical data served as an impetus to this study which revealed that an andragogical instructional methodology was more effective.

INTRODUCTION

Background of the Problem

The Institutionalization of American Policing

Humans have historically demonstrated an innate need to ensure their safety and to maintain social order and control. Traditionally, the responsibility for fulfilling this function was relegated to the family and the immediate community. As societies grew, evolved, and matured, these responsibilities not only expanded in scope, but shifted to the sphere of government, more specifically, to personnel and organizations that we currently recognize and collectively refer to as the 'police' (Roberg, Novak, and Cordner, 2005: 37-38). While the mission of policing democratic societies has fundamentally remained unchanged over the course of the past two hundred years, its role within society has undergone changes and transitions, as have the methods for achieving its goals and objectives (Roberg, Kuykendall, and Novak, 2002: 10-19). Underscoring the challenges that face today's police is the importance of how new officers are trained (Gaines and Kappeler, 2005: 138; Walker and Katz, 2008: 146-147; Birzer and Tannehill, 2001: 233). While basic police training is not represented as the panacea for the innumerable challenges that face modern policing, the process represents a critical factor in the professional preparation of new police officers. While a traditional, pedagogical, military model of training may have at one time served the needs and interests of society, its applicability and efficacy have recently come under question. Toward that end, it is theorized that an andragogical instructional methodology is a more effective means for training police recruits. In this context, this study will begin with a brief examination of the history of American policing, the nature and extent of basic training, the learning processes associated with training, and a comparison of the traditional, pedagogical, military model of training to an adult-based, andragogical training methodology.

To understand policing within the United States, including its training practices, it is important to acknowledge that their historical development has been strongly influenced by,

and in many respects, paralleled similar developments in the United Kingdom (Gaines and Miller, 2005: 139). Walker and Katz (2005: 25), addressing this relationship, explain that the police in the United States are a product of their history, and consequently, have been strongly influenced by English heritage. This heritage includes the traditions of 'common law and the high value placed on individual rights', its judicial system, and the variety and extent of its law enforcement agencies. Underscoring Britain's influence, the authors point out that the United Kingdom has 'contributed three enduring features to American policing': (1) a tradition of limited police and government authority, thus placing 'a high premium on protecting individual liberty', (2) 'a tradition of local control of law enforcement agencies', and (3) a highly decentralized and fragmented system of policing (Walker and Katz, 2002: 25-26). Indeed, any discussion of America's police, which has been characterized as a series of tumultuous transitions, would be deficient if it did not recognize the influence of Britain's reforms and the impact they have had on the United States, perhaps most notably, those initiated by Sir Robert Peel and his commissioners in 1829 under the auspices of the *Act for Improving the Police in and Near the Metropolis* (Peak, 2006: 12-16). Widely recognized as the *father of modern policing*, Peel's reforms continue to influence America's current policing practices (Walker and Katz, 2008: 25).

To understand the functions, operations, and training of police within a democracy it is important to recognize, first and foremost, that they are a microcosm of society, i.e., they are a product of, and an integral component of the communities they serve. This was perhaps best stated by Sir Robert Peel (1829) when he declared 'the police are the public and the public are the police'. Explained otherwise, Swanson, Territo, and Taylor (2001: 1) point out, 'as a profoundly significant social institution, policing is subject to, and continuously shaped by, a multitude of forces at work in our larger society', thus, the history of American policing 'cannot be understood properly if it is examined alone', rather, it can best be understood in the context of America's growth and development. Given the parallel between the police and society at-large, it is important to observe that their response to the changing needs and

interests of society has traditionally been in a reactive mode, i.e., rather than keeping up with, or proactively anticipating the changing needs and demands of the community, they have historically lagged behind (Miller and Hess, 2005: 17-18). As Brandell and Barlow (2004: 1) point out, 'social institutions, such as the police, are human constructions that form and develop in relation to various political, economic, and social forces'. Certainly, today's police can not be abstracted from their past. On the contrary, their current standing within society has been forged over a long period of time and this speaks to how and why they exist today. Any attempt, therefore, 'to describe the police and their function must begin with an analysis of their historical development' – which the following synopsis will attempt to do.

Historical Development of America's Police

As with most historical accounts, it is important to acknowledge that there are problems that relate to the writer's personal perspective and interpretation (Purpura, 2001: 3). Indeed, in tracing the historical development and evolution of America's police, there exits a variety of themes, explanations, and timelines that guide the research. As Kelling and Moore (2004: 5) point out, the difficulty in interpreting the development of America's police is that their 'history is incoherent, its lessons hard to read,' and that it 'was produced by thousands of local departments pursuing their own visions and responding to local conditions'. Fosdick (1972: 3-57), commenting on the tumultuous evolution of America's police suggests that many factors have contributed to what he describes as 'fundamental divergencies in national conditions', some of which include: a heterogeneous population, ambiguous and unenforceable criminal laws, 'faulty personnel', anomalies in the 'machinery of justice', politics, public attitudes, and what he characterizes as a 'preponderance of crime'. Despite its fragmented past, however, these authors suggest that a historical analysis of America's police can lend itself to an objective analysis and interpretation of their growth and maturation. While some historians have categorized the history of America's police into four or five periods, Kelling and Moore indicate that they 'found it useful to divide the history of policing into three eras': (1) the Political Era, (2) the Reform Era, and (3) the Community Policing Era.

It is during this last period, the Community Policing Era, when the need to examine the efficacy of traditional embraced methods for training America's modern police arises (Kelling and Moore, 1998 cited in Brandell and Barlow, 2004: 5-25).

Notwithstanding popular acceptance of Kelling and Moore's historical divisions (Gainer and Miller, 2006; Stevens, 2003), there are other academicians that not only 'take issue' with their account[1], but provide a more expansive chronicling of America's police to include the period of the 1600s through to the early 1800s, commonly referred to as America's Colonial Period of policing (Champion and Hooper, 2003; Dempsey and Forst, 2005; Purpura, 2001, et al). Given that this period serves as an important backdrop to the three eras of policing outlined by Kelling and Moore, the following synopsis will begin by examining this period of time. By way of preface, it is important to note that this brief review is merely intended to provide a historical backdrop to illustrate the parallels in the growth and development of American's police with that of society at-large and how those parallels affected police training; the issue of police training will be chronicled in the section following this review.

America's Colonial Era of Policing (1600 – 1840)

Renown police historian, Raymond B. Fosdick (1972: 58), discussing the early beginning of police in America, acknowledged that their origin developed in colonial practices (1972: 58). Bailey (1995: 553-558), addressing *Early American Policing* writes that 'the earliest inhabitants of colonial cities in the seventeenth century still had one foot in the Middle Ages'; that 'their worldview was dominated by scarcity'. Addressing the then state-of-affairs, he explains that the government's pre-occupation 'was to regulate economic life so that strangers did not usurp work rightfully belonging to residents, or wandering poor gain the

---

[1] Stevens (2003: 11) writes 'among others, Hubert Williams and Patrick Murphy (1999) take issue with Kelling and Moore's (1999) historical perspective of America's policing. Williams and Murphy felt that Kelling and Moore's interpretation is inadequate – it fails to take into account how slavery, segregation, discrimination, and racism affected the development of police strategies, and how these strategies affected police response to minority communities'. As pointed out, the history of America's police encompasses many components, including that involving the slave police of the south, which this synopsis does not include. The significance of this review is to merely provide a broad overview of the development of U.S. policing with the objective of focusing on the parallels between police and society, and how that has influenced police training.

right to local relief, or greedy men take undue advantage of consumers'. He emphasized that 'public officials did not think of government as a provider of services financed through the collection of taxes', which included among many things, the notion of having to finance others to provide policing services. As was the case with other early communities where formal policing was nonexistent – in America's early days of colonization – 'ordinary citizens played a major role in maintaining social control through informal means'. Such informal controls were possible because communities were small, homogeneous, and 'people shared the same basic values' (Walker and Katz, 2005: 27-28). Similarly, Bailey (1995: 554) writes that 'in the colonial period, order maintenance and crime-fighting were more individual and communal responsibilities than the purview of a bureaucratic agency'. Over time, however, as English colonists increased in numbers and their communities grew and developed, the means for maintaining social order and control was influenced, to a great extent, by the 'customs, laws, and law enforcement systems known in their native land' (Champion and Hooper, 2003: 74). While the positions and operational practices of the constable, the watch and ward system, and the sheriff served the interests of America's early pioneers, they 'eventually acquired distinctive American features' as a consequence of the many changes the country was experiencing (Walker and Katz, 2005: 27-28). One such feature, which according to Stevens (2003: 5-6) was distinctively different from its English roots and practices in other European countries, was that 'American society from the beginning was far more violent'; with riots being a 'recognized feature of pre-industrial urban life'. Bailey explains that these riots had specific political targets and goals. While 'rioters rarely took life . . . they often destroyed considerable property'; as exemplified by the riots 'associated with the American Revolution, such as the protests over the Stamp Act of 1765, the Boston Massacre of 1770, and the Boston Tea Party of 1733' (Bailey, 1995: 554).

Eventually, however, 'whenever families failed in their tasks of nurturing and disciplining their members, other institutions had to step in to remedy the deficiencies' (Bailey, 1995: 555). While some situations were dealt with by social and religious

institutions, others necessitated the establishment of some form of policing. These early forms of policing differed from place to place reflecting the different backgrounds and experiences of the early colonists, most of who came from different parts of England. This contributed to an uncoordinated and fragmented policing system. Addressing this point, Purpura (2001) writes that 'prior to 1800, over 90 percent of the people in the North American colonies were from England, and perhaps a third had been subject to 'transportation' (i.e., forced to leave England as a sentence for a crime)'. Consequently, 'many colonists resented royal authority and were determined to live without it in America. These circumstances influenced the fact that constables and sheriffs were typically elected positions held for short periods of time', which in turn set the stage for a decentralized and politically influenced policing 'system'.

In sum, America's early policing 'system' reflected a pragmatic response to the needs and interests of the local constituency. By most accounts, policing represented a disorganized, uncoordinated, and decentralized enterprise, due in great part to the colonist's contempt for centralized government. This brought the police to local control, and by default, under the influence of local politics. Clearly, in retrospect, there was a conspicuous absence of any uniform or standardized mission, vision, goals or objectives, and training. Bailey (1995: 527), discussing the development of police training in the United States, indicates that 'most police scientists agree that police training [has] changed little from the constabulary and night-watch system of 1636 through to the mid-1900's; the essence of which ostensibly consisted of 'a brief set of directions and [being] sent out on [one's] own'. Conceptually and operationally, any form of police training was non-existent during the Colonial Era.

America's Political Era of Policing (1840 – 1930)

Underscoring the historical parallels between society and its police, Kelling and Moore (1998 cited in Brandl and Barlow, 2004: 7) explain that the *Political Era* of policing is so named because of the contentious relationship that existed between the police and politicians. Political corruption permeated nearly every aspect of local government and police

6

were at the centre. When examining this period of time, it is important to bear in mind that its characterization is principally based on the activities that were systemic to America's major cities. The perspective does not necessarily include the hundreds of small local police departments with fewer than ten officers. According to Bailey (1995: 558) fifty-seven of America's largest cities had established their police departments between 1850 and 1880. This was due in great part to the influences of the Industrial Revolution which attracted a large and culturally diverse influx of people to America's cities from both its rural areas and countries such as Ireland and Germany. This convergence of 'social, political, and economic forces of the period' led to over-population, social unrest, social disorder, and crime. These problems were further compounded by the deleterious effects of its Civil War (1862 – 1865). Not only did the population of the United States triple in size from 30 million to over 92 million during this period of time, but so did the number of people living in its cities. In fact, 'the number of people living in cities grew from a low of 5 percent in the early nineteenth century to over 45 percent by 1910'. For example, the population in cities of Boston, New York, and Philadelphia grew from less than 100,000 people in the early nineteenth century to more than 1 million by 1890 (Bailey, 1995: 558; Bailey citing Johnson, 1979: 4; Lane, 1975: 161).

Notwithstanding many of the positive aspects of this period such as the close bond that the police had established with the community, this era has been and continues to be characterized by the adverse effect of politics, corruption, urbanization, industrialization, migration of people, and exponential growth in the public and private sectors (Roberg, 2005). Addressing the influence of politics, Roberg (2005) explains that 'several trends converged in the mid-1800's that resulted in the creation of political machines that controlled cities, including the police department'. These trends included pressure on politicians by the upper and middle classes for municipal services and protection of their *status quo*, an influx of immigrants who politicians lured and exploited with promises of employment in exchange for support, and political appointments to the police department so as to ensure control in the

community. The influence of politics was so overt during this period, that it not only influenced police arrests and services, but also 'who was employed, who was promoted, who was the chief of police, and who was appointed to the police commission'; in effect, the police department was run 'in a manner approved by elected officials' (Roberg, 2005: 46; Miller and Hess, 2005: 10).

This political culture, while individually unique from city to city, nevertheless transcended urban boundaries and influenced policing practices throughout the rest of the country (Champion and Hooper, 2003: 85). By the end of the century, as cities began to grow larger and become more difficult to manage, the politically corrupt police departments came under increasing criticism. Indeed, the ill effects of the Civil War (1862-1865), World War I (1914-1918), the *roaring twenties*, prohibition of alcohol (1920-1933), labor strikes, and the crash of the stock market leading to the *Great Depression* (1929), all took their toll. The public's growing contempt for political corruption and other social ills such as 'an increase in crime, population congestion, inadequate housing, health problems, [and] waste disposal' all gave rise to calls for reform (Champion and Hooper, 2003: 85). The reformers, or *progressives* as they came to be known, 'were made up of religious leaders and civic-minded upper and middle-class business and professional people [who] argued that government should be managed efficiently, public officials should be honest, and there should be one standard of conduct for everyone' (Roberg, Crank, and Kuykendall, 2000: 45). Finally, in 1929 President Hoover, as part of his initiative to reform government, appointed the *National Commission on Law Observance and Enforcement* to study the criminal justice system. This set the stage for a new era of policing (Roberg, Novak, Cordner, 2005: 45-46). While few, if any initiatives in training occurred at the beginning of this era, by the end, an increasing amount of attention was directed to its significance as a result of the public's growing contempt of political corruption and social disorder. By example, in 1877 the Cincinnati (Ohio) Police Department and later in 1903, the Cleveland Police Department established a training program for police recruits, where on a weekly basis, 'captains in each of the thirteen

precincts conducted classes that covered state law, city ordinances, and departmental regulations (Brand and Peak, 1995: 45-58). It was not until 1907, however, that August Vollmer[2], Marshall of the City of Berkeley, California, set forth 'the idea for the first formal police academy'. He was 'convinced that the principle problem of all police departments was inefficiency' which he contended was directly related to inexcusable ignorance and lack of training (1995: 46). Resolving to address these deficiencies, in 1908, he developed a *police school* 'which covered a wide variety of subjects such as police methods and procedures, fingerprinting, first aid, criminal law, anthropometry, photography, public health and sanitation' (Brand and Peak, 1995 citing Douthit, 1983: 102). Following Vollmer's lead, in 1909, the New York City Police Department established its first police academy which 'provided recruits with training in firearms, departmental rules and regulations, police procedures, and criminal law' (Brand and Peak, 1995 citing Gammage, 1963: 102).

America's Reform Era of Policing (1930 – 1970)

Given the over-reaching influence and control that politicians exercised over police during the *Political Era*, there was a grassroots movement for change and reform by citizens and government alike. Society's demand for reforms, including reform of the police, gave rise to renewed calls for law and order, and reflected a need for professionalizing the police in the fight against crime (Brandl and Barlow, 2005: 10). Champion and Hooper (2003: 90) addressing the transition of policing from the *Political Era* into the *Reform Era* suggest that two major factors led to the periods' growth and reform: the progressive movement and new technologies. The progressive movement, as it applied to government, was based on three basic ideas: (1) honesty and efficiency in government, (2) more authority for public officials (and less for politicians), and (3) the use of experts to respond to specific problems (Roberg, Crank, and Kuykendall (2000: 45). New technologies involved the use of the latest scientific

---

[2] August Vollmer (1876-1955), often referred to as the *Father of modern professional policing in the United States* is renowned for contributions to American policing. A strong advocate for police professionalisation, his police career began as Marshall of Berkeley, California in 1905. In addition to help to organize over ten major police departments in and outside the United States, he was considered to be innovator and pioneer in policing. He was the first to advocate a college education for police officers, the concept of probation for first time offenders, and the decriminalization of victimless crimes (Bailey, 1995).

equipment to investigate crime and the employment of other 'state-of-the-art' innovations such as the use of call boxes, two-way radios, and motor vehicles. Because this era was influenced by the principles of industrial and scientific management, which placed a strong emphasis on the efficiency and effectiveness of bureaucracies, its philosophy permeated the organization and operations of most police departments, to include the need for increased training. Collectively, this opened the door toward adopting the professional model of policing[3] (Walker and Katz, 2005: 34-36).

By the 1920's, attempts at reform on the local, state, and federal levels were beginning to have an impact, particularly given the influence of President Herbert Hoover's *National Commission on Law Observance and Enforcement* (1929-1931). A significant part of the Commission's report was the product of *Volume 11* of *Wickersham Commission Report*, entitled a *Report on the Lawlessness in Law Enforcement*, and *Volume 14, Report on the Police,* a fourteen volume report that addressed, among other things, 'the pervasive political corruption of the time, police brutality, officers' low intelligence, poor education, overwork, and poor training. 'Prominent police authors, administrators, and commissioners felt compelled to voice their opinions with regard to the purpose, length and content of the academy curricula' (Brand and Peak, 1995: 46; Bailey, 1995: 822). Underscoring the importance of the Commission's call five years later, August Vollmer was once again 'moved to describe the deplorable quality of police officers and their training' (Brand and Peak, 1995: 47). Expressing his contempt and frustration at the unprofessional character of the police, he contemptuously wrote of what he described as 'daily demonstrations of police incompetency [where] no one apparently cares to heed the lesson they should teach' and 'where untrained persons are permitted to function as policemen, no person's life or liberty is safe' (Vollmer, 1936: 231).

---

[3] The professionalization movement of the reform era emphasized: (1) define policing as a profession, (2) eliminate political influence from policing, (3) appoint qualified chief executives, (4) raise personnel standards, (5) introduce principles of scientific management, and (6) develop specialized units (Walker and Katz, 2005: 35-36).

Yet despite Vollmer's call for increased training, there appeared a lack of momentum, perhaps in part, due to a preoccupation with the approach of World War II. Later, however, in 1957, a renewed call for training was advanced by Vollmer's protégé, O.W. Wilson, who argued that 'cadet training school should extend for a minimum period of 13 weeks, and only then if the recruit had an educational equivalent of two years of college' (Peak, 1995 citing Wilson, 1957). Despite his recommendations, however, a 1965 survey by the *International Association of Chiefs of Police* found that only 15 percent of all police agencies provided recruits any formal training before releasing them on the streets' (Peak, 1995 citing Kuykendall and Unsinger, 1975).

Bailey (1995: 562) explains that 'the impetus for police reform' came not only from society at-large, but from within the ranks of the police themselves. 'The coalition of civic, religious, and commercial groups that led the reforms of the late nineteenth century gave way to leaders from the police field after the turn of the century'. These leaders concluded, inter alia, that 'the police function was spread too thin and that the organization was a catch-all agency that absorbed too many social service responsibilities. They argued that these responsibilities detracted from what they saw as the primary goal of the police, crime control'. Relying on a professional model, 'police leaders pushed for more centralization in the administration of the departments by lengthening the chief's tenure, developed a model that organized the departments along the functional rather than geographic lines', and aimed at lessening political influences, thus insulating the police from politics (Bailey, 1995: 562). Paradoxically, while these changes succeeded in distancing the police from adverse political influences and orienting them towards a more bureaucratic, legalistic, and professional model of policing, subscription to this model stifled their ability to recognize and respond to social changes during the 1960's and 1970's, which once again led to calls for reform.

America's Community Policing Era (1980 – Present)

Not unlike the state-of-affairs that prompted reforms by Sir Robert Peel in 1829 and those by America's August Vollmer a century later, the social climate in America during the

1960's and 1970's once again called for much needed change due to 'growing violence and civil unrest' (Rosenbaum, 1998: 3-29). Events such as the civil rights movement, Vietnam War protests, the 'hippie, peace, and free love movement', experimentation with hallucinogenic and other illicit drugs, a rise in the crime rate, along with a host of other tumultuous social changes, prompted unparalleled reactions on the part of the police (Schmalleger, 2005: 194). Their conditioned response to the social unrest of the time, was based on the mentality of the *Reform Era*, which placed primacy on the need to re-establish the *law and order*, one in which society not only empowered the police with the requisite authority as *crime-fighters*, but looked to them as a recognized and respected authority figure within the community. While such an overt response was perhaps what society needed and wanted as a consequence of the corruption, social disorder, and lawlessness associated with the *Political Era*, this same type of a response was met with contempt during the 1960's and 1970's. Images of police in riot gear employing batons, tear gas, canines, and water cannons to quell crowds, not only evoked complaints of police brutality, but an outcry that the police were unsympathetically out of touch with society. Once again, this gave rise to a call for much needed reforms on the part of the police to re-connect with society, which among many things, underscored the importance for more training and was articulated in the 1967 *Task Force on Police* as part of the *President's Commission on Law Enforcement and the Administration of Justice*. It found that 'most training programs were disjointed, run by unmotivated part-timers who had little time to prepare their presentations, and inadequate for preparing a recruit to police within a democratic political context'. Among the task forces' many recommendations was a call for a minimum four year college degree, and an academy curriculum that emphasized due process, sensitivity toward the public, and 'an appreciation for enforcing the law and maintaining peace in a democratic society' (Bailey, 1995: 528). Six years later the *Task Force on Police*, part of the *1973 National Advisory Commission on Criminal Justice Standards and Goals,* 'made its own suggestions for improving police training'. Bailey suggests that these were not necessarily 'oriented toward a philosophical or

moral position vis-à-vis democracy or pluralism as with the 1967 task force', but 'seemed more interested in upgrading police training for pragmatic reasons'. While it endorsed the earlier task forces' recommendation for a minimum four year college degree, it also suggested that basic training should consist of a minimum of ten weeks, with an emphasis on 'performance and efficiency' (Bailey, 1995: 528). Further, it was viewed that by studying the psychological and sociological principles of human behaviour, recruits could gain a better understanding of the community, thus reducing hostility, and consequently, reducing citizen complaints and litigation. While the objective may have been more pragmatically oriented, i.e., with an eye on improving the measurable efficiency and effectiveness of the police, retrospectively, this transition represented an important stepping-stone toward embracing the philosophy of community policing and an important paradigm shift in basic police training.

The principle focus of community policing was on building meaningful and collaborative partnerships with the community (Miller and Hess, 2005; Roberg, Crank, Kuykendall, 2000). Gaines and Miller (2006: 182-184) explain that some of the principle attributes of community policing have their origins in the practices of the *Political Era*, despite the ill effects of political corruption. They explain that 'during the nineteenth century, police were much more involved in the community than they were after reforms'. It represented a time when 'police officers performed many duties that today are associated with social services, such as operating soup kitchens and providing lodging for homeless people'. In spirit, they contend 'community policing advocates a return to this understanding of the police mission', which represented a genuine concern and connection with the community. Because of the centrality accorded to the notion of 'reconnecting with the community', there have been multiple approaches and methodologies toward achieving the same goal, again underscoring the importance for renewed training. Addressing community policing, Miller and Hess (2006: 20-21) suggest it consists: (1) building comprehensive partnerships between the police and the community, (2) collaborating in identifying and solving problems within the community, and (3) mitigating and preventing crime. Indisputably, its spirit and import

has made significant strides toward bridging the many voids that have existed between the police and the community, however, not without the growing pains often associated with entrepreneurial growth and development.

More recently, advancing the philosophy of community policing has been the management practice of *Compstat*, a concept that originated with the New York City Police Department in 1994. Deriving its name from a computer-based program file called 'Compare Stats' (short for comparative statistics), *Compstat* represents a philosophical management tool that emphasizes 'accountability and discretion at all levels of the organization' (Bratton, 2003: iv in Henry, 2003). Henry (2003: 11-12) in his book entitled the *Compstat Paradigm* (2003), explains that before Bratton's arrival as police commissioner, the New York City Police Department 'had no functional system in place to rapidly and accurately capture crime statistics or use them for strategic planning'. Looking to capitalize on the goals of community policing, he explains that as a result of introducing *Compstat*, the New York City Police Department underwent a tumultuous transformation from what he describes as a 'rather passive and reactive agency that lacked energy and focus, to an agency that responds quickly and strategically to crime and quality of life trends with an unprecedented vigor'. Simply stated, *Compstat* represents a management process 'that identifies problems and measures the results of its problem-solving activities'. 'What was once simply a web of interconnecting lines has come to resemble a network of complimentary policies, practices and strategies that combine to make the Criminal Justice enterprise . . . reach a new level of effectiveness' (2003: 8-12). In Bratton's words, *Compstat* involves:

> the strategic and time-sensitive identification and response to management
> problems (not only crime, social disorder, and quality of life issues, but also
> internal management issues); capitalization of the expertise and input of
> internal and external personnel, both inside and outside the organization; and
> continuous organizational restructuring and re-engineering to remove
> impediments to high performance'.

> (Bratton in Henry, 2003: iv)

Convinced of its efficacy, Henry argues that *Compstat* represents 'a revolutionary method of police management . . . and although it has been adopted and practiced in the NYPD and a

few other municipal police agencies', he suggests that it will inevitably become the 'standard practice across the landscape of American police management' (Henry, 2003: 15).

Social Paradigm Shifts

Notwithstanding the significant contributions associated with community policing, its emergence has been accompanied by many challenges (Glensor, Correia, and Peak, 2000). Its implementation requires a steadfast commitment and dedication on the part of the police and community, recognizing that multi-dimensional changes need to occur. As Stevens (2003: 2) adeptly observes, 'community policing and the role of police in the United States is largely affected by changing demographics of the American community', which is further complicated by 'advances in technology, sophistication of criminal activities, uncertainties about new responsibilities mandated by law, a due process revolution, and most recently, terrorist attacks on the United States'. Indeed, these and many other changes in the fabric of society underscore the importance of building meaningful and comprehensive partnerships with the community. Decidedly, embracing the philosophy and practices associated with community policing represents a further shift away from the mindset of the reform era; one in which the police were by both design and default, a quasi-militaristic and autocratic force that subscribed to a more prescriptive and law enforcement oriented role. While traditional policing practices have been characteristically *reactive* in nature, i.e., responding *to* calls for service, community policing advocates a *proactive* posture, i.e., a philosophy that involves anticipating problems and identifying solutions before they appear, thus once again, underscoring the importance of training. Addressing this strategy, Miller and Hess (2005) explain that the term encompasses a more expansive definition, i.e., not only does being *proactiv*e necessitate anticipating problems and identifying solutions, but it also emphasizes the importance of accountability on the part of officers. Rather than blindly following a prescribed set of uniform policies and procedures, which do not always produce the same desired outcomes, officers are encouraged to take entrepreneurial initiatives and exercise good judgment and discretion. Defining discretion as 'the autonomy or freedom an officer has in

choosing an appropriate course of action', Champion and Hooper (2003: 343) explain that police officers exercise discretion 'whenever the effective limits of the officer's power leave him or her free to make a choice among possible courses of action or inaction'. Not only does the wide range of discretion represent a substantial deviation from the traditional, hierarchical, and autocratic culture of police departments of the past, but considering that it has now become an integral component of current day policing philosophies, it necessitates skill sets and competencies that separate the modern police officer from his counterpart in previous eras.

Changing Expectations in Police Competencies

Although the philosophy and practice of community policing has a relatively brief history, it is nevertheless important to realize that the move to community based policing was driven by the needs and demands of contemporary society. Consequently, it is also important to recognize that as society has grown, matured, and evolved over the past half century, so too has the need for more diverse, complex, and sophisticated police and law enforcement services. Certainly, the social, cultural, economic, legal, political, and technological changes that characterize today's global society have placed unprecedented challenges and demands on today's police, to include the ominous *war on global terrorism*. This is not to suggest that the foregoing eras of policing did not face changes and challenges unique to the police of those periods; the sophistication, however, of today's culturally diverse, fast-paced, ever-changing, technologically advanced, and globally influenced society calls for skill sets and competencies that are demonstrably different and more complex. Beyond the need for new proficiencies associated with technology, there are preeminent calls for competencies in areas such as critical thinking, problem-solving, decision making, effective communication skills, and generally, an ability to recognize and understand the multi-dimensional needs and demands of a diverse community. Even more recently is a heightened awareness and sensitivity to the role of emotional and social intelligence within policing (Goleman, 1997). Saville (2006: 38-41) indicates that 'many officers are just now appreciating how deeply the

emotional intelligence competencies affect the police profession'. As Brewer and Wilson

(1995: ix) suggest, 'human behavior is now a core component of police training' and as such,

'it is imperative that police recognize that negotiation, conflict resolution, cultural awareness,

and sensitivity are *skills,* which are more valuable than the weapons and powers we equip

them with'. Further, Champion and Hooper write that 'police officers are continuously

confronted with situations that require critical thinking', which they define as 'the analysis of

ideas in the process of solving a problem or formulating a belief'. They further contend that

critical thinking 'serves as an important prerequisite to developing the needed proficiencies in

areas such as problem solving, creativity, empathy, and understanding community values'

(2003: 253). Indeed, the literature is replete with references to the importance of such skill

sets and competencies as evidenced by statements such as:

> At the broader organizational level, as society looks for police recruits who
> epitomize the community's image of the police (i.e., tolerant, patient,
> perceptive, nonracist, etc.) police services are using psychologists in recruiting
> to ensure the selection of members of the community who have those
> particular skills.
>
> Brewer and Wilson, 1995: ix.

> It is critical in the police profession as elsewhere that law enforcement
> personnel learn how to think critically, conceptually, and creatively when
> confronted with situations needing analysis and when developing solutions to
> problems.
>
> Charles, 2000: 73.

> There is . . . an urgent need for police officers who are skilled communicators
> and decision makers, who are capable of helping citizens identify and solve
> problems in their communities, and who possess effective mediation and
> conflict-resolution skills.
>
> Birzer and Tannehill, 2001: 233.

> In this new millennium, the law enforcement profession faces the need for
> complex change. Police agencies are moving away from just responding to
> incidents.

> Answering difficult social problems requires not only collaboration with other
> social agencies and the public, but creative and critical thinking. Many view
> the community police officer as a critical social scientist – someone who
> solves social, economic, or political problems through socially active change.
>
> Dwyer and Laufersweiler, 2004: 18.

Suggesting that 'some believe that law enforcement is entering an age of enlightenment, in which police leaders can take unprecedented steps in improving the overall approach to crime and the community', Champion and Hooper (2003: 253-255) echo what others also portend, explaining that 'new policing philosophies such as community policing require that police officers possess a new set of skills to adapt to these changes'.

Clearly, critical thinking has been emphasized as a skill set that is consistently identified as essential for today's police officer. Wallace and Master (2006: 330-333), underscoring the importance placed on critical thinking, explain that it involves 'the ability to use logic and to analyze information to solve problems and make decisions'. They explain that a person with the ability to think critically is able to: (1) distinguish between verifiable facts and value claims, (2) determine the credibility of a source of facts and value claims, (3) distinguish between warranted or unwarranted reasons or conclusions, (4) distinguish between relevant or irrelevant facts, claims, or reasons, (5) detect biases, and (6) identify unstated assumptions – processes that are unequivocally integral to policing. While some may argue that the qualities and dynamics associated with critical thinking may be innate, others suggest that many of the skills associated with the process such as problem-solving, decision making, and effective communication, can be developed and honed as part of the basic police training process (Gaines and Miller, 2006: 184).

This is not to suggest that competencies in the areas of critical thinking, problem-solving, decision making, effective communication skills, sound judgment, and discretion were not desired traits for yesteryears' police, however, the mindset and expectations of society during earlier times was distinctively different. In general, the public did not engage or challenge the role and authority of its police; nor were the police as proactively engaged with the community as they are today. Whether by design or default, the police of earlier days were generally reactive in nature and despite working in a hierarchal structure enjoyed a greater degree of autonomy, whereas today's police are definitively more proactive and are held to a greater degree of accountability. One can certainly argue that by its very nature,

modern society creates an ongoing state of tension between the police and the community that they seek to serve. This ongoing state of confrontation requires a redefinition of the skills and competencies required by police, and hence, the methods of their training.

Police Training: Purpose and Implications

Basic police training may be compared to the early imprinting and conditioning that occurs during a child's formative years. Holden (1994: 279-282) underscoring the significance of police training and education, writes that 'the most important process for ensuring organizational effectiveness is training', emphasizing that 'the foundation of effective law enforcement is based on the quality of its training program'. At the risk of overstating the obvious, it is important to acknowledge that police training is generally divided into two essential areas: basic training and in-service or advanced training. While the latter is intended to develop proficiencies, expertise, or simply to update and/or enhance a veteran officer's knowledge and performance, basic training represents the initial training that a police recruit receives, i.e., it is intended 'to orient new officers to the department, teach them about the department's goals and objectives, and provide them with the necessary skills and knowledge required to do the job' (Dempsey, 1999: 101). Addressing the goals and objectives of basic training, Concur and Russell (2000: 323) suggest that it encompasses seven fundamental principles: (1) to orient an officer to the nature of police work, (2) to indoctrinate an officer with the organization and its goals and objectives, (3) to transfer the knowledge and skills necessary to perform the job, (4) to standardize procedures and increase efficiency, (5) to build confidence so that 'critical tasks can be practiced and mastered in learning situations', (6) to enhance safety and help assure survival, and (7) to build morale and discipline. Considering the foregoing, the mission of basic police training can be described as 'a process to instill a recruit with the requisite knowledge, understanding, skills, attitudes, behaviors, and competencies necessary to efficiently and effectively discharge the duties and responsibilities inherent to that of a professional police officer'. While such a mission may present itself as a straight-forward 'academic exercise', it is hardly the case, for

the success of policing lies not just in *what* a police officer does, but perhaps more importantly, *how* one does it, which speaks to, in great part, the six months of *conditioning* that occurs during the process of basic training.

Before addressing the instructional methodologies used to facilitate basic training, it is necessary to acknowledge that the curricula within America's police academies, not unlike those in other democratic countries, encompass a wide range of topics and disciplines. These embody the three educational domains of learning identified by Bloom (1969) in his *Taxonomy of Educational Objectives*, namely the cognitive, affective, and psychomotor domains. While *Appendix A* provides a link to the curriculum prescribed by the *New Jersey Police Training Commission*, it is important to point out some of the major areas of study within basic training. These include: criminal justice, criminology and delinquency, sociology, psychology, political science, criminal and constitutional law, civil rights, the use of force, laws of arrest, search, and seizure, criminal investigation, domestic violence, and cultural diversity. Beyond these rather academic fields of study, the recruits are also *trained* to develop proficiencies in other practice oriented areas such as: effective communication and interviewing, computer software applications, first aid, offensive and defensive tactics, defensive driving, weapon and firearms proficiency, and a host of other similar psychomotor skills.

Notwithstanding the importance of each of these content areas, the ability to synthesize and pragmatically apply the various disciplines, necessitates a host of competencies in areas related to critical thinking, decision making, problem solving, and effective communication skills. These underscore the importance of not just *what* is learned, but *how* and *why* it is learned. In effect, recruits must not only possess the ability to synthesize what has been learned, but to pragmatically apply it within the field, highlighting the importance for developing a recruit's situational awareness, tactical vigilance, and the exercise of good judgment and discretion. Speaking to the importance of police training, Bennett and Hess (2004: 222) write that a police department's 'efficiency and effectiveness is

directly related to the amount and quality of training it provides'. Stated more profoundly, Holden (1994: 282) contends that not only is training 'necessary for the fulfillment of employee potential', but without it, 'the best of officers is inadequate at best, incompetent at worst'. Without question, the increasing attention that the subject of training is receiving, from both the community and the police themselves, underscores its importance. Addressing this importance, Concur and Russell (2000: 323) note that 'it is readily apparent that the tasks and responsibilities of law enforcement officials are so complex and burdened with liability that the need for training is unquestioned'. Given the emphasis placed on training and the inadequate techniques used in the past, Holden (1994: 282) suggests that because policing involves 'the art of maintaining order in an ever-changing society . . . not only must training programs for new officers be designed for today's world, but the organization must acknowledge the obsolescence of old training programs'. Recognizing the importance of training content and delivery, Birzer and Tannehill (2001: 233-252) write that 'as we begin the 21st century, the need for more and improved police training is gathering increasing momentum. It is through training that change, protocol, and philosophy are first introduced to police personnel'. Hence, 'the manner in which training is conducted can actually facilitate change and make learning a rewarding experience'. Considering the implications of what many argue is an obsolescent 'traditional, pedagogical, military model' of training, Birzer and Tannehill suggest 'there is absolutely no reason why training cannot become a positive and invigorating experience for police officers'; obviously, 'if the police are to stay current with the trends taking shape in society, then so too must police training'.

Changes in Training Methodologies: Traditional and Andragogical

As the changing needs and demands of society have given rise to the philosophy of community policing, they have also shaped concerns regarding the ways and means of training and educating today's police officers. Professional police trainers and academicians alike have called into question the applicability and efficacy of conventional police training practices, which have been characterized as traditional, militaristic, behavioral, or pedagogical

in nature. Conser and Russell (2000: 323), addressing the changing scene of police training, acknowledge that 'even though there is consensus on the need for training, there are many issues and controversies about the amount, type, and format of training necessary for the modern officer'. Conceptually, 'training can mean different things to different people. While 'some hear the term and immediately think of formal physical exercise and skill development, as in basic military training', others think of it as 'a combination of classroom and field-based learning in preparation for a job. Still others perceive it as extensive college preparation followed by an internship and residency, as in medical training'. The authors suggest that 'in lieu of distinctions between the concepts, we believe it is more relevant to focus on matters of *process* and *outcomes*. The common link between education and training is the process of teaching or instruction', which they contend, includes a broad range of activities. 'In this perspective, both training and education are considered outcomes, and the teaching-instruction process becomes the critical point', which speaks to the importance for exploring the potential purported efficacy of andragogy (Conser and Russell, 2000: 323).

The Traditional Model

Many advocates for exploring change within police training argue that traditional police training methodologies are predicated on an outdated military model which emphasizes structure, regimen, discipline, and curricular content, with little, if any, deliberation on the transactional processes associated with learning. Addressing this concern, Dwyer and Lauferswiller (2004: 18-24) contend that 'for years, academicians and police trainers have suggested changes not only in academy content but also methods of educating officers to meet changes in society, technology, law, and crime'. Similarly, Birzer (2003: 29-42), a strong advocate for exploring new alternatives in training, suggests that 'one area of police-training that has remained fairly uniform is the manner in which academy training is conducted'. He explains that 'many police-training programs are conducted in a very behavioral and militaristic environment', which 'has paralleled police officer selection strategies over the past 50 years', i.e., one in which police officers 'were hired for their good physical condition,

their interest in crime control, and their ability to follow command decisions without hesitation'. He contends that 'many have argued that the paramilitary model of policing has created myriad problems not only in the training environment, but also in the general culture of the organization' (citing Lorinskas and Kulis, 1986; Weisburd, 1989). Referencing the work by McNeill (1992: vii), Birzer suggests that 'theoretical scholarship has pointed out that the behavioral and paramilitary training environment has created a warrior-like mentality on the part of the police', which not only inhibits learning, but may, paradoxically condition a recruit in a manner that is contrary to the philosophy of community policing.[4]

Addressing the disparate styles that characterize training programs in the United States, Holden (1994: 282-286) suggests there exist two basic schools of thought: (1) academies that subscribe to a traditional, military, pedagogical model, and (2) academies that subscribe to a collegiate model; one that is consistent with the philosophy and principles of adult based, andragogical learning. He posits that because America's 'police organization is built along military lines . . . there has been a tendency to structure police training academies similarly'. Consequently, because 'the police boot camp style of the academy is still the salient feature of the traditional police organization . . . the curriculum suffers'. Rather than focusing on the skills needed to 'accomplish their jobs, they are trained in accordance with the myth that they are soldiers in a war against crime'; a mindset that is reminiscent of the Reform Era. Arguing against the traditional military model, he writes that 'police academies that are designed along military lines are archaic and dysfunctional . . . they teach the wrong lessons for the wrong reasons', adding that 'if an organization looks like a military unit, it must be a military unit'.[5]

---

[4] See footnote #7 regarding a study by Brown and Willis (1985: 97-108) that addresses the influence of basic training on authoritarianism.

[5] Holden's suggestion that 'police organizations look military only because an arbitrary decision was made to make them look that way', may not necessarily be accurate. The influence of British policing, the principles advocated by Sir Robert Peel (Charles Rowan and Richard Mayne), et al., that the police be organized along military lines, and the initiatives associated with America's Reform Era, as example, suggest that there was an intent and design for subscribing to a quasi-military policing model.

Pointing out that subscription to a militaristic, 'boot camp' philosophy is counter-productive and outdated, he posits that 'even the military has altered its approach to training over the past 20 years',[6] suggesting that today's police 'should be taught utilizing adult education methodologies rather than behavioral techniques which are currently utilized in a fair number of police academies' (Holden, 1994: 286). He further emphasizes that 'it cannot be stressed strongly enough that academies stressing high discipline crush the initiative and creativity out of recruits. Police work is an occupation requiring motivation, imagination, and initiative. These traits are not found in organizations obsessed with military like discipline'.

Likewise, pointing to some of the misgivings associated with the traditional military model of training, Birzer (2003: 31-32) explains that 'the philosophy of most police-training programs is based on three precepts': (1) 'that it should closely follow the military training model'; (2) 'it is a punishment-centered experience in which trainees must prove themselves'; and (3) 'it helps screen out those who are not up to par'. He contends that the problem with learning under the traditional, pedagogical, military model of training is that it is behaviorally oriented, constituting a highly structured, regulated, and uniformed environment. As a result, given the complexity of the process and understanding that assessing learning extends far beyond standard practices common to the traditional training model, it renders assessment of real learning almost impossible. In summary, he contends that 'the paradox here readily comes to light: the police work in a democratic society but are trained and learn their jobs in a very paramilitary, punitive, and authoritarian environment' (Birzer (2003: 35); hence, there is a discernable disconnect between society's expectations of today's police and the training mentality of the traditional, pedagogical, military model of training. This opens up the need to explore more viable and pragmatic alternatives.

Andragogy: An Alternative Methodology

Addressing the importance of basic police training, Birzer and Tannehill (2001: 238) write 'if the police are to stay current with the trends taking shape in society, then so too must

---

[6] An observation confirmed by this author while researching the training methodology at the United States Marine Corps Officer Candidate School in Quantico, Virginia.

police training'. Underscoring the significance of a police officer's formative years –
beginning with what is learned during basic police training – Birzer strongly advocates the
philosophy and practice of andragogy as what he describes as 'a more dynamic approach to
learning'. Andragogy, an adult-based learning theory advanced by Malcolm Knowles (1998,
et al.) and other leading scholars in the field, is based on a number of important assumptions
about how adults learn, which differs significantly from the way that children learn.
Explaining that andragogy places primacy on the transactional processes associated with
facilitating effective learning based on the needs and interests of adults and their 'station-in-
life', advocates of andragogy praise it as a holistic, integrative, and empowering process for
learning. A strong proponent of the andragogical model within the context of police training,
Holden (1994: 282-286) explains that it is designed along lines similar to the college
experience, i.e., it employs multi-sensory learning, encourages informal classroom
discussions, and a 'positive environment . . . for learning'. Decidedly, he argues that it is the
'better approach for preparing new police officers', considering that 'the purpose of the
academy is to provide [the] knowledge and skills necessary for the recruit to perform
competently in an independent manner'.

Declaring that 'the undercurrent of the literature giving attention to adult training and
education is quite convincing of the fact that andragogical assumptions are far more realistic
than many of the behavioral methods of teaching and learning', Birzer (2003: 34)' suggests
that 'police-training academies may find it advantageous to deviate from the mechanical,
militaristic and behavioral aspects of training and evolve into training programs that inform
police how to identify, respond to, and solve problems', within the greater context of their
duties and responsibilities. He contends that all too often, 'there is a disconnect between the
mission, the organization, and training', hence, an important goal of training is to translate
what was learned in the classroom into discernable 'skills and competencies' required to
perform in the real world. Also advocating the merits of andragogy, White (2007: 47-48)
explains that 'andragogy has emerged as an effective adult learning technique in a variety of

fields', and that 'proponents of the andragogical approach for police training argue that it: (1) draws on trainees' past experiences, (2) treats trainees as adults, (3) adapts to the needs of the participants, and (4) fosters critical thinking and creativity'. As such, he contends that 'this method of instructional format would seem to match calls from police scholars to bring the realities of police work into the academy through critical discussion, role plays, and interaction between the recruits and instructional staff'.

While many educationalists and police professionals advocate the use and utility of andragogy as a preferred instructional methodology for facilitating adult learning, its espoused benefits and advantages appear to be based on intuition and anecdotal observations. For example, Holden, a vocal advocate for the collegiate/andragogical style as 'the better approach to police training', fails, however, to provide empirical data to support his claim. Furthermore, notwithstanding the enthusiastic endorsement that andragogy has received among many professionals as a preferred philosophy and instructional methodology, Knowles, who is remembered affectionately as the *father of andragogy*, points to the absence of any definitive empirical data to support his research by stating that 'andragogy is not an ideology . . . but a system of assumptions about learners that needs to be tested out for different learners in different situations.' While no representation is made to the effect that basic police training is the anticipated panacea for the innumerable challenges that face policing, it is theorized that subscription to an andragogical philosophy and methodology can better facilitate the learning, educative, and training goals for police officers, which will, in effect, influence the police organization, its mission, and the delivery of services.

<div align="center">Statement of the Problem</div>

The mission of policing in the United States, similar to that of most democratic societies, serves to maintain social order and control. As society has grown, matured, and evolved, so too has the mission of policing. Because today's fast-paced, ever-changing society continues to experience unprecedented social, cultural, legal, political, economic, and technological changes, expectations of police have grown exponentially. Next to recruitment,

the training of new police officers has broad implications in the ability to fulfill new and changing duties and responsibilities. While a traditional, pedagogical, military model of training may have at one time served the needs and interests of society, its applicability and efficacy have come under question. Toward that end, it is theorized that an andragogical instructional methodology is a more effective means for training police recruits. Andragogy, based on the belief that adults learn differently than children, bases its practices on the needs, interests, readiness, orientation, experience, and motivation of the adult learner. In the effort to facilitate a holistic, integrative, and collaborative approach to learning, anecdotal data suggest that andragogy yields greater learning outcomes when compared to a traditional, pedagogical, military model.

Given the implied potential positive impact that an andragogical instructional methodology may have on basic police training, the focus of this study will set out to: (1) examine whether Knowles' assumptions about adult learners apply to police recruits, and (2) to assess and compare the efficacy of an andragogical instructional methodology in basic police training to the traditional, pedagogical, military model of training employed by many, if not most police academies throughout the United States (Birzer and Roberson (2007: 226).

Research Questions and Hypotheses

Research Question 1

Do the andragogical assumptions that Knowles (1998) makes about adult learners apply to police academy recruits? The significance of this first research question is to ascertain whether the assumptions made by Knowles regarding adult learners exist among police academy recruits. Dantzker and Hunter (2006: 29), addressing the nature of hypotheses and assumptions explain that 'an assumption is a statement accepted as true with little supporting evidence', and suggest 'that such statements of inquiry or fact be backed up by research to substantiate them'. Hence, if Knowles' assumptions about adult learners, and whether they apply to police recruits, can be affirmed, they will serve to provide a baseline and a frame of reference from which the following two research question can be posed. In

order to address this research question, Knowles' six (6) assumptions about adult learners were individually assessed through the following subset of research questions:

Research Question 1.a.: The need to know. Do police academy recruits possess a need to know 'why they need to learn something' before undertaking to learn it.

Research Question 1.b.: The learner's self-concept. Do police academy recruits possess a self-concept requiring them to being responsible and accountable for their own decisions and for their own lives?

Research Question 1.c.: The role of the learners' experience. Do police recruits enter the police academy with a greater fund of knowledge or experience that will aid them in their basic police training?

Research Question 1.d.: *Readiness to learn*. Do police academy recruits possess a 'readiness to learn', i.e., are they ready to learn the things they need to know in order to become a police officer?

Research Question 1.e.: *Orientation to learning*. Do police academy recruits possess an orientation towards learning because they are motivated to learn those things that will help them to better perform their police duties and responsibilities, i.e., do they perceive that their basic police training will help them to better perform their tasks and deal with problems that they confront in real life situations?

Research Question 1.f.: *Motivation*. Are police academy recruits more motivated by intrinsic qualities such as the desire for increased job satisfaction, self-esteem, status, and quality of life, than extrinsic qualities, such as promotion, better jobs, and higher salaries?

Research Question 2

Does the use of an andragogical instructional methodology (IV) within the construct of basic police training result in an increase of measurable performance (DV) when compared to that of a traditional, pedagogical, military model of training? Hypothesis: The use of an andragogical instructional methodology within basic police training provides for a

greater degree of critical thinking, decision-making, and problem-solving skills than the use of a pedagogical instructional methodology.

<p align="center">*Research Question 3*</p>

Is the use of an andragogical instructional methodology (IV) a more effective process (DV) for training police recruits than a traditional, pedagogical, military model of training?
<u>Hypothesis</u>: The use of an andragogical instructional methodology within basic police training provides a more effective process for the training of police recruits than a traditional, pedagogical, military model of training.

<p align="center">Limitations the Study</p>

It is important to emphasize that the literature on andragogy and adult learning is replete with different viewpoints and theories about how and why adults learn and the best means for facilitating adult learning. While it is important to acknowledge that the writings of such scholars are in some respects distinctively different, the commonalities far outweigh such differences. Notwithstanding such notable differences, Knowles' research about adult learning, upon which his assumptions and principles of practice are based, accurately represent the field in both general and specific ways. While discerning such differences would in its own right honor the many scholars who have dedicated their research to such pursuits, it is important to emphasize that the focus of this study was limited to measuring the efficacy of andragogy in the context of basic police training.

While it is important to recognize that this study was limited to two regional police academies in northern New Jersey, given their location in the greater New York City metropolitan area and the degree of sophistication of its participants, this study's finding has the potential for generalization to other metropolitan and suburban police organizations. Given, however, the replicable nature of the methodology, it is recommended that similar, more expansive studies be conducted, including longitudinal studies that track a recruit's career. Furthermore, it is important to understand that while there exist many dimensions of police training that are in general common use and transcend police academies in general, the

<p align="right">29</p>

findings of this study suggest that the use of andragogy makes a difference. That being said, it is important to recognize that there exist a host of other variables that influence the efficacy of andragogy outside of the academy. The positive impact of andragogy can serve as a springboard for generally improving police efficiency and effectiveness which is contingent on the organizational culture of the police department, the community to which the recruit returns, and the leadership (or lack thereof) that exists within the department.

As with any form of social research, there are limitations inherent to the nature and scope of the study. Accordingly, while it is important to recognize that conceptually this study can be applied to the general population (given its sample size and the demographic makeup of the sample population), there are, nevertheless, limitations which point to the need for continued research including longitudinal case studies. This study, therefore, was limited to:

- Two regional police academies located in northern New Jersey; part of the greater New York City metropolitan area.

- Eight (8) separate basic police training classes that consisted of a total of 324 participants which spanned a time period of 2 years.

- The quantitative outcomes assessment was limited to four (4) problem-based learning assessment scenarios.

- The testing instrument used to assess problem-based learning scenarios was designed by the author and four other professional police administrators.

- The study was limited to the development of a pre and post training.

- The study was limited to interviews with recruits and academy directors; interviews with academy faculty were limited in time and scope.

- The study's limitations may also have been influenced by a number of uncontrolled extraneous variables.

Significance of the Study

Considering the expansion of roles and responsibilities assigned to police within an exponentially growing complex and sophisticated society, today's police require basic training that will ensure that they acquire the requisite knowledge, understanding, skills,

attitudes, behaviors, and competencies to prepare them for the growing number of challenges that they face. While no representation is made to the effect that basic police training is the anticipated panacea for the innumerable challenges that face policing, it is theorized that subscription to an andragogical philosophy and its accompanying methodology can better facilitate the education and training of police officers. This will also positively impact the police organization, its mission, and the delivery of services.

CHAPTER I: REVIEW OF THE LITERATURE

Introduction

Andragogy, defined as 'the art and science of teaching adults', espouses a learning methodology based on a set of distinctive assumptions about adult learners. While the focus of this study examines the influence and efficacy of an andragogical instructional methodology as a prospectively more effective means for preparing police recruits for successful careers in policing and law enforcement, it is important to acknowledge that the process of basic police training needs to consider the nature of learning as well as the processing of educating. Considering that human learning is a complex and multi-dimensional process, one would be remiss not to acknowledge the major schools of thought relative to learning and their relevancy to andragogy. As a precursor to this review, however, it would be worthwhile to clarify the meanings of learning, education, and training, notwithstanding their interactive relationship. Finally, before focusing on the theoretical assumptions of andragogy, a brief overview of adult education will also be presented.

Learning, Education, and Training

To those unfamiliar with police training, the phrase evokes images of a boot-camp style quasi-militaristic environment; a process in which recruits are physically challenged and vocationally prepared for a career in police work. Police training, notwithstanding its many rudimentary practices and physical features, represents a challenging, multi-sensory experience in learning and education that extend far beyond traditionally held perceptions and expectations. Bennett and Hess (2004: 224), addressing the distinctions between police training and education, suggest that training is mistakenly 'viewed as a lower form of learning', i.e., a process 'dealing with physical skills'. Conser and Russell (2000: 323) addressing the conceptual and philosophical constructs of police training, acknowledge that 'training can mean different things to different people. Some hear the term and immediately think of formal physical exercise and skill development, as in basic military training. Others think of it as a combination of classroom and field-based learning in preparation for a job',

and yet 'others perceive it as extensive college preparation followed by an internship and residency, as in medical training'. While the process of preparing police recruits for a professional career in law enforcement undoubtedly necessitates physical conditioning and vocational preparation, such stereotypical perceptions undermine perhaps the most dynamic dimension that underlies basic police training – the process of learning, which includes the socialization process that occurs both during and after basic police training[7] (Alpert, Dunham, and Stroshine, 2006: 65-80; Brown and Willis, 1985: 97-108; Dempsey and Forst, 2008: 150-151; Gaines and Miller, 2008: 195-198). Learning, a complex enterprise that 'involves the acquisition and modification of knowledge, skills, strategies, beliefs, attitudes, and behaviors', is a process that is relevant to every component of basic police training (Schunk, 2004: 1). As the curriculum hyperlink in *Appendix A* reveals, basic police training entails achieving a host of desired outcomes that require successful mastery of a wide array of competencies. These competencies, according to Jarvis, include discernable knowledge, understanding, skills, attitudes, behaviors, and competencies. The acquisition of these competencies, essential to realizing the programmatic learning outcomes of basic training, involve a complex learning process, which Bloom (1969) suggests occurs within three domains: the cognitive, psychomotor, and affective. Because the literature is often based upon very different understandings of the meanings, definitions, and application of the terms learning, education,

---

[7] The focus of this discussion pertains to learning associated with the academic and curricular components of basic police training. Another dimension of basic police training deals with socialization. Socialization represents the process through which a police officer is taught the values and expected behavior of the police subculture (Gaines and Miller, 2007: 183). Alpert, Dunham, and Stroshine (2006: 65-80) discussing police socialization and the police subculture define socialization as a complex process of social learning that contributes to an individual's personality, permits participation in group life, and engenders acceptance of the beliefs and values of a group. 'Van Maanen (2002) conceptualized the socialization process of police officers as occurring in four distinct phases: choice, introduction, encounter, and metamorphosis'. He suggests that the socialization of police officers occurs before, during, and after basic training. Brown and Willis (1985: 97-108) who examined the authoritarianism among British police recruits, found that it was not necessarily a product of the socialization process of basic police training, but rather learned once they enter the field as practitioners. While noteworthy, the significance of the study may not apply to this research due to differences in the UK and US as it relates to cultural orientation, tolerance, and perhaps most significantly, differences in basic police training philosophies and practices. The philosophy of training in the UK is more aligned with that of an andragogical model (the subject of this study), as compared to that of the US, which is predominately a traditional, pedagogical, autocratic, military model. See also: Hess and Wrobleski, 2006: 470-481; Kappeler, Sluder, and Alpert, 1999: 238-263; Lefkowitz, J. 1975; Niederhoffer, 1967; Skolnick, 1994).

and training, it is important to clearly define their relationship to one another and to basic police training.

Concepts of Learning

Because of the interdisciplinary nature of learning theory, Shuell (1986, in Schunk, 2004: 2), points out that there is no definition for learning that is universally accepted by theorists, researchers, or practitioners. Like many of his counterparts, Knowles (1998: 11; 23), discussing the process of learning, makes a point of distinguishing the process of *learning* from that of *acquiring an education*. He defines learning as 'the act or process by which behavioral change, knowledge, skills, and attitudes are acquired' (1998: 11). From the perspective that learning is the product of one's experiences, a concept that is particularly germane to the methods of andragogy and police training, Kolb (1984: 20-38 in Jarvis and Griffin, 2003: Vol. IV, 159-179) defines learning as 'the process whereby knowledge is created through the transformation of experience', a concept that is discussed in greater detail when addressing experiential learning theories later in this chapter. Certainly, learning, by definition, is difficult to assess. Unlike education and training, which may be measured directly, learning is something which is only known through products or outcomes. While there are many definitions of the process of learning, perhaps the one that is most comprehensive and directly applies to the construct of basic police training is one proffered by Schunk (2004: 1) who defines learning as the 'acquisition and modification of knowledge, skills, strategies, beliefs, attitudes, and behaviors'.

Concepts of Education

The term education, not unlike that of learning, bears multiple definitions and interpretations, and while education always involves learning, learning does not necessarily involve acquiring an education. Merriam and Brockett (1997: 6) discussing the differences between learning and education explain that while 'learning is a cognitive process internal to the learner', education is typically 'concerned with specific learning outcomes and with the process of learning needed for students to achieve those outcomes'; hence, education cannot

exist without learning. Darkenwald and Merriam (1982: 2), suggest that education consists of 'the deliberate, systematic, and sustained effort to transmit, evoke, or acquire knowledge, attitudes, values, or skills', while Knowles (1998: 11), defines it as 'an activity undertaken or initiated by one or more agents that is designed to effect changes in the knowledge, skill, and attitudes of individuals, groups, or communities'. He explains that 'the term emphasizes the educator, the agent of change who presents stimuli and reinforcement for learning and designs activities to induce change' (1998:11).

Notwithstanding subtle differences in definitions, it is nevertheless important to recognize that the process of how one acquires an education versus that of learning, may reflect separate processes or consist of the same enterprise as in the case of basic police training. Clearly, the *process of learning* is a continuing activity throughout one's life, while *acquiring an education* suggests a more formal and institutional process that occurs within designated places such as schools and/or colleges. As Darkenwald and Merriam (1992: 2) contend, 'the word *education* is so deeply associated with young people and with schools that for much of the public and even for many professional educators the phrase *adult education* has a slightly incongruous ring'. Delors (1996: 85-96) suggests that traditional responses to education in the form of quantitative and knowledge-based curricula are no longer appropriate, rather education should be designed to equip individuals with 'learning opportunities throughout life, both to broaden her or his knowledge, skills, attitudes, and to adapt to a changing, complex and interdependent world'. These dynamics lie at the heart of the goals and objectives of basic police training.

While the processes associated with learning, education, and training can be viewed as different enterprises, there is an inevitable convergence of all three. To this point, Collins (1991: 182) writes that 'though the distinction between training and education seems readily apparent, a commonly held view that the two are antithetical is fallacious and unhelpful. Both education and training are concerned with the systematic development of individuals and communities, and consequently are intricately interrelated and interdependent'. He further

contends that traditionally, there has always been 'a discernable artificiality in training schemes which rest upon presuppositions about the separation of education and training', which adult educators generally rebuke.

And lastly, Conser and Russell (2000: 323), discussing the overall dynamics associated with police training, explain that training involves both a learning and an educative process, and in doing so, make a point of distinguishing the two terms. They 'broadly define education as what one has learned', and that 'learning can be defined as a process that changes a person's knowledge, behavior, or attitude. It refers to changes that are determined primarily by the individual's interaction with his or her environment' (citing Eson, 1972: 58). Accordingly, 'a person's education is achieved by various means: socialization, experience, academics, training, and so on; it is not limited to the classroom or formal setting'. In that context, the authors point out that some within the field of criminal justice 'have insisted on making a distinction between 'training' and 'education', essentially stating that training inculcates the *how* to do something while education focuses on the *why*'. Along the same lines, 'traditionalists argue that training emphasizes skill and ability development while education emphasizes concepts, theory, and critical thinking' (2000: 323). Surely, basic police training encompasses a wide range of comprehensive activities, not the least of which includes both processes.

Concepts of Training

The *New Jersey Police Training Commission*, as part of its basic police training curriculum, has identified thirteen areas of competency encompassing more than 1000 performance objectives, in a wide range of content areas whose mastery is essential for fulfilling the duties and responsibilities of a police officer. Despite the rigorous nature of this analysis, it is still necessary to discuss the conceptual relationships that distinguish learning, training, and education from one another, especially with regard to fine distinctions made by the commission. Surely, in examining the Commission's curriculum, it is obvious that it

entails the processes of learning, training, and education. Conser and Russell (2000: 324), addressing the goals and objectives of basic police training explain that:

1. It serves to orient the recruit to their new job or position

2. It provides the foundational experiences whereby the recruit comes to identify the organization and to believe in its goals and objectives

3. It serves to transfer to the recruit the skills and knowledge necessary to do the job

4. It serves to standardize procedures and increases efficiency

5. It serves to build personal confidence as critical tasks are practiced and mastered in learning situations

6. It serves to improve safety and helps to assure survival

7. It serves to build morale and discipline

Roberg, Kuykendall, and Novak (2002: 149), addressing the dynamics of police training, also make a point of distinguishing *training* from that of *education* and in doing so, explain that differences between the two are influenced in great part by an academy's philosophical orientation. They define *training* 'as the process of instructing the individual *how* to do a job by providing relevant information about the job,' while *education* involves 'the process of providing a general body of knowledge on which decisions can be based as to *why* something is being done while performing the job'. They further explain that 'training deals with specific facts and procedures, whereas education is broader in scope and is concerned with theories, concepts, issues, and alternatives', which, considering the dynamics of contemporary policing, represents a significant distinction. To this point, they argue that traditional 'police training programs are heavily oriented toward teaching facts and procedures to the exclusion of theories, concepts, and analytical reasoning'. They suggest that this is problematic 'because so much police work requires analysis and reasoning instead of application of specific procedures that supposedly fit all circumstances'. Certainly, given that basic police training involves acquiring the requisite knowledge, skills, abilities, attitudes, and behaviors needed by police officers, the training process is by its very nature a learning and educative process.

Given this trinity of convergent processes, many authors have raised the role of the teacher-instructor-facilitator. Taylor, Marienau, and Fiddler (2000) as an example, preface their book *Developing Adult Learners* by arguing that what at one time were clear distinctions between teaching and training has now been subsumed into complimentary actions. Referencing the work of Bridges (1988), they explain that there are distinctions that allow one to differentiate 'between skills-based training and context-based training, which enables people to see and understand things differently and depends on imagination and dialogue rather than on memorization and programmed responses' (2000: xi-xii). Rogers (2002: 52-53; 165), addressing the triad of learning, education, and training, suggests that these processes can be viewed along a continuum, defined by the degree of structure necessary to achieve a stated outcome. While training may involve elements demonstrating the 'right way to doing something', it nevertheless involves elements of learning and education, but to a lesser degree. He further indicates that the process of learning not only involves changes in knowledge, but also in behavior (2002: 82). He explains that 'what we usually mean by 'learning' are those more or less permanent changes and reinforcements brought about voluntarily in one's patterns of acting, thinking and/or feeling' (2002: 86). This, in many respects, is not dissimilar from the learning outcomes in basic police training which entail the acquisition of the discernable knowledge, understanding, skills, attitudes, behaviors, and competencies. Discussing such desired outcomes, Rogers, referring to the work of Lewin (1935) and Gagne (1972), suggests that learning is a process that 'takes place in a number of different spheres'. He explains that 'changes in attitude rely to a large extent on changes in knowledge and understanding, and behavioral changes can hardly take place without accompanying changes in other areas' and that 'these relationships are idiosyncratic and uncertain. How any individual reacts to learning changes in any one domain, seems to depend on personality and situational factors' (2002: 87).

Notwithstanding that the goal of basic police training involves the acquisition of discernable knowledge, understanding, skills, attitudes, behaviors, and competencies, trainers

are often left to define and interpret exactly what these objectives mean. Tough (1971), addressing the acquisition of *knowledge and skills*, provides an even further, in-depth explanation in his report of a study that examined how adults learn through what he describes as *episodes of time*. *Episodes of time* can range over a span of time from 30 to 120 minutes. He suggests that adults learn with a purpose to gain and retain discernable knowledge and skills – this is apropos to the goals of basic police training. He explains that the term *knowledge and skill* refers to:

> any positive or desired changes or improvement in a person's knowledge, understanding, awareness, comprehension, beliefs, ability to apply, ability to analyze and synthesize, ability to evaluate, judgment, perceptual skills, competence or performance, response tendencies, habits, attitudes, emotional reactions, recall, awareness, sensitivity, insight, confidence, patience, and self-control, and/or some other personality characteristic, inner behavior, or overt behavior.
>
> <div align="right">Tough, 1971: 37.</div>

He further adds that 'these changes result from experience – from what a person sees, hears, feels, thinks, or does', which is influenced by a learner's efforts and intention, i.e., they 'produce a great deal of knowledge, skill, understanding, affective change, and behavioral change in people' – factors that are aligned with the goals and objectives of basic police training (Tough, 1971: 37).

Conser and Russell (2000: 323), who also address the triadic relationship of learning, education, and training, make a point of not differentiating the three processes, but emphasize their common goals and interests when they state that 'such simple distinctions are unfortunate because as Saunders (1970: 115) stated . . . the best of each will always contain elements of the other'. 'In lieu of distinctions between the concepts, we believe it is more relevant to focus on matters of process and outcomes'. This agrees with the fundamental goals of this study, which is to examine and assess the best means (methodology) for achieving the goals and objectives of basic police training.

<div align="center">*Taxonomy of Educational Objectives*</div>

Given that police training necessarily includes the acquisition of competencies using the cognitive, affective, and psychomotor domains of learning, a review of Benjamin Bloom's

renowned *taxonomy of educational objectives* is in order (Bloom, 1969). Recognizing that there was no common frame of reference for educational evaluation, Bloom and his colleagues set out to establish 'a common terminology for describing and referring to the human behavioral characteristics' of the educative process. Despite the existence of common educational objectives among educators, Bloom recognized that there existed a wide range of measurements that dealt with subject matter, human experiences, and 'aspects of the self' (Bloom, 1969: 3).

While each of the three domains are distinctly different, Bloom explains that even though 'one could place an objective very readily in one of the three major domains or classes, no objective in one class [is] entirely devoid of some components of the other two classes' (1969: 8). This point is especially relevant to the present study insofar as it reflects the relationship of the cognitive, affective, and psychomotor domains of learning to basic police training. Further, the subcategories of these domains hold much in common with the skills sets and competencies needed by today's police officers.

Cognitive Domain

With the objective of identifying intended behaviors, Bloom began his taxonomy by identifying 'those objectives commonly referred to as knowledge, intellectual abilities, and intellectual skills' which, he explains, include cognitive behaviors such as remembering, reasoning, problem solving, concept formation, and creative thinking. Within this domain, six major classes of educational behaviors were identified and arranged in a hierarchy by level of complexity so that 'the objectives in one class are likely to make use of and be built on the behaviors found in the preceding classes on the list'. Bloom describes the hierarchy consisting of: (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis, and (6) evaluation (Figure 1-1). Notably, it is these same behaviors that appear as reoccurring processes associated with basic police training, and that form the basis of the overarching critical thinking skills required of today's police officers.

Curzon (2006: 164), addressing Bloom's taxonomy, describes the hierarchy as one that 'is based on a continuum ranging from mere knowledge of facts to the intellectual process of evaluation'; that 'each category within the domain is assumed to include behaviour at the lower levels', and that the hierarchy is 'based on a growth in the level of quality, and the higher levels are assumed to be founded on the skills of the lower levels'. Stated otherwise, Reece and Walker (2005: 59-62) explain that in order 'to accomplish objectives at any level, objectives at the lower level need to be achieved first', a progression that is fundamental to basic police training.

Figure: 1-1
Bloom's Taxonomy of Educational Objectives **Major Categories in the Cognitive Domain**

Evaluation

Involves acts of decision making or judging based on criteria or rationale

Synthesis

Combines elements to form new entity from the original one

Analysis

Separates whole into parts until relationships are clear

Application

Uses information in a situation different from original learning content

Comprehension

Interprets, translates or summarises given information

Knowledge

Recognition and recall of information

Source: Reece and Walker (2005: 60)

Conser and Russell (2000: 325-326), discussing the significance of Bloom's taxonomy as it relates to police training, acknowledge that the cognitive domain relates to 'acquiring new knowledge, understanding, and thinking skills', adding that 'learning in this domain includes remembering the definitions of crimes, translating legal terms so that others can understand them, and evaluating a situation when given certain facts, and making a decision based on the facts and on the knowledge of the law. It would also include knowing which methods and techniques to employ in a given situation, such as writing reports or sketching a crime scene'. Given the significance of this domain as it relates to the processes associated

with basic police training and the means with which police officers carry out their duties and responsibilities, its importance is addressed later in this study.

Affective Domain

Addressing the affective domain, Bloom (1969: 7) writes, 'the question posed by modern behavioral science research is whether a human being ever does thinking without feeling, acting without thinking, etc. It seems very clear that each person responds as a 'total organism' or 'whole being' whenever he does respond'. In this, he underscores the idea that learning does not occur without human emotions. Bloom describes this domain as encompassing 'objectives which emphasize a feeling tone, an emotion, or a degree of acceptance or rejection'. He explains that 'affective objectives vary from simple attention, to selected phenomena, to complex but internally consistent qualities of character and conscience', explaining that such objectives are often expressed in terms of 'interests, attitudes, appreciations, values, and emotional sets or biases'. Just as 'levels in the cognitive domain range from the lowest level . . . to the more complex thinking processes', similarly, each succeeding level in the affective domain involves a greater degree of internalizing feelings or attitudes, i.e., 'the behavior becomes part of our total way of responding and we become 'committed' to the feeling or attitude' (Reece and Walker (2005: 61). As illustrated in Figure 1-2, the affective domain comprises five categories: (1) receiving, (2) responding, (3) valuing, (4) organizing, and (5) characterizing. *Receiving* 'involves awareness, a willingness to attend and a controlled attention'. *Responding* 'involves the arousal of curiosity and the acceptance of responsibility in relation to response'. *Valuing* 'involves recognition of the intrinsic worth of a situation so that motivation is heightened'. *Organizing* 'involves the patterning of responses on the basis of investigation of attitudes and values'. And lastly, *characterizing*, 'involves the ability to see as a coherent whole matters involving ideas, attitudes and beliefs' (Curzon, 2002006: 165).

Figure: 1-2

**Bloom's Taxonomy of Educational Objectives
Major Categories in the Affective Domain**

Characterising

Total behaviour consistent with internalized values

Organising

Committed to set of values as displayed behaviour

Valuing

Displays behaviour consistent with single belief or attitude in situations where not forced to obey

Responding

Complies to given expectations by reacting to stimuli

Receiving

Aware of, passively attending certain stimuli, e.g., listening

Source: Reece and Walker (2005: 60)

Conser and Russell (2000: 325-326), discussing the significance of this otherwise nebulous area within police training, explain that the affective domain 'impacts one's values, emotions, and/or attitudes'. They suggest that 'in policing it relates to 'appreciations' and keeping an open, acceptive mind to new knowledge'. Thus, 'if an officer is to properly benefit from training, he or she must be *willing* to learn [as] a precondition to learning'. Examples of the affective domain 'include listening attentively, accepting differences in race and culture, demonstrating a belief in democratic principles, accepting responsibility for one's own behavior, maintaining good health habits, displaying safety consciousness, and accepting and practicing ethical standards of the law enforcement profession' (Conser and Russell, 2000: 326).

Notwithstanding the equal importance of all three domains, the significance of the affective domain as it relates to factors that influence feelings, attitudes, perceptions, intentions, and emotions, has received little attention within police work. This is due, in part, due to the macho nature of policing. It is only of late, that the impact of human emotions has been recognized and openly acknowledged within the realm of the police profession. Areas dealing with officers' feelings, stressors (e.g., *critical incident stress syndrome)*, values,

attitudes, behaviors, racial and cultural sensitivity, empathic listening, and social and emotional intelligence, or what Suskie (2004: 168-170) described as *other ineffable* factors, are now recognized as relevant and important. As such, the impact of how one feels and is able to reflect about one's learning has a direct bearing not only on the acquisition of the requisite knowledge, skills, and competencies, but how such affective factors translate to an officer's overall performance. Suskie, discussing the importance of student reflection, i.e., encouraging students to think about 'what, how, and why they have learned', suggests that such thinking is essential to *synthesis* and *metacognition*. *Synthesis*, the author explains, involves 'the ability to put together what one has learned and see the big picture', while *metacognition* entails 'learning how to learn and how to manage one's learning by reflecting on how one learns best'. The relevance of *synthesis* and *metacognition* to policing, therefore, becomes even more apparent when one understands that, like critical thinking, it involves:

- Using efficient learning techniques

- Discussing and evaluating one's problem solving strategies

- Critically examining and evaluating the bases for one's arguments

- Correcting and revising one's reasoning or arguments when self-examination so warrants

- Forming efficient plans for completing work

- Evaluating the effectiveness of one's actions

Suskie, 2004: 168-169

While the significance of the affective domain is instrumental to the inclusive endeavors of basic police training, it has equal, if not a more important role, in conditioning recruits for the soft skills needed in advancing the philosophy and practices of community-oriented policing.

Psychomotor Domain

In describing the psychomotor domain, Bloom explains that it deals with 'objectives which emphasizes some muscular or motor skill, some manipulation of material and objects, or some act which requires neuromuscular co-ordination'. He

44

notes that these are most frequently related to handwriting, speech, physical education, trade, and technical courses, or what Curzon (2006: 165) describes as 'reflex movements, basic fundamental movements, perceptual abilities, physical abilities, skilled movements, and non-discursive communication'. Reece and Walker (2005: 61) explain that 'this taxonomy is similar to that of the cognitive domain in that it progresses from the simple to the complex, in this case, skill development'. They add that 'a psychomotor skill consists of tasks that are integrated into a coordinated whole', beginning with imitation and progressing through to a 'point at which performance becomes automatic or habitual'. Not only does this domain directly relate to the cognitive domain in that it represents a cumulative product of learning, but it underscores the importance of experiential learning in which learners apply what they have learned.

Figure: 1-3

Bloom's Taxonomy of Educational Objectives
Major Categories in the Pyschomotor Domain

Naturalisation

Completes one or more skills with ease and becomes automatic

Articulation

Combines one or more skills in sequence with harmony and consistency

Precision

Reproduces a skill with accuracy, proportion and exactness. Usually performed independent of original source

Manipulation

Performs skill according to instruction rather than observation

Imitation

Observes skill and tries to repeat it

Source: Reece and Walker (2005: 60)

Conser and Russell (2000: 325-326), discussing the significance of this domain as it relates to police training, explain that the psychomotor domain ostensibly 'relates to motor skills and the ability to physically perform a specific behavior' such as 'properly firing a weapon, conducting a crime scene search, dusting for fingerprints, driving a vehicle at speeds

in a safe manner, and mediating a domestic argument'. This domain, they contend, 'builds upon the cognitive domain in that one may know *how* to do something but may be able to actually do it', which underscores the significance of experiential learning exercises within police training.

To summarize, Maki (2004: 32-33), addressing the significance of Bloom's taxonomy and the importance of integrating the three domains as an integral part of the learning process, suggests that learning involves 'constructing meaning, framing issues, drawing upon strategies and abilities honed over time, re-conceptualizing understanding, repositioning oneself in relation to a problem or issue, and connecting thinking and knowing to action'. Perhaps no better example of this lies in basic police training, where the nature of the training process itself necessitates learning on multiple levels, to include the cognitive, affective, and psychomotor domains.

<div align="center">Theories of Learning</div>

Introduction

As noted, learning can be defined as the 'acquisition and modification of knowledge, skills, strategies, beliefs, attitudes, and behaviors' (Schunk, 2004: 1). While the products or outcomes of 'learning' are regularly measured in some form, as evidenced by the development of Bloom's taxonomy, the cerebral or mental processes associated with learning elude direct observation. Because of this, there are numerous theories that attempt to explain the learning process. Indeed, attempting to explain human learning has preoccupied the professional careers of psychologists and educationalists alike. Although the focus of this study is an examination of the efficacy of an andragogical instructional methodology, it is important to acknowledge the dynamics associated with human learning.

Learning theory, often referred to by psychologists as behavior theory, is defined by Lefrançois as 'a systematic attempt to explain and understand how behavior changes' (2000: 348). Considering the ineffable nature of human learning, Lefrançois astutely suggests that learning theory represents an *attempt* to explain and understand human learning. Indeed,

dating back to the great scholars Plato, Aristotle, and Socrates, learning has, and continues to be a study unto itself, i.e., we continue to learn about learning. As such, the field is inexhaustibly rich with theories that attempt to explain how learning occurs and what influences the process.

Schunk, in his book *Learning Theories* (2004: 14), explains that the origin of learning theories can be traced to the work of Wundt and Ebbinghaus who were responsible for providing a critical transition from 'the formal theorizing characteristics of the philosophers to the emphasis on experimentation and instrumentation' that characterized psychology. Ormrod (1995: 6-7), addressing *Human Learning* makes a point of distinguishing *principles* of learning from *theories* of learning. While learning *principles* 'identify specific factors that consistently influence learning and describe the particular effects that these factors have', *learning theories* 'provide explanations about underlying mechanisms involved in the learning process. Whereas *principles* tell us *what* factors are important for learning, *theories* tell us *why* these factors are important'.

While sensitive to oversimplifying a complex field, Rogers suggests that learning theories in the aggregate, can be viewed from two fundamental perspectives: (1) *how* learning takes place, i.e., what are the processes are involved in learning, and (2) *why* learning occurs, i.e., what drives or motivates human learning. He explains that theories can best be understood by categorizing them around four elements: (1) the learner, (2) the context of the learning, (3) the learning task itself, and (4) the associated processes. Citing Gangné's (1972) research, Rogers posits that learning occurs in five domains which involve the acquisition and/or changes in knowledge, understanding, skills, attitudes, and behavior, which are similar to the goals and objectives typically associated with basic police training. He also acknowledges the importance of intelligence. Because recent research suggests that the brain is in a constant state of growth and change, it is important, when considering traditional schools of thought regarding human learning to remember that all such knowledge evolves in reference to an ever-changing field of knowledge describing how and why humans learn.

Because the number of learning theories and their inherent complexity, it is often difficult to divide them in a satisfactory classification scheme. For the sake of relevance and applicability, a synopsis of the following theories of learning will be addressed under the following five principle headings:

1. Behavioral Theories

2. Cognitive Theories

3. Humanistic Learning and Motivation

4. Experiential Learning

5. Social Learning

Behavioral Theories

Behaviorism is a theory of learning based on the principle that all behaviors are acquired through conditioning and occurs with one's interaction with the environment. Reece and Walker (2005: 419), discussing *behaviorism* suggest that it is fundamentally based on observable changes in one's behavior, or 'the prediction of human behavior or learning through actions or tasks based on responses to stimuli', upon which the traditional, pedagogical, military model of training has been associated (Holden, 1994: 286-287). Schunk (2004: 479) contends that *behaviorism* represents a 'theory that views learning as a change in the form or frequency of behavior as a consequence of environmental events', while Klein (2002: 4) suggests that behaviorism represents 'a school of thought that emphasizes the role of experience in governing behaviour'; that behaviors are learned, and that 'we learn both the drives that initiate behavior and the specific behaviors motivated by these drives through our interaction with the environment'.

While major contributors to *behaviorism* include Thorndike, Guthrie, Hull, and Watson, the two most prominent researchers whose names have become synonymous with behaviorism are Ivan Pavlov and B.F. Skinner. Ivan Pavlov (1927), whose original research studied the process of digestion, is most notably associated with his findings related to experiments involving the involuntary salivation reflexes of dogs. This later resulted in his

acclaimed principle of *classical conditioning*, which dealt with the relationship between stimulus and response (S-R), concluding that all behaviors are *learned*. B.F. Skinner (1968), characterized as 'unquestionably the best known psychologist in the behaviorist tradition', observes in his renowned theory of *operant conditioning* that a 'response that is followed by a reinforcing stimulus is strengthened and therefore more likely to occur again', and conversely, 'a response that is not followed by a reinforcing stimulus is weakened and therefore less likely to occur again', which he refers to as the *law of extinction* (Ormrod, 1995: 23). Stated otherwise, *operant conditioning* establishes an association between a behavior and a consequence, which can be either good or bad. The source for these two laws are attributable, in part, to Skinner's observations of rats, which revealed *learned* behavior; each time a rat would push down on a lever it *learned* that it would receive food pellet. Consequently, 'behavior is shaped through the animal's successive approximations to the desired, target behavior; each approximation results from the selective reinforcement of some responses, but not others' – principles that he applied to human learning (Curzon (2006: 74).

Applied to traditional learning and education, to include basic police training, this theory suggests that a teacher can control learning by designating the target stimulus and rewarding or reinforcing the desired response from the student, hence, controlling the acquisition of new behavior. 'Learning is thus brought about by an association between the desired responses and the reinforcement (rewards and punishment) through a system of success and failure indicators' (Rogers, 2002: 89). Given that behaviorism 'is derived from the belief that free will is an illusion, and that human beings are shaped entirely by their environment', Sadker and Sadker (2005: 346), suggest that if you 'alter a person's environment . . . you will alter his or her thoughts, feelings, and behavior', i.e., 'people act in response to physical stimuli'. Conser and Russell (2000: 322-325) and Holden (1994: 286-296) suggest that a traditional, pedagogical, military model of training is more often related to the behavioral school of learning, which in many respects, is out of step with contemporary

training practices, notwithstanding that some of its principles and practices are relevant under certain training conditions – a matter addressed later in this study.

Cognitive Theories

Presently, cognitive leaning theory serves as the predominate perspective on human learning. It focuses on how individuals process information and effects internal states which involves motivation, thinking, problem solving, decision-making, and attention. Its roots lay in the 1950-1960's when many psychologists grew frustrated with traditional behaviorists who would not consider the thought processes associated with learning, although its beginnings date back to the 1920's and 1930's with the work of Gestalt[8] psychologists Max Wertheimer, Wolfgang Kohler, Kurt Koffka, Edward Tolman, Jean Piaget, and Lev Vygotsky (Morgan, 2002: 135-136; Ormrod, 1995: 164-165). Gestalt psychologists emphasized 'the importance of organizational processes in perception, learning, and problem-solving, and believed that individuals were predisposed toward organizing information in particular ways' (Ormrod, 1995: 164-165). Given the impact and influence that Gestalt psychologists have on current day cognitive theory, an understanding of their basic tenets is apropos. Summarized, Gestalt psychology espouses the following principles: (1) *Perception may be different from reality*, i.e., what one sees and/or perceives may not necessary represent what is actually occurring. This was exemplified by Wertheimer's research into the phi phenomenon. Wertheimer (1912) had observed that two lines of lights, alternatively blinking on and off will be perceived a flowing line of lights by most observers, despite the fact that there is no movement or animation; (2) *the whole is more than the sum of its parts* which this suggests that experiences are best understood in context to one another. 'Gestaltists believed that human experience cannot be successfully understood when various aspects of experience are studied in isolation from one another' (Ormrod, 1995: 165). This concept is particularly germane to this study's hypothesis in that: (a) it is believed that there is a significant benefit in

---

[8] 'Gestalt psychology takes its name from the German word *Gestalt* – a configuration, structure, a pattern; it is a 'form' psychology. It stands in total opposition to the principles, methods, and conclusions of the structuralist and behaviourist schools of psychology' (Curzon (2006: 80).

explaining to police recruits the purpose, activities, and philosophy of what they will be experiencing over the course of their training period, and (b) when all parts of basic training are holistically integrated with the objective of achieving the intended learning outcomes, recruits have the benefit of better understanding the meaning of basic training and its application in the field; (3) *the organism (person) structures and organizes experience*, meaning that while a learning situation may not necessarily have structure, humans will attempt to impose structure and organize the experience in order to foster its own understanding. This concept is particularly germane to the use of experiential learning activities in basic police training which serve to reinforce and connect cognitive and theoretical constructs learned in the classroom to hypothetical, hands-on case scenarios in the field; (4) *the organism (person) is predisposed to organizing experience in particular ways*, i.e., learners are predisposed to structuring their experiences in similar, predictable ways, i.e., 'as simply, concisely, symmetrically, and completely as possible, a principle known as the law of Prägnanz (terseness or preciseness); (5) *learning follows the law of Prägnanz*, which involves the formation of memory traces, so over time, they tend to become simpler, more concise, and more complete; and (6) *problem solving involves restructuring and insight*, a process not of trial and error as described by Thorndike, but a process of 'mentally combining and recombining the various elements of a problem until a structure that solves the problem is achieved', a process that is perceived as intuitive to policing (Ormrod, 1995: 165-167).

Edward Tolman (1886-1959), who like his behaviorist contemporaries, underscored the importance of objectivity in research, agreed with the Gestalt School regarding the importance of cognition and physiological factors; that learning should be viewed holistically, i.e., in the context to the learning situation and not just as an isolated stimulus-response process. He contended that learning does not necessarily require reinforcement as a condition of learning, nor that learning necessarily leads to a change in observable behavior, or what he called *latent learning*. Tolman further argued – a point which has great relevance to police

recruit training – that intrinsic variables, or what he described as *intervening variables* such as drive, habit strength, incentive, and motivation, all affect behavior (Ormrod, 1995: 168-172).

Notwithstanding the influence of the Tolman and the Gestalt psychologists, perhaps Jean Piaget (1928-1980) is credited with having the greatest impact on contemporary theories of cognitive development. Specifically, Piaget advanced the intellectual development of humans by elucidating the following principles: (1) humans actively process and interpret events, as opposed to passively responding to stimuli, i.e., they 'act upon those stimuli and observe the effects of their actions'; (2) humans develop cognitive structures over time; the most basic of these structures is a schema – 'the basic structure through which an individual's knowledge is represented'; and (3) cognitive development is related to the interactions of individuals with their physical and social environments which involves a process of assimilating to the environment and making accommodations (Ormrod, 1995: 131).

While sharing the behaviorist's view that the study of learning must be objective and empirically based, cognitivism today suggests that learning involves human information processing theory which involves how people acquire, process, and remember information. Curzon (2006: 35-36) addressing cognitivism, explains that it is principally 'concerned with the various mental activities which result in the acquisition and processing of information by the learner', adding that 'its theories involve a perception of the learner as a purposive individual in continuous interaction with his social and psychological environment'. In contrast to the behaviorists, who emphasize the role of environmental conditions (stimuli) and overt behaviors (responses), cognitive psychologists look more at how individuals *process* the stimuli they encounter, i.e., how individuals perceive, interpret and mentally *store* the information they receive from the environment', which represents, in part, the processes associated with acquiring the requisite knowledge, understanding, skills, attitudes, behaviors, and competencies as part of basic police training.

Curzon (2006: 111) addressing the significance of humanistic learning explains that this school of thought 'emerged in America largely as a deliberate reaction against behaviourism, which was condemned, along with psychoanalysis, as having reduced essential human qualities to mere physical qualities'. He explains that the humanistic theory of learning is based on the essential characteristics of the human being, including the growth, worth, and dignity of persons, 'and on the need for teachers to facilitate the processes which will lead to the self-actualization of students'. Schunk (2004: 336) suggests that humanistic learning 'is largely constructivist and emphasizes cognitive and affective processes'; that its theories 'emphasize people's capabilities and potentialities as they make choices and seek control over their lives'. He posits that humanistic theories approach learning holistically, i.e., 'to understand people, we must study their behaviors, thoughts, and feelings'. Petty (2004: 16) further suggests that the humanistic school of learning emphasizes the importance of emotional factors, as well as personal growth and development, and that such factors have been 'ignored in a society which is unduly materialistic, objective and mechanistic'. He argues that 'learners should be allowed to pursue their own interests and talents in order to develop themselves as fully as possible'. With particular relevancy to this study, he explains that 'the main principles suggested by humanistic psychologists have been highly influential, especially in adult education and training'. While many theorists contributed to this school of thought, the two most popularly associated with humanistic learning theory and motivation are Abraham Maslow and Carl Rogers (Curzon, 2006: 111; Schunk, 2004: 336).

Rogers' thinking on education, similar to Maslow's, 'opposes much conventional educational practice and the psychology on which it is based; he calls for *student-centered education based on active discovery*, in contrast to the essentially passive, conformist, 'accumulation of stored knowledge' (Curzon, 2006: 116). Curzon further explains that 'the humanist approach to education marked out by Rogers places emphasis on feeling and thinking, on the recognition and importance of a student's personal values, on interpersonal

communication, and on the development of positive *self-concepts'* – traits essential to developing the self-confidence and self-efficacy necessary for today's police officers. It is these traits, which Maslow contends, motivates and leads to self-actualization (2006: 116).

Motivation, a ubiquitous factor consistently cited in the literature of learning and adult learning, is described by Schunk (2004: 329) as 'the process of instigating and sustaining goal-directed behavior'. Ormrod (1995: 412) describes it as 'an internal state that arouses us to action, pushes us in particular directions, and keeps us engaged in certain activities.' He suggests that motivation and learning 'are equally essential for performance: the former enables us to acquire new knowledge and skills, and the latter provides the impetus for demonstrating the things we have learned'. While many factors undoubtedly affect performance, research suggests that people who are generally more motivated achieve at higher levels (Ormrod, 1995; Walberg and Uguroglu, 1980). In addressing the relationship between motivation, learning, and performance, Ormrod suggests that motivation 'appears to affect learning and performance in at least four ways': (1) motivation 'increases an individual's energy and activity level' (Ormrod, 1995: 412, citing Maehr, 1984; Pin, and Boyle, 1993; Vernon, 1969); (2) motivation 'directs an individual toward certain goals' and away from others, (3) motivation not only promotes the initiation of activities, but encourages persistence effort in such activities when faced with challenges and difficulties; and (4) motivation 'affects the learning strategies and cognitive processes an individual employs'. The mere fact that learners are cognitively engaged in the process of learning, i.e., '*thinking about*' what they are seeing, hearing, and doing', affects one's learning activities. This is of particular importance in basic police training and the use of experiential learning activities.

While many factors influence an individual's motivation, theorists often refer to the internal and external factors that influence an individual's decision to take or not take action, otherwise referred to as *intrinsic* and *extrinsic motivation*. *Extrinsic motivation* is usually related to external factors that influence one to take action, such as rewards related to increases in salary, bonuses, promotions, better working conditions, etc. The source of

54

intrinsic motivation usually lies within the individual, i.e., one's personal satisfaction, sense of accomplishment, achievement, or simply the enjoyment that one realizes from certain activities. Light and Cox (2006: 50) suggest that 'students are intrinsically motivated when they learn because they are interested in the task or activity itself, and motivated extrinsically when 'they perform tasks because of the value or importance they attach to what the outcomes brings' (citing Biggs, 1999). While both intrinsic and extrinsic factors influence one's motivation, it is usually the intrinsic variables that have greater influence in learning. This is of particular relevance to basic police training when comparing a traditional, pedagogical, military model of training to that of an adult-based, andragogical model where the former subscribes to a behavioral school and the latter towards a cognitive, humanistic, and social process theory. Ormrod explains that while 'extrinsically motivated students are likely to exert only the minimal behavioral and cognitive effort they need to execute a task successfully', intrinsically motivated learners are more likely to be cognitively engaged, pursue tasks on their own initiative, evidence persistence, learn in a more meaningful way, and overall, experience pleasure in what they are doing – factors that are often cited as being characteristic of adult learners.

Abraham Maslow renowned for his *Hierarchy of Needs Theory*, postulates that humans have innate physiological and psychological needs arranged hierarchically so that successive needs cannot be achieved until the preceding need is satisfied. This hierarchy of needs is most often arranged and illustrated in the form of a pyramid of five levels: (1) physiological needs, (2) safety needs, (3) love and belongingness needs, (4) esteem needs, and (5) self-actualization needs. Understanding these needs in context to an individual's motivation has served multiple disciplines and professions, not the least of which including the educational and training setting (Petty, 2004: 53-55). According to Maslow (1968, 1970) these needs may be described as follows: (1) the physiological needs represent goods and substances needed for one's physical survival, namely, air, water, food, warmth, exercise, rest, etc. Because these needs must be met and satisfied as a necessary precondition for other

kinds of action, humans are ill-suited to consider other needs before these are met. As an example, a student who is hungry or cold, or needing to use a restroom, is obviously preoccupied with satisfying these needs and as such, will be poorly motivated toward learning. The second group of needs consists of safety considerations, the need to feel safe and secure in their environment which consists of clothing, shelter, and protection. As it relates to learning, Ormrod (1995: 417-418) suggests that people prefer structure and order in their lives, i.e., 'most students like to know what things are expected of them and prefer classroom routines that are somewhat predictable', not to suggest, however, that they don't seek challenges and occasional change. Love and belongingness, the third need, suggests that 'people seek affectionate relationships with others and like to feel that they belong and are accepted as part of a group'. This relates to Bloom's affective domain of learning, which speaks to the importance of tone, emotion, or one's degree of acceptance or rejection. The fourth need, the need for esteem, simply suggests that people need to feel good about themselves (self-esteem), as well as 'believe that others also feel positively about them (need for esteem from others). To develop positive self-esteem, individuals will strive for achievement and mastery of their environment. To attain the esteem of others, they will behave in ways that gain them recognition, appreciation, and prestige', factors that play an instrumental influence in learning as well. Lastly, the fifth and most important need relative to motivation and learning is the need for self-actualization, which is the need for realizing all of what one is capable of becoming. In the context of learning, Ormrod (1995: 418) explains that 'people seeking self-actualization might be driven by their own curiosity to learn everything they can about a particular topic'. In a greater sense, however, one's pursuit of self-actualization has far greater impact than the other needs when considered as part of basic police training. While the first four needs represent needs that can only be satisfied by external sources, self-actualization is inherently intrinsic. Maslow referred to this as one's *growth need*. While the extrinsic needs, once achieved and maintained, no longer need to be satisfied, the need for self-actualization is a continuing, never-ending process, for once such a

need is satisfied, man inherently sets new goals to pursue and realize (Curzon (2006: 111-116; Maslow, 1973; Schunk, 2004: 336-338, et al).

Relative to these six needs, the needs for affiliation, approval, and achievement have been identified as factors that sometimes play a greater influence in some learners than others. These are factors that are worthy of consideration as part of the basic police training process. In addressing these three factors, Ormrod explains that '*the need for affiliation*' is the degree to which a person wants and needs friendly relationships with others' (Ormrod, 1995: 420). While not necessarily applicable to all individuals, evidence suggests that people with a high need for affiliation share a number of characteristics such as: being nervous when their performance is being observed; spending considerable time communicating with others; and their attitudes and opinions are easily influenced by those around them'. Learners who have a high '*need for approval'* often seek 'to look good', which may suggest a low self esteem. And lastly, the '*need for achievement*', otherwise referred to as '*achievement motivation*' is a trait characteristic of learners who have an intrinsic need to achieve excellence, despite any extrinsic benefits that they may realize from such pursuits. 'People with a high need for achievement are realistic about the tasks they can accomplish, and they persist at tasks that are challenging yet achievable' (Ormrod citing Vernon, 1969, and Veroff, 1975).

There is a large body of opinion regarding the applicability of Maslow's theory to learning. In light of that, it is acknowledged that this review merely scratches its surface. Nevertheless, the importance of Maslow's theory to adult learning and basic police training is evident. As Curzon (2006: 114) suggests, 'Maslow's model throws some light on motivation in the classroom. Students' basic needs have to be satisfied before effective learning can take place', and as such, Maslow's message is clear: 'do not accept the absence of motivation in a student as an unalterable state of affairs' – 'it can be understood and modified to the advantage of student and teacher'.

D.A. Kolb (1984: 20-38) renowned for his theory of experiential learning suggests that his research 'offers a fundamentally different view of the learning process from that of the behavioral theories of learning . . . or the more implicit theories of learning that underlie traditional educational methods'. He explains that the process of experiential learning proffers 'some very different prescriptions for the conduct of education, the proper relationships among learning, work, and other life activities, and the creation of knowledge itself'. Different from the behavioral schools which 'deny any role for consciousness and subjectiveness in the learning process', Kolb suggests that experiential learning theory represents a holistic and integrative approach to learning that 'combines experience, perception, cognition, and behavior' – all of which are of particular importance to basic police training.

Inspired by Lewin's model of action research and laboratory training where 'learning, change, and growth are seen to be facilitated best by an integrated process', Kolb explains that Lewin's model, conceptually similar to those of Dewey and Piaget, involves a four stage cycle. This cycle is predicated on the notion that one's learning is a procedural process based on one's experience in which one's behaviour is determined by the sum total of an individual's situation and environment. Kolb's four stage model begins with: (1) an immediate or *concrete experience,* which serves as the basis for (2) *observation and reflection*, which are then (3) assimilated into the *formation of abstract concepts* or *conceptualization*, and from which (4) '*new implications for action can be deduced*' (Kolb, 1984: 160 in Jarvis, 2003). Fundamentally, each stage of this cyclical process depends upon and is contingent upon the preceding stage. The succeeding stage, in its turn, influences the next stages, thus representing a cyclical process of learning that continues to build and grow.

Figure: 1-4

Kolb's Experiential Learning Model

Source: Kolb, D.A. (1984) Experiential Learning: Experience as the Source of Learning and Development. London: Prentice Hall. Pp. 20-38 in Jarvis and Griffin, 2003: Vol. IV, 159-179.
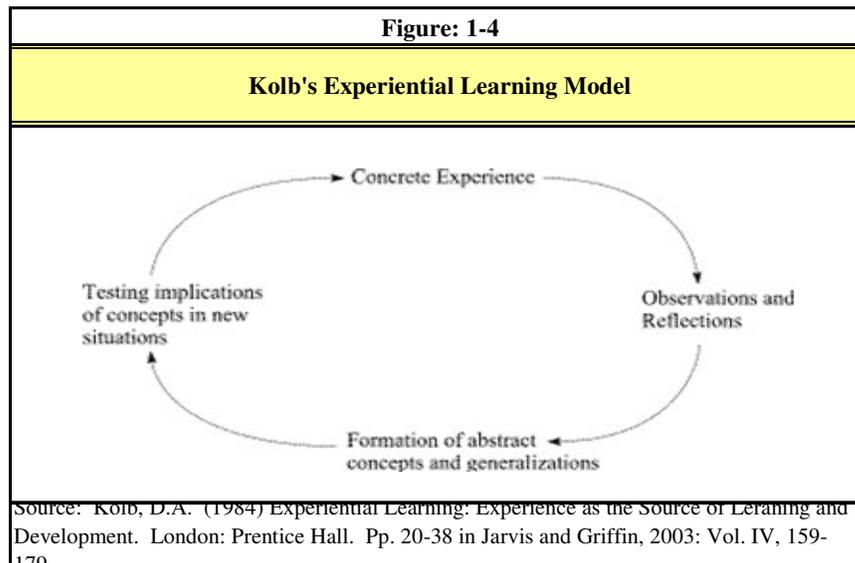
This model offers a unique perspective on learning and development upon which Kolb posits six fundamental principles.

The first principle, which posits that *learning is best conceived as a process, not in terms of outcomes*, Kolb argues that 'the theory of experiential learning rests on a different philosophical and epistemological base from behaviorist theories of learning and idealist educational approaches' (1984: 164), which base their efficacy on measurable outcomes. Kolb suggests that experiential learning theory is based on a different set of assumptions, explaining that experiential learning focuses on the processes of learning and the embodiment of ideas, which are by their nature, 'immutable elements of thought', i.e., they are continuously being reformed by experience and are therefore, not susceptible to measurement. He maintains that 'when viewed from the perspective of experiential learning the tendency to define learning in terms of outcomes can become a definition of non-learning'.

Regarding the second principle, which contends that *learning is a continuous process grounded in experience*, Kolb explains that 'knowledge is continuously derived from and tested out in the experiences of the learner' (1984: 168). Learning consists not so much in obtaining a discernable outcome per se, but exists as a never-ending process deeply integrated with personal experience. This second principle, he contends, has important educational implications insofar as the role of 'an educator is not only to implant new ideas but also to

dispose of or modify old ones'. As such, 'if the education process begins by bringing out the learner's beliefs and theories, examining and testing them, and then integrating the new [and] more refined ideas into the person's belief systems, the learning process will have been facilitated' (Kolb, 1984: 168).

Addressing his third principle, Kolb explains that *learning requires the resolution of conflicts* 'between opposing ways of dealing with the world'. Contending that 'learning is by its very nature a tension and conflict-filled process', he suggests that 'new knowledge, skills, or attitudes are achieved through confrontation' among the four modes of experiential learning as depicted in Figure 1-4. He explains that for learners to be effective, they need four different kinds of abilities:

1. Concrete experience abilities (CE) – learners must be able to involve themselves fully, openly, and without bias in new experiences

2. Reflective observation abilities (RO) – learners must be able to observe and reflect upon their experiences from many perspectives

3. Abstract observation abilities (AC) – learners must be able to create concepts that integrate their observations into logically sound theories

4. Active Experimentation (AE) – learners must be able to use these theories to make decisions and solve problems

His fourth principle, which states that *learning is a holistic process of adaptation*, provides what is perhaps the best insight into experiential learning. He suggests that learning is not necessarily limited to a 'single specialized realm of human functioning such as cognition or perception', rather, it 'involves the integrated functions of the total organism – thinking, feeling, perceiving, and behaving' (Kolb, 1984: 171). Notwithstanding the extensive and specialized research that has been conducted over the past half century with regard to learning theory, Kolb acknowledges that any attempt to integrate and synthesize the process of learning into a single explanation is at best problematic. 'Yet if we are to understand human behavior, particularly in any practical way, we must in some way put together all the pieces that have been so carefully analyzed'. As such, 'in addition to knowing how we think and how we feel, we must also know when behavior is governed by thought and

60

when by feeling'. Experiential learning, Kolb explains, is thus 'concerned with how these functions are integrated by the person into a holistic adaptive posture toward the world' (Kolb, 1984: 171-172). The process of learning, therefore, is <u>the</u> major process of human adaptation, irrespective of where it occurs. Humans learn to adapt based on their experiences, which in turn, influence their future learning. Learning then, can be viewed as a cyclical, continuous, and sustained activity; a process that adaptively extends to 'concepts such as creativity, problem solving, decision making, and attitude change'. Kolb further contends that 'when learning is conceived as a holistic adaptive process, it provides conceptual bridges across life situations such as school and work, portraying learning as a continuous, lifelong process' (1984: 172). Conceptually, this is germane to the processes experienced of basic police training, as will be discussed in the final chapter.

The fifth principle, that *learning involves transactions between the person and the environment*, suggests that the environment in which one learns plays an important part in the learning process. He explains that to 'the casual observer of the traditional educational process', learning may simply appear to be a personal and internal experience involving books, a teacher, and a classroom. Kolb suggests, however, that 'in experiential learning theory, the transactional relationship between the person and the environment is symbolized in the dual meanings of the term experience: one being subjective and personal, i.e., referring to a person's internal state, as in 'the experience of joy and happiness'; and the other being objective and environmental, as in 'he has 20 years of experience on this job' (1984: 172). Referring to the work of Bandura (1978), he notes that the personal characteristics of the learner, environmental influences, and behavior 'all operate in reciprocal determination, each factor influencing the others in an interlocking fashion' (Kolb, 1984: 176).

And lastly, Kolb contends that *learning is the process of creating knowledge*. As evidenced by foregoing review of learning theories, the process of learning is a complex and idiosyncratic process. Kolb suggests that 'to understand learning, we must understand the nature and forms of human knowledge and the processes whereby this knowledge is created'

61

(Kolb, 1984: 176). By understanding, recognizing, and acknowledging that the acquisition of knowledge necessitates the use of different instructional methods, learning can be enhanced. His point is particularly relevant to basic police training, not only as it relates to the need for instructors to be able to shift their teaching style based upon the nature of the materials being taught, but it is also an important reminder of the need to consider the idiosyncratic learning styles that exist among learners.

In consideration of these challenges, Kolb contends that 'the theory of experiential learning provides a perspective from which to approach these practical problems'. He suggests 'that a typology of different knowledge systems result from the way the dialectic conflicts between adaptive modes of concrete experience and abstract conceptualization and the modes active experimentation and reflective observation are characteristically resolved in different fields of inquiry' (Kolb, 1984: 178).

Social Learning

Notwithstanding the significance and implications of the foregoing learning theories, the social learning theories, for reasons addressed hereafter, may have particular relevance to the processes associated with basic police training. Social learning theories, also referred to as *social cognitive theories* because they originally evolved from, and incorporate components of behaviorism and aspects of cognitivism, involve the process of learning that occurs within a social context. This involves learning that occurs most often through observation, imitation, and modeling; it 'focuses on the ways in which individuals learn from observing one another' (Ormrod, 1995: 131). Morgan (2002: 170) writes 'that some of life's most important lessons are learned simply by observing others'. Addressing this school of thought, Ormrod posits four general principles that underlie social learning:

1. *'People can learn by observing the behaviors of others and the outcomes of those behaviors'*. This is more commonly referred to as *modeling*; a particularly important factor in basic police training, considering the length of training, along with the influence that police instructors have upon police recruits.

2. '*Learning can occur without a change in behavior*'. Contrary to the behaviorists, who suggest that learning leads to a change in behavior, 'social learning theorists

62

argue that because people can learn through observation alone', their learning may or may not necessarily be reflected in their current behavior.

3. '*Reinforcement plays a role in learning*'. The concept of operant conditioning, i.e., 'a response that is followed by a reinforcing stimulus is strengthened and therefore more likely to occur again', underscores the concept of *modeling* or *imitation*. While the extent to which *modeling* has on learning continues to be debated, it is, nevertheless significant given the nature of police training, and in particular, the extent to which practical exercises and case-scenarios are utilized within basic police training.

4. '*Cognitive processes play a role in learning*'. The notion that learners are aware of 'response-reinforcement contingencies is an essential component of the learning process', i.e., an expectation of a reward can influence learning.

As noted, it is doubtful that any single theory can adequately account for the complexities of human learning. Given the highly idiosyncratic nature of human learning, it is more plausible that a combination of these and other theories can provide an acceptable account of human learning. Notwithstanding this acknowledgement, there is good reason to believe that the theories of social learning have particular application to basic police training, given the nature of its curriculum, the intended learning outcomes and desired competencies, social and cultural environment, and the group dynamics that exist among recruits. At this point, then, it becomes important to examine how the environment influences and serves to reinforce learning through the process of *modeling*.

Social learning theory places special emphasis on social and environmental factors. That is, it focuses on the behavior of other people who we imitate or whose behavior reinforces that of our own actions, thereby providing reinforcing consequences. Writing that 'clearly, people are reinforced for modeling the behaviors of others', Ormrod referencing the research of Bandura (1963; 1977; 1995; 1997), suggests that reinforcement occurs in four ways: (1) people reinforce others who copy what they themselves do, e.g., if a police recruit follows and/or duplicates his/her example, the instructor will compliment the recruit's performance; (2) an observer's (participant) actions are reinforced (complimented/rewarded) when his/her actions model those of a third party, e.g., a recruit is complimented because his/her behavior was similar to that of another successful recruit); (3) successful modeling or imitation serves to reinforce the modeled behavior; it is self-reinforcing. This means that the

63

intrinsic satisfaction of one's performance in and of itself serves to reinforce learning; and (4) observing another person's behavior that is rewarded serves to reinforce the observer's own behavior and learning. So, a recruit who comes to respect an instructor's performance and stature may model his/her behavior by working toward that same position, 'a phenomenon known as vicarious reinforcement' (Ormrod, 1995: 134-135).

Knowles, addressing the research by Bandura explains that he 'developed the most elaborate system of thought on imitation, identification, or modeling as concepts of teaching'. Labeling the system as *social learning*, Bandura (1963), suggests that 'in teaching by modeling, the teacher behaves in ways that he or she wants the learner to imitate', i.e., 'the teacher's basic technique is role modeling' Knowles (1998: 103). Addressing the importance of modeling, Knowles explains that 'Bandura and Walters (1963) identified three kinds of effects from exposing the learner to a model: (1) a *modeling effect*, whereby the learner acquires new kinds of response patterns; (2) an *inhibitory* or *disinhibitory effect*, whereby the learner decreases or increases the frequency, latency, or intensity of previously acquired responses; and (3) an *eliciting effect*, whereby the learner merely receives from the model a cue for releasing a response that is neither new or inhibited' (1998: 102-103).

Providing examples of these three models, he writes that the *modeling effect* 'occurs when the teacher shows how to listen empathically to one another by listening empathically to them himself'. 'The *inhibitory* or *disinhibitory effect* occurs when the teacher lets the learners know, through modeling, that it is or is not approved behavior to express their feelings openly'. And lastly, with regard to the *eliciting effect*, this occurs when the teacher, through modeling, 'teaches the art of giving and receiving feedback by inviting the learners to constructively criticize his/her own performance' (Knowles (1998: 103).

As noted, a great deal of what people learn is acquired through modeling the behaviors of others. This is most easily observed in the influence that parents have on their children, which is perhaps most notably exemplified in areas such as a child's acquired disposition to learning, reading, aggression, biases, tolerance, morality, etc. The influence of modeling,

however, extends far beyond one's immediate family; extending into the community at-large and in the case of police recruits, the influence of academy instructors. Bandura (1977), suggests that four elements must exist for successful modeling: *attention, retention, motor reproduction*, and *motivation*. Addressing these four elements, Bandura contends that *attention* refers to the process of consciously paying attention to those aspects of the modeled behavior; *retention* involves remembering the behavior that has been observed via the use of *memory codes*, i.e., verbal and visual cues that humans develop to recall behavior; *motor reproduction* involves the process of replicating the behavior demonstrated by the model as in the case of a police recruit's instructor, provided that one has the mental and physical ability to do so. On this point, Ormrod suggests that 'instruction that included an opportunity for practice and immediate feedback about the quality of the performance was clearly superior to instruction that provided no opportunity for such specific feedback' (Ormrod, 1995: 147). And lastly, *motivation* to exhibit the modeled behavior, involves one's interest to learn the behavior, regardless of whether it may be required, or more importantly, whether one has an internal desire.

In considering these four elements, it is noteworthy to point out that learners may model the same observed behavior differently reflecting the idea that all learning is inherently idiosyncratic. 'Not only will the four components lead to individual differences in modeled behaviors, the absence of any one of these components will make modeling unlikely to occur at all' (Ormrod, 1995: 147). These considerations have serious implications for the target outcomes in basic police training In consideration of the intensive contact that police instructors have with recruits, it is important to consider the three effects of modeling: (1) it teaches and leads to new behavior, (2) it can either inhibit or disinhibit previously learned behaviors, i.e., while *vicarious punishment* can lead to inhibition, *vicarious reinforcement* has a disinhibiting effect. This underscores the importance of both the instructor's attitude towards their recruits, and the significance of police academy's overall instructional philosophy, and (3) the fact that modeling elicits similar behavior, i.e., 'when a person

observes a model performing a particular behavior, that person may display similar rather than identical behavior' (Ormrod, 1995: 148). Given the importance and influence of modeling, researchers suggest that people who serve as models, either by design or by default, should possess certain characteristics: (1) that they be competent and capable individuals, (2) that they possess high status, respect, and power, (3) that they behave in gender-appropriate ways, and (4) that their behavior be relevant to the learner's situation, which in the case of basic police training exits in the majority of situations.

Lastly, notwithstanding the influence that a role model plays in learning behaviors, a learner's sense of *self-efficacy*, i.e., their belief that they are capable of successfully executing these behaviors, plays a critical role. Ormrod explains that 'self-efficacy is a concept similar to *self-esteem*, but with one important difference. One's self-esteem tends to pervade a wide variety of activities; thus people are described as having generally high or low self-esteem. Self-efficacy is more situation-specific', as in the case of this study, which measures, among a number of variables, a recruit's self-confidence (self-efficacy) upon completing basic training, i.e., do they believe they are capable of successfully executing the role and responsibilities of a police officer (Ormrod, 1995: 150). Another point that Ormrod makes that is relevant to this study while echoing Bloom's *affective domain*, is the suggestion that 'people's feelings of self-efficacy affect a number of aspects of their behavior, including: (1) choice of activities; a person's beliefs about whether or not an individual believes s/he can succeed at a particular task or activity will determine whether they will undertake the same, (2) effort and persistence; 'people with a high sense of self-efficacy are more likely to exert effort in attempting to accomplish a task', as well as persist when encountering difficulties, and (3) research suggests that students with a high degree of self-efficacy 'tend to learn and achieve more than students with low self-efficacy . . . students who *believe* they can do a task are more likely to accomplish it successfully than those who do not believe they are capable of success' (Ormrod, 1995: 151).

Summary

As noted in the opening paragraph of this section, it is readily apparent that no single theory exits that can stake claim for a full and complete understanding of how and why human learning occurs. The study of human learning is not unlike the criminologists' attempts to understand criminal behavior; the more one learns about how and why humans act, the more one appreciates the uniqueness of each human being. Notwithstanding the many schools of thought that exist within these two disciplines, by examining the theoretical basis of each, one comes to realize that many of the explanations that account for learning, as with criminality, are not necessarily juxtaposed or antithetical, but rather coexist in a complimentary relationship. If nothing else, one comes to appreciate that they are not mutually exclusive; rather they can be better appreciated when understood as complimentary elements of human behavior.

In that context, it is important to note that the foregoing review barely scratches the surface of the literature that addresses theories of learning. It's intent, however, was to acknowledge the scope and breadth of the major schools of learning that have particular application and relevance to basic police training, including the traditional, pedagogical, military model of training and the collegiate, adult-based, andragogical model. Addressing the significance and contribution of learning theories, Ormrod contends that learning should not be left to chance. He rather suggests that 'the better we can understand the factors that influence that learning (principles) and the processes that underlie it (theories), the better we can train teachers and design instructional materials to maximize learning that will benefit students and minimize learning that will interfere with their later achievement' (1995: 9).

Adult Learning and Education

Development of Adult Education

To understand *adult education* as a discipline, one must understand that contemporary society, whether by design or default, has reserved the formal process of *acquiring an education* for the young, despite the fact that history abounds with evidence of initiatives

designed to provide education for adults. Indeed, there has been a resounding theme among post 18th century scholars and practitioners of adult education that attests to society's preferences for educating children, often at the expense of ignoring the needs of adults, who many contend, have equal, if not greater needs for learning and education (Knowles, 1998, et al; Merriam, 2001a, 2000b; Brookfield, 1986); Rogers, 2002; Jarvis, 2003, Jarvis and Griffin, 2003, et al). Dating back as early as 1816, Thomas Pole, in the *History of Origin and Progress of Adult Schools* (1816: 1-5), began his treatise by stating that 'benevolent individuals, of preceding generation, have exerted themselves for the education of youth' (Pole, 1816: 1-5, cited in Jarvis and Griffin, 2003). A century later Thomas Masaryk (1927: 3-7), expressed in his presidential address to the *Council of the World Association for Adult Education*, that what caused him concern with traditional school education was not necessarily 'the education of children in school', but rather the lack of education for parents and adults (Masaryk, 1927: 3-7, cited in Jarvis and Griffin, 2003: 84-87). Since that time, however, attention to adult education has grown exponentially – with the impetus originating in Europe.

Stubblefield and Keane (1994: 26), addressing the *History of Adult and Continuing Education* in the United States, point to the importance of understanding the historical growth and development of adult learning despite what appears to be a general sense of disinterest or ambivalence on the part of contemporary scholars on the subject. Underscoring this point, the authors preface their writings by explaining that 'practitioners and researchers in socially oriented fields such as adult education often turn a blind eye toward history', noting that when they look at the development of adult education, they do so merely with the purpose to 'find examples to justify societal support or to seek inspiration through the lives of great pioneers'. Suggesting that adult education in the United States reflects a patchwork of events that covers a time span of over three centuries, its rich history is sometimes relegated to remain 'only institutional, inspirational, and celebratory'. Emphasizing the importance of understanding the historical development of adult education, they suggest that 'beyond institutional

development, questions must be addressed – questions of ideas, purposes, questions of the relationship between segments of society, and questions of the social conditions that adult educators seek to redress through various programs of adult education' (1994: 26). It is important to recognize, therefore, that adult education has been in practice long before its formal institutionalization and that its origins have a rich past, which bear upon present day practices, including basic police training.

Notwithstanding what has been characterized as a long and tattered history of adult education within the United States, its origins can be traced to a wide range of peoples, cultures, religions, and other influences, that accompanied those who settled America from Europe. These settlers were in turn strongly influenced by the great ancient scholars of Greece and Athens. Indeed, 'historians of western civilization and education often look to the ancient Greek city states as the source of western culture', in which the concept of *enculturation* – the immersion and participation into the total Greek culture – comprehensively embodied learning and education (Ornstein, 1997: 84-88). The origins of adult education date back to the philosophies and practices of Socrates, Plato, Aristotle, Cicero, Evelid, Quintilian, Confucius, and Aquinas, all of whom subscribed to, and advocated freedom of thinking, active teaching, self-examination, and intellectual and introspective inquiry – 'they perceived learning to be a process of active inquiry, [and] not passive reception of transmitted content, they invented techniques for actively engaging learners in inquiry' – a concept and practice that serves to underscore the practice of adult education today, and more specifically, that of andragogy (Knowles, 1990: 27).

Adult Learning Defined

Rogers (2002: 34), addressing the meaning and interpretation of adult learning states that 'much ink has been spilt to determine what we mean by the words *adult*, *education*, and *adult education*, but there is still confusion'. He writes that this confusion persists 'despite the fact that, mainly in the form of continuing education and more recently lifelong education, adult education is becoming increasingly important in the public eye, [and that] a good deal of

uncertainty exits as to what these terms mean'. Many terms fall under the rubric of adult-based learning – the most popular of these include *adult education, continuing education, recurrent education, non-formal education, transformational learning, lifelong learning, the learning age, further learning and education*, and perhaps most popularly, *andragogy*. Merriam and Brockett (1997: 8), basing their own definition on the work of Knowles, define *adult education* as 'activities intentionally designed for the purpose of bringing about learning among those whose age, social roles, or self-perception define them as adults'. Addressing what Brookfield points out as a 'paradigm' in definitions, he notes that the *National Advisory Council for Adult Education* (1980: 3) views the adult learner as 'an adult who is enrolled in any course of study, whether special or regular, to develop new skills or qualifications, or improve existing skills and qualifications', while the *National Center for Education Statistics* (1980: 1) defines *adult education* as 'courses and other educational activities, organized by a teacher or sponsoring agency, and taken by persons beyond compulsory school age'. Without belaboring what might otherwise seem a question of semantics, it is important to note that there are multiple definitions for adult learning and education. None of them, however, creates a significant distinction in meaning. Darkenwald and Merriam (1982: 9) offer the following definition, which not only presents a clear characterization of *adult learning*, but one that is relevant to basic police training and the current study: 'adult education is a process whereby persons whose major social roles are characteristic of adult status undertake systematic and sustained learning activities for the purpose of bringing about changes in knowledge, attitudes, values, or skills'.

Conceptual Principles of Adult Learning

As a preface to the following discussion, it is important to acknowledge that no single principle or theory accounts for how or why adults engage in further learning. Nevertheless, it is fair to say that there exists a general presupposition among scholars that adult learners possess specific needs, interests, desires, experiences, and motivations that are related to their *station-in-life*, which is of particular importance when considering the police recruit. The

70

various philosophies and methodologies of adult learning have evolved from the efforts of adult educators to address these issues. It is important to acknowledge that traditional theories of learning serve as a foundation for understanding how and why adults learn, however, when presented under the rubric of adult learning, the advancement of theories of adult learning, per se, must take centre stage. Furthermore, principles of adult learning are most often presented, and perhaps best understood and appreciated, when contrasted with the prescriptive pedagogical format that characterizes the traditional mode of teaching children; a matter that will be discussed in greater detail to follow. Mindful that the focus of this study examines the efficacy of an andragogical instructional methodology in basic police training, three points are worthy of notation as a prologue to examining what is commonly referred to within the discipline as *principles of adult learning*:

Theories of Adult Learning. It is important to acknowledge that there are many theories, including hybrid theories, about adult learning that serve to account for how and why adults learn. Not dissimilar to other disciplines, while there are other perspectives that might differ, the majority of commentaries share a core set of beliefs and concerns relating to adult education, and it is this consensus that will be examined herein.

Instructional Methodologies. Theories about *how* and *why* adults learn characteristically serve as foundations upon which instructional methodologies are advanced. These are what Knowles (1998) describes as *principles for practice*. In this regard, the differences of opinions among theories, especially as they pertain to the characteristics of the adult learner, i.e., who they are and what motives them, naturally lead to distinctive recommendations as how best to facilitate adult learning. These recommendations are generally thematic in nature.

Andragogy. Andragogy, falling under the rubric of adult-based learning, represents a school of thought, based in part, on a number specific beliefs, principles, and assumptions about how and why adults learn, and upon which certain

methodological *principles of practice* are recommended. While much of what andragogy advances is not inconsistent with the mainstream, and in many respects, builds upon earlier research on adult learning principles, it is distinct in key ways as outlined below.

General Characteristics of Adult Learners

Clearly, when reviewing the literature of adult learning and education, a clear differentiation must be made between adult and pre-adult learning. Certainly, if no such differences existed, the subject of 'adult education' would be moot. However, this is by no means the case. Adults, including police recruits, who find themselves in an educational context, are different from traditional school children. While some address the characteristics of adult learners in broad terms, others suggest that adults possess individual, group, or situational characteristics that serve to differentiate them. When discussing these different characteristics, it is important to understand that beyond the stark differences of age, physical development, and maturity, adults find themselves in learning situations under completely different circumstances than those of traditional school age children. Understanding the differences and circumstances under which adults enter a learning environment, therefore, has significant implications. It is the recognition of these individual, group, and situational characteristics that serve, in great part, as a foundation upon which effective *principles of practice*, i.e., instructional methodologies, are advanced.

Brookfield (1986: 2-3), addressing individual and group differences among adult learners, suggests that 'the teaching-learning transactions undertaken by adults are complex and multi-faceted,' and consequently, 'steadfastly refuse simple categorization'. Learning for adults encompasses a wide range of purposes, settings, formats, and methods – all of which involve the cognitive, affective, and psychomotor domains of learning. He explains that adult learners often share characteristics that he describes as *commonalities* which serve to unite them as a learning cohort, which in effect, influences and enhances their learning experiences. While these characteristics may be representative of adult learners on an individual, group, or

situational basis, Brookfield, along with Rogers (2002: 71-82) and Cross (1981: 220-252), point to their importance in creating a group dynamic, which in the case of basic police training, is an important consideration. Recognizing these different characteristics, therefore, not only helps to understand the circumstances and idiosyncrasies that adult learners share, but the teaching methods that can be used to help them meet their adult learning goals. Collectively, the following represents individual, group, and situational characteristics that serve to guide the facilitation of adult learners as put forth by Brookfield, Cross, and Rogers:

1. Adult learners define themselves as adults, whether by legal definition or chronological age.

2. Adult learners are in the middle of a process of growth and are engaged in a purposeful exploration of a field of knowledge or set of skills.

3. Adult learners possess expectations about the learning process.

4. Adult learners possess different and common physiological, social, cultural, and psychological characteristics.

5. Adult learners' quest for knowledge, skills, and experiences occurs in group settings.

6. Learners share a host of experiences, skills, knowledge, and values that influence how new ideas are received, how new skills are acquired, and how the experiences of others are interpreted.

7. Adult's prior learning and experience at-large, comprise valuable curricular resources, e.g. adult cohort groups can share and relate to similar problems, challenges, concerns, deficiencies, identify areas for improvement, etc.

8. Transactions among adult learners in similar cohort groups, such as police recruits, will be characterized by a respect for individual members that will be manifest in the procedures used. Examples of such transactions are group discussions where leadership for facilitating discussions are shared and rotated.

9. Adult learners possess their own set of patterns for learning.

In summary, while learning is an individual and idiosyncratic process, the influence of adults learning within a group provides a synergistic dynamic, which has particular applicability to the processes inherent to police recruit training. As Rogers (2002: 167) suggests, learning within a group serves to enhance the learning experiences so that 'each person comes to claim for themselves something new and in the process changes their thought patterns, their competencies and their behavior to a smaller or greater extent'. It would

certainly appear, therefore, that learning within a group is 'a valuable tool for helping adults to become more conscious of and more effective in their learning' and as such, can wholly influence a recruit's overall training experience.

<div align="center">Andragogy</div>

While suggested in the previous sections, it is important to preface the following discussion by reiterating the point that the construct of andragogy falls under the rubric of adult-based learning. Andragogy, however, taking into consideration these many theories and prescribed practices, offers a set of assumptions about adult learning around which a number of specific practices may be organized. From accounts other than Knowles' (1998), andragogy is defined as 'the art and science of helping adults to learn and the study of adult education theory, processes, and technology to that end' (Krajnc citing Titmus, 1989: 19-21). Malcolm Knowles (1913-1997), revered by many as the *modern father of andragogy* and from whom much of the following review is derived, popularized the term and meaning dating back to the mid 1960's (Krajnc, 1989: 19-21; Jarvis and Griffin, 2003: Vol. IV, 217).

His research into its meaning and origin is based on the work of Gert van Enckevort, a Dutch adult educator who conducted an in-depth study into the word's origin and the sporadic use of the term. Van Enckevort suggests the term originated from the German name *Andragogik*, coined by Alexander Kapp in 1833. Kapp, who used the word to describe the educational theory and practices of the famous Greek teacher and philosopher Plato, who was renowned for his use of the dialectic (Socratic) method of teaching (Knowles, 1989: 79-85). As the use of the term andragogy evolved in meaning and application, much to the credit of Dusan Savicevic (a Yugoslavian adult educator and student of Malcolm Knowles) and other pioneers in the field such as Houle, Kapp, Lindeman, and Thorndike, Van Enckevort points to the 1921 writings of Eugen Rosenstock (1921) as providing significant details of its evolution. Rosenstock, a German social scientist who addressed the special needs of the adult learner, suggested that adult education was of 'such a nature that it required special teachers, special methods, and a special philosophy'. He emphasized that, 'it is not enough to translate the

insights of education theory [or pedagogy] to the situation of adults', rather, equal attention should focus on the role of instructors, declaring that 'teachers should be professionals who could cooperate with the pupils'; adding that 'only such a teacher can be, in contrast to a *pedagogue*, an *andragogue*' (Knowles, 1998: 59, citing Rosenstock, 1921). Despite Rosenstock's advocacy for the concept, it failed to gain 'general recognition, until 1957 when a German teacher, Franz Poggeler, published a book, *Introduction into Andragogy: Basic Issues in Adult Education*' (1957), which sparked the interest of adult educators worldwide (Knowles, 1989: 79-85). While the term andragogy was used rather sparingly in the formative years of the early twentieth century, its use and practice has grown exponentially, that it has resulted in a number of undergraduate and graduate programs internationally, including programs at Columbia University, the University of Nottingham, and the University of Amsterdam where they differentiate the terms of *andragogy, andragogics, and andragology*. They define *andragogy* as consisting of any intentional and professionally guided activity that aims at a change in adult persons; *andragogics* as relating to the background of methodological and ideological systems that govern the actual process of andragogy; and *andragology* as the scientific study of both andragogy and andragogics (Knowles, 1998: 60).

Pedagogy versus Andragogy

Perhaps the best means of introducing andragogy is by tracing its origins in context to examining how and why it is best understood when comparing it to pedagogy. Knowles (1913-1997), explains that his research into andragogy evolved not only from his growing understanding of pedagogy, but also from his ever-increasing knowledge about 'adults as learners and their learning processes' (Knowles, 1994: 6). In introducing andragogy, Knowles provides a comparative and analytical framework for understanding the differences between pedagogy and andragogy. The term *pedagogy*, he explains, 'is derived from the Greek words *paid*, meaning *child* and *agogus*, meaning *leader of*'. Translated, pedagogy may be interpreted to mean *the art and science of teaching children*. The practice of pedagogy can

be traced to seventh century Europe where 'schools were organized for teaching children, primarily for preparing young boys for the priesthood'. These institutions later came to be known as cathedral and monastic schools (Knowles, et al, 1998: 36; 61). Given the role and mission of these monasteries, which involved teaching, reading, writing, and 'the indoctrination of students in the beliefs, faith, and rituals of the church . . . they developed a set of assumptions about learning and strategies for teaching that came to be labeled pedagogy'; and even though formal education was reserved for the elite, 'this model of education persisted through the ages well into the twentieth century' (Knowles, Holton and Swanson, 1998: 36). Consequently, it has served as the basis for most modern educational systems. Despite some changes within the past half century, it continues as a prescriptive process of learning where the teacher is the transmitter of knowledge and/or information, and the student/child is the receiver or recipient. As such, 'the pedagogical model assigns to the teacher full responsibility for making all decisions about what will be learned, how it will be learned, when it will be learned, and if it has been learned. It is teacher-directed, leaving to the learner only the submissive role of following a teacher's instructions' (Knowles, 1990: 55-56). Knowles emphasizes that the pedagogical model is based on the premise that given the student/child age, immaturity, and lack of experience, the pupil is wholly dependent on the teacher. Given the absence of any other teaching philosophy or practice, the pedagogical model has had an unquestioned influence in formal education. In response to the near exclusive reign of the pedagogical model, Knowles writes 'the pedagogical model is the one we have all had the experience with. In fact, it is the only way of thinking about education that most of us know, for it has dominated all of education' (Knowles, 1990: 55).

Pedagogical Assumptions

Knowles posits that the pedagogical model, in its purest form, is based on assumptions about the characteristics of children as learners, which, when contrasted with the assumptions to the andragogical model, serves to provide a foundation for understanding the differences in their teaching styles. Knowles' latest publication (1998) identifies six andragogical

76

assumptions, although his earlier writings identified only four assumptions, which speaks to, in great part, the evolution and maturation that the discipline has experienced over the past decades. Pedagogy, therefore, is based on the following six assumptions about children as learners:

1. The child's need to know

2. The child's self-concept

3. The role of the child's experience

4. The child's readiness to learn

5. The child's orientation to learning

6. The child's motivation to learn

With regard to Knowles' (1998: 62) first assumption, which addresses *the child's need to know*, he explains that 'learners only need to know that they must learn what the teachers teach if they want to pass and get promoted; they do not need to know how what they learn, will apply to their lives'. This stands in contradiction to the motivations of adult learners whose *need to know* can be associated with both the intrinsic and extrinsic incentives. Where the adult's motivations may be based on real world consequences beyond the classroom, i.e., what will I need to know or learn relative to my functionality and success as a contributing member of society, a child's *need to know* is absolutely prescriptive – the child's outcomes are limited to the expectations of the adult teacher.

Addressing the second assumption regarding *the child's self-concept*, Knowles writes that 'the teacher's concept of the learner is that of a dependent personality; therefore, the learner's self-concept eventually becomes that of a dependent personality' (1998: 62). Here, Knowles maintains that the pedagogical model assigns to the teacher full responsibility for making all the decisions about what should be learned, how and when it should be learned, and whether it has been learned. The only role for the learner, therefore, is that of submissively carrying out the teacher's directions. He explains, that 'as individuals mature, their *need* and *capacity* to be self-directing, to use their experience in learning, to identify

their own readiness to learn, and to organize their learning around life problems, increases steadily from infancy to preadolescence, and then increases rapidly during adolescence' (1998:62). While the pedagogical approach may be appropriate for students in their early years of school, it not does not change or adapt to a child's growing independence and need for self-direction, and consequently, may produce 'tension, resistance, resentment, and often rebellion', all of which inhibit learning (1998: 63). This natural maturation is depicted in Figure 1-5, which represents an individual's decreasing dependency and increasing self-directedness as one grows older, which Knowles contends, the pedagogical model does not take into consideration.

Figure: 1-5

The Natural Maturation Toward Self-direction

Source: Knowles, M.S., Holton, E.F., and Swanson, R.A. (1998: 63). The Adult Learner
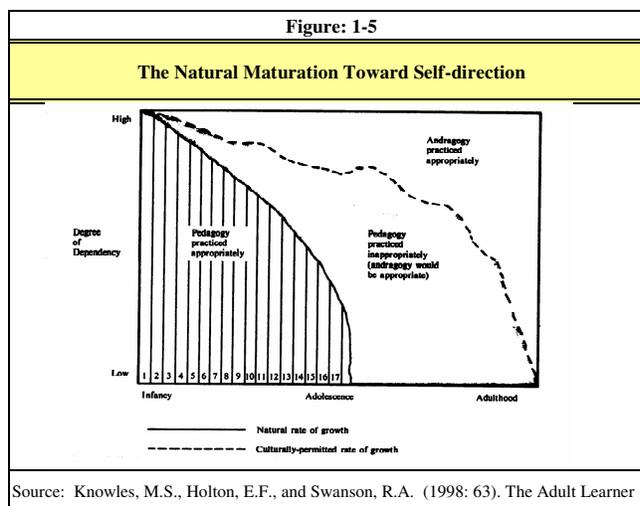
Knowles' third assumption, which addresses *the role of the child's experience*, suggests that , in the pedagogical model, 'the learner's experience is of little worth as a resource for learning; the experience that counts is that of the teacher, the textbook writer, and the audio-visual aids producer'. Consequently, 'transmittal techniques (e.g., lectures, assigned readings, etc.) are the backbone of pedagogical methodology' (Knowles, 1998: 63). Children, because of their youth and consequent lack of experience have a very limited frame of reference. This becomes particularly obvious when it is contrasted with adults, whose experiences include careers, marriage, children, community involvement, etc. He further notes, albeit subtly, that a child's experience 'is something that happens *to* them; it is an external event that affects them, [it is] not an integral part of them'. A child's identity is

largely derived from external sources such as their parents, siblings, where they live, and what school they attend, which collectively, influences how they are taught and how they learn. An adult's experience, however, contributes to their self-identity and is often shaped by personal choices (Knowles, 1998, et al.)

In his fourth assumption that addresses a child's *readiness to learn*, Knowles (1998: 63) reinforces the same point that he made in discussing the first assumption, emphasizing that 'learners become ready to learn what the teacher tells them they must learn if they want to pass and get promoted'. He submits that readiness is largely a function of age, that 'it is well accepted in our culture that children learn best those things that are necessary for them to know in order to advance from one phase of development to the next'. He adds that 'the developmental tasks of youth tend to be the products of physiological and mental maturation', whereas, 'those of adult years are the products primarily of physiological and mental maturation' (Knowles, 1980: 51).

His fifth assumption addresses a student's *orientation to learning*, and Knowles argues that 'learners have a subject-centered orientation to learning; they see learning as acquiring subject-matter content. Therefore, learning experiences are organized according to the logic of the subject-matter content' (Knowles, 1998: 63). He suggests that a child's orientation and time perspective with regard to learning is distinctively different from that of an adult. Children, he says, 'tend to have a perspective of postponed application on most of their learning; to a child, education is essentially a process of the accumulation of a reservoir of subject matter – knowledge and skills – that might be useful later in life' (Knowles, 1980: 53).

And with regard to his last assumption dealing with *motivation*, he writes that 'students are motivated to learn primarily by external pressures from parents and teachers, competition for grades, the consequences of failure, . . . the teachers' approval or disapproval, parental pressures', which are in direct contrast to the intrinsic motivators that more often influence adults, such as achievement, self-esteem, recognition, self-confidence, and self-actualization (Knowles, 1998: 63).

Knowles suggests that these six assumptions, not only serve to elucidate the premises upon which pedagogy is based, but also serves to underscore the reasons why they are ill-suited for adults. As the following discussion will reveal, adults, simply as a consequence of their *station-in-life*, enter a learning situation from a position that is almost diametrically opposite to that of children. This is not to suggest, however, that a pedagogical philosophy is devoid of positive traits, nor to suggest that it is the antithesis of andragogy. While Knowles does not necessarily take exception to the pedagogical model, and suggests that it may indeed be appropriate for children at an early age of dependency, he does, however, argue against its applicability and efficacy for adult learners. It is in examining the assumptions upon which the pedagogical model is based, and comparing them to the circumstances in which adult learners find themselves, that Knowles posits his andragogical assumptions.

The Origins of Andragogy

To better help understand the differences between pedagogical and andragogical assumptions, Knowles turns to examples of adult learning that existed long before the development of the monastic schools to which pedagogy is attributed. He specifically examines the influence and techniques of the great teachers of ancient times such as 'Confucius and Lao Tse of China, the Hebrew prophets and Jesus in Biblical times, Aristotle, Socrates, and Plato in ancient Greece, and Cicero, Evelid, and Quintillian in ancient Rome'. Pointing out that students of these great teachers were predominately adults, as opposed to children, 'they developed a very different concept of the learning/teaching process from one that dominated formal education. They perceived learning to be a process of mental inquiry, not passive reception of transmitted content' (Knowles, Holton and Swanson, 1998: 35-36). One can discern that the methodology developed by these revered scholars was philosophically insightful, reflective, and yet pragmatic. It was one that utilized techniques for engaging learners in introspection and inquiry, processes that have become popular within some basic police training academies.

Addressing these methodologies, Knowles writes that 'the ancient Chinese and Hebrew invented what we now call the *case method*, in which the leader or one of the group members describes a situation, often in the form of a parable, and together with the group explores its characteristics and possible resolutions.' Similarly, Knowles points to the teaching practices of the Greeks who 'invented what we now call the Socratic dialogue, in which the leader or a group member poses a question or dilemma and the group members pool their thinking and experience to seek an answer or solution. Along the same lines, the Romans, who were more confrontational, 'used challenges that forced group members to state positions and defend them' (Knowles, Holton and Swanson, 1998: 35-36). Framed in a collaborative context, practices such as problem-based learning assessments, simulations, the case method, practical hands-on training exercises, etc., are integral components of andragogy and are employed in varying degrees within basic police training.

Indeed, when examining the methodologies of these great teachers in contrast to pedagogical practices, the logic and rationale of Knowles' thinking becomes quite apparent. In explaining the differences between children and adults as learners, Knowles contends that 'as individuals mature, their need and capacity to be self-directing, to utilize their experience in learning, to identify their own readiness to learn, and to organize their learning around life problems, increases steadily from infancy to pre-adolescence, and then increases rapidly during adolescence'. Traditional learning, based on the pedagogical model, does not however, provide for what Knowles describes as ones' 'natural maturation toward self-direction'. While the pedagogical model may be appropriate for a child's early years of learning, its applicability and efficacy wanes as a result of its inability to adapt to a child's growing maturation, independence, and self-directedness.

Andragogical Assumptions

As previously noted, recognizing the origin, historical development, and the principles upon which the pedagogical model is based, serves to provide a structural framework of assumptions that can be contrasted with andragogy. While the assumptions upon which the

andragogical model is based do not radically deviate from existing principles and practices within the field of adult based learning, it is the assembly and integration of such principles that serves to distinguish andragogy as a holistic, integrative, and adaptable construct that distinguishes itself from other theories of adult learning. While Knowles' thesis is based upon his own research and that of others such as Thorndike, Lindeman, Gessner, Houle, and Kidd, his commitment to andragogy as a philosophy underscores its flexibility, adaptability, and pragmatic applications. It is this flexibility and holistic approach that makes it especially applicable to basic police training.

As Knowles suggests, much can and has been learned by examining the principles and practices as enumerated by the great teachers and their adult students, particularly when comparing such practices to the traditional pedagogical methods that have influenced education for the past eight centuries. As he did with the pedagogical model, Knowles sets forth the following six (6) theoretical assumptions about adult learners upon which he espouses his *principles of practice* that serve to facilitate adult learning. As noted previously, these principles evolved over the course of Knowles research; while his earlier writings espoused four major andragogical assumptions, they later evolved into six assumptions about adult learners.

With the objective of clearly representing Knowles' six assumptions and providing a cogent presentation of his writings, each discussion will address: (1) Knowles' andragogical assumptions, (2) the views and perspectives of other scholars relative to each assumption, and (3) instructional implications and recommendations, which Knowles identifies as *principles of practice*. Please note that the first paragraph immediately following each of the six assumptions reflect Knowles' latest writings, verbatim (1998: 64-68), while the subsequent paragraph(s) reflect his earlier research, subsequent discussions, and commentary. Together, these are intended to provide for greater clarity and a better understanding of the characteristics that influence an adult's learning and the methods suggested for facilitating that learning. In the following exploration, it is important to bear in mind that Knowles' sets

out to appreciate and understand the contrasts and parallels between children and adult learners. He sought to take into account the idiosyncratic differences that exist among adult learners, along with the circumstances that led them to engage the learning process. It is also important to bear in mind that the means toward facilitating effective learning does not rest with any single method, practice, or procedure; rather, it embodies a holistic and integrative methodology that considers the overall needs and dispositions of the learner, the learning environment, and the circumstances in which adults pursue learning – such as basic police training. Using the same criteria with which he assessed the needs and orientation of children to learning, Knowles makes the following assumptions about adult learners:

1. The learner's need to know

2. The learner's self-concept

3. The role of the learner's experience

4. The learner's readiness to learn

5. The learner's orientation to learning

6. The learner's motivation to learn

Andragogical Assumption # 1: The Need to Know

> Adults need to know why they need to learn something before undertaking to learn it. Tough (1979) found that when adults undertake to learn something on their own, they will invest considerable energy in probing into the benefits they will gain from learning it and the negative consequences of not learning it.
>
> Consequently, one of the new aphorisms in adult-education is that the first task of the facilitator of learning is to help the learner become aware of the 'need to know'. At the very least, facilitators can make an intellectual case for the value of the learning in improving the effectiveness of the learners' performance or the quality of their lives. Even more potent tools for raising the level of awareness of the need to know are real or simulated experiences in which the learners discover for themselves the gaps between where they are now and where they want to be.

> Knowles, 1998: 64-65.

Addressing this first assumption, Knowles begins by writing 'when I think of all the courses I have taken in school and college, I can think of very few in which I understood the need to know what the teacher was teaching me; I was taking the courses to get credits toward

a degree or diploma . . . I am sure that I would have learned more from those courses if the teachers had shown me how I would be able to use the learnings in real life' (Knowles, 1990: 58). In his later writings, he contends that 'the core principle that adults *need to know* why before they engage in learning has led to the now generally accepted premise that adults should be engaged in a collaborative planning process for their learning'. He adds that 'one of the distinguishing characteristics of many adult learning programs is the shared control . . . even in learning situations' such as basic police training, 'in which the learning content is prescribed, sharing control over the learning strategies is believed to make learning more effective' (Knowles, 1998: 133). He suggests that the use of 'real or simulated experiences' such as problem-based learning scenarios or simulations, would be potent tools for raising the level of awareness relative to the *need to know* in which adult learners would 'discover for themselves the gaps between where they are now and where they want to be' (Knowles, 1998: 65).

Knowles suggests that the *need to know* incorporates three dimensions: (1) *how* learning will be conducted, (2) *what* learning will be conducted, and (3) *why* learning is important. Addressing these dimensions, Knowles points to three separate studies that underscore their importance. In regard to *how* learning is conducted, Knowles references the work of Tannenbaum, Mathieu, Salas, and Cannon-Bowers (1991), whose studies of new employees revealed a positive relationship between training fulfillment and post-training attitudes. Their study served to underscore 'the importance of understanding trainees' expectations and desires through needs assessment and mutual planning. The second study was conducted by Hicks and Klimoski (1987). Here, a group of managers received a realistic preview of *what* topics would be covered in a performance appraisal seminar. Results revealed that knowing what was going to be covered contributed to a high level of satisfaction with their learning experiences. This underlines the importance for adult learners to know *what* was going to be learned. With regard to *why* adults should learn, a study by Clark, Dobbins, and Ladd (1993) involving fifteen training groups across twelve organizations

revealed that 'job and career utility were significant predictors of training motivation', i.e., adults need to know *why* they are learning something (Knowles, 1998: 134). These studies suggest that the more adult learners are engaged in the learning process with regard to knowing *how*, *what*, and *why* they are learning, the greater their perceived success.

     Other Perspectives. Making a point of differentiating an adult's *intention* from that of their *need*, Rogers (2002: 75-76) agrees with Knowles that 'adults come to education because of a sense of need . . . they come with an intention to do something about changing their world. Unlike children, adults have the opportunity and the means to implement their learning immediately, rather than wait until *they are grown up*. According to Rogers, adults can use education to change their 'personal lifeworlds', adding that 'it is more useful to talk of all adult student participants as having a set of *intentions*, an agenda which for many of them can imply the meeting of a felt need' (Roger, 2002: 75). He suggests that *intentions for learning* for some adults may be for *symbolic, opportunistic, and/or practical reasons*. *Symbolically*, some adults may want to be seen as educated; *opportunistically*, the results of learning may open doors to new opportunities, 'including access to further learning opportunities'; and *practically*, learning will prove to be useful and pragmatic. Along similar lines, Houle (1961) suggests these intentions can be: (1) *instrumental or goal-oriented* – those who desire to acquire an education to achieve some external objective such as a certificate or promotion; (2) *subject* or *learning-oriented* – those that desire the knowledge or skill for its own sake; and (3) *process* or *activity-oriented*, i.e., those who come for social and/or personal reasons: they like the atmosphere and circumstances of the learning group, or that 'they get something out of the process apart from the subject matter involved' (Rogers, 2002: 77-78). While the categorization of these different groups of learners may be academic in terms of identifying the different needs and intentions of adult learners, Rogers submits that such distinctions do not necessarily impact the teaching methodology, rather they obligate the *teacher* (facilitator) to be aware that adults as learners have different needs and intentions. While some learners may be anxious, others may be calm and relaxed. These differences

necessitate sensitivity on the party of the *teacher* (facilitator), and the ability to provide tailored responses towards the student. While some may interpret the intention of an adult learner as synonymous with one's motivation, it is important to point out that Rogers treats these two characteristics separately, a matter discussed hereafter.

   Methodological Implications and Recommendations: Principles of Practice. Notwithstanding the recognition that an adult enters a learning situation with a specific purpose and objective, an important function of the facilitator is to help reaffirm to the learner, not only the significance of what s/he will be learning, but the importance of how that learning will translate into real life rewards and consequences. To acquire knowledge, absent any meaning or pragmatic application, deprives the learning process of purpose and may potentially undermine the learner's motivation toward learning. Additionally, research suggests that when learners have collaborated and contributed in some part to the planning of the learning process, those contributions serve to stimulate the learner's interest and thus satisfy, on some level, the learner's *need to know*, which Knowles explains involves three dimensions: (1) the need to know *how* learning will be conducted, *what* learning will be conducted, and *why* learning is important. This is of particular interest in basic police training when comparing the philosophies of the traditional model to the andragogical model.

   Another means for recognizing the needs and interests of the learner and raising one's level of awareness of the learning process, is accomplished through the use of experiential learning activities, which allow learners to 'discover for themselves the gaps between where they are now and where they want to be' (Knowles, 1990: 58). The positive implications of experiential learning activities, as advanced by Kolb, are critical components within basic police training. In sum, by actively engaging the learner in discovering the reasons why learning is important, what will be learned, and how it will be learned, serves to reinforce the learner's need to know, a precursor perhaps, towards the actualization and implementation of the following five assumptions.

Andragogical Assumption # 2: The Learner's Self-Concept

> Adults have a self-concept of being responsible for their own decisions, for their own lives. Once they have arrived at that self-concept they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction. They resent and resist situations in which they feel others are imposing their wills on them. This presents a serious problem in adult education: the minute adults walk into an activity labeled 'education', 'training', or anything synonymous, they hark back to their conditioning in their previous school, put on their dunce hats of dependency, fold their arms, sit back, and say 'teach me'.

Knowles, 1998: 64-65

'This assumption of required dependency and the facilitator's subsequent treatment of adult students as children', Knowles contends, 'creates a conflict within them between their intellectual model – learner equals dependent – and the deeper, perhaps subconscious, psychological need to be self-directing'. The typical response to psychological stress in such situations, Knowles explains, 'is to try to flee from the situation causing it – which probably accounts in part for the high dropout rate in much voluntary adult education'. Recognizing such situational challenges, adult educators have responded by creating 'learning experiences in which adults are helped to make the transition from dependent to self-directing learners' (Knowles, 1998: 64). An adult learner's self-concept, which determines to a great extent, his self-directedness, is a topic within adult learning that evokes a wide range of responses. To understand the importance of an adult learner's self-concept and self-directedness, Knowles points to children in their formative years and their dependency upon adults generally – whether at home, in the community, or within school. As children grow and mature, however, so too does their self-identity and need for self-direction, and these are manifested in their need to take responsibility for managing their own lives. This tumultuous transition, which often leads to rebellious behavior during the teenage years, can also be observed within the traditional educational setting where much of what students learn is prescribed for them by their teachers, and this prescriptive regimen Knowles contends, tends to 'freeze them into self-concepts of dependency'

(1980: 45). When education is no longer a compulsory full-time pre-occupation and individuals perceive and define themselves as adults, they also begin to see themselves as self-directed – being in control of their own lives and making decisions for themselves. These changes have significant implications for both adult learners as well as facilitators, for as Knowles explains, 'once adults make the discovery that they can take responsibility for their own learning, as they do for other facets of their lives, they experience a sense of release and exhilaration' (180: 46).

Knowles, referencing the work of Brookfield (1986) and Candy (1991), suggests that self-directed learning is comprised of two principle concepts: first that self-directed learning entails a process of self-teaching, and second, that self-directed learning is akin to personal autonomy; while the two are relatively independent, they may very well overlap. The former entails learners taking control of the mechanics and techniques of teaching themselves in a particular subject, such as independently taking an on-line, web based course. The latter involves taking control of the goals and purposes of learning and its ownership. Knowles suggests that this assumption of ownership is perhaps the most important consideration on the part of the facilitator, in that he must recognize and attune himself to the different capabilities, preferences, idiosyncratic learning styles, and the situational components of each adult learner. Knowles (1998: 136) explains that 'mismatches can occur in either direction. That is, too much self-directedness can be as big a problem as too little, depending on the learner. For example, a learner who is experienced with the subject matter and has strong learning skills will likely be frustrated in highly controlled learning situations. Conversely, a learner who is inexperienced with the subject and has poorly developed self-directed learning skills will likely be intimidated, at least initially, in highly self-directed learning situations'. Because learners in any given learning situation are likely to vary widely as to what stage they are in, the teacher has to structure the

learning situation to accommodate all stages, which could be problematic given the prescriptive nature of basic police training.

Referencing the work of Grow (1991) and Garrison (1997), who both provide matrices for the analysis of the learning enterprise and a learner's level of self-directedness, underscore the importance of the facilitator's ability to assess all of the variables involved in the learning situation including learning style, readiness, motivation, previous experience with the subject matter, social orientation, climate, environment, etc. Given the varying degrees of an adult learner's self-directedness and autonomy, learning becomes inherently situational and it is just this contextual variability to which the instructor (facilitator) must adjust. In light of this, Grow developed a four stage matrix that takes into consideration the learner's degree of autonomy and self-directedness to which the facilitator must adjust so that the readiness of the learner will determine the level to which the instructor interacts with the student as depicted in Figure 1-6 (Knowles, 1998: 139).

Figure: 1-6			
Grow's Stages in Learning Autonomy			
Stage	Student	Teacher	Examples
Stage 1	Dependent	Authority, Coach	Coaching with immediate feedback, drill. Informational lecture. Overcoming deficiencies and resistance.
Stage 2	Interested	Motivator, guide	Inspiring lecture plus guided discussion. Goal setting and learning strategies.
Stage 3	Involved	Facilitator	Discussion facilitated by teacher who participates as equal. Seminar. Group projects.
Stage 4	Self-directed	Consultant, delegator	Internship, dissertation, individual work or self-directed study group
Source: The Adult Learner (Grow, G.O. 'Teaching learners to be self-directed'. Adult Education Quarterly, 41, 1991, 125-129).			

Other Perspectives. Of all the topics that revolve about adult based learning and andragogy, no area is quite as extensive as that which deals with an adult learner's self-concept and self-directedness. This discussion, therefore, will attempt to provide a sample of its breadth, however, it will become readily apparent that the views of most scholars in the field focus on two principal concepts: the degree of a learner's autonomy and their ability for self-directed learning (self-teaching). Nearly all experts of adult learning acknowledge that 'adult students' have a sense of self-concept, which in contrast to those of children, is quite different given their respective differences in age and maturity.

MacKeracher (1996: 42), addressing the notion of self-concept, writes that 'our sense of self evolves out of our experience with objects, other persons, and the kinds of interactions we have with them', suggesting that 'we construct our *self* out of our experience with the object world'. Elias and Merriam (1995: 119), discussing the notion of an adult learner's 'self-concept', explain that from a humanist's perspective, the *self* is 'the sum total of everything that distinguishes one person from another – attitudes, body, values, feelings, intellect, etc.'. They explain that self-concept, especially from a psychologist's perspective, 'is a person's subjective evaluation of who he or she is', and that one's self-concept not only determines one's behavior, but one's ability to grow and develop, which includes learning. Jarvis (2003: 44), discussing theories and practices associated with *Adult and Continuing Education*, suggests that the notion of self-concept is central to learning theory. He posits that the mind and the self are learned phenomena, arguing that since the brain stores memories of experiences, it becomes 'the storehouse of memories from which emerge the mind and self' (2003: 44). To this point, MacKeracher writes that one's self-concept 'is a basic and essential component of the individual's personal model of reality' which embodies one's collective physical, cognitive, emotional, social, and spiritual experiences to which 'adults must defend the *self* against the threats inherent in learning activities, until they are able to perceive that the worst will not happen and that change in self-concept can lead to positive results' (MacKeracher, 1996: 42).

Recognizing that an adult's self-concept gives rise to their need to be self-directed, Brookfield (1986: 40-41), who dedicates a chapter in his book to *Exploring Self-Directedness in Learning*, points out that 'the development of self-directed learning capacities is perhaps the most frequently articulated aim of educators and trainers of adults'. This, however, is not the case within the traditional setting of basic police training where the notion of self-directedness is essentially non-existence – the implications of which are addressed later in this study. Preferring to addresses the concept of self-directedness in cognitive terms, as opposed to overt behaviors, Brookfield suggests that a learner's degree of self-directedness can best be understood as being either *field dependent* or *field independent*. *Field independent* learners, he explains, are those who are analytical, socially independent, inner-directed, individualistic, and possess a strong sense of self-identify; they are learners who are 'more likely to be found in open, democratic societies that emphasize self-control and autonomy'. *Field dependent* learners are in contrast, 'extrinsically oriented, responsive to external reinforcement, aware of context, view things holistically, and are cognizant of the effects that their learning has on others' (Brookfield (1986: 41). The recognition of these orientations is important. Especially given that the learning environment can give rise to either. In the case of police training, it must also be recognized that the culture, climate, and environment can influence a recruit's orientation with regard to whether they are *field independent* or *field dependent*. Notwithstanding Brookfield's emphasis on the differences between these two orientations and the influence of the learning environment, the implications of these dispositions in adult learners underscores the importance of the facilitator's ability to respond to learners on an individual or within a group basis. These issues have generally received little attention within basic police training (Brookfield, 1986: 41).

Another perspective is provided by Cross (1981: 186-187) who defines self-directed learning 'as deliberate learning in which the person's primary intention is to gain certain definite knowledge or skills'. Referencing the work of Johnstone and Rivera (1965), who regarded self-directedness as including all 'systematically organized' learning activities,

including self-instruction and self-education, Cross explains that the range of subject matter in which examples of self-directed learning may be found is potentially infinite. Cross also refers to the work of Penland (1977), who, she contends, undertook 'the largest and most representative sample of American adults'. Penland classified self-directed learning into three major categories: (1) those who engaged in *formal topics* involving subjects such as English, Mathematics, and Languages; (2) those who pursued learning in *practical topics*, such as in the technical and medical field, business, gardening, and travel; and (3) adults that sought out *intraself topics*; subjects that involve areas such as self-awareness, religion, music, psychology, and nature. Considering these three categories, one can argue that police training transcends all three areas; certainly, the first two categories entail subjects such as criminal law, criminology, psychology, first-aid, self-defense, and firearms proficiency, while the third area encompasses a self-realization that one will be observing and interacting with human behavior under the best and worst of circumstances.

In summary, a self-directed learner can be viewed from any number of perspectives, depending on how self-direction is operationally defined and/or conceptualized. Merriam and Brockett contend that self-directed learning is: (1) the most frequent way adults learn, (2) that there is a strong connection between self-directedness and self-concept, (3) personality and social characteristics influence self-directed learning, and (4) research related to self-directedness provides a 'more holistic view of the adult learner' (1997: 140). It is evident from this brief review, that the concepts of self-concept and self-directedness involve a host of variables and dynamics, beginning with the purpose, motivation, and disposition of the learner, and extending through to the environment and those who are responsible for facilitating the learning process. Perhaps, as Brookfield contends, the heart of self-directedness may simply involve 'the adult's assumption of control over setting educational goals and generating personally meaningful evaluative criteria' (Brookfield, 1986:41). While the notion of self-directedness, in terms of autonomy and independent control over one's learning, may have its limitations within basic police training given the prescriptive nature of

its curriculum – there nevertheless exist numerous opportunities to address its importance as an integral component of basic police training, a matter addressed in greater detail in the last chapter.

Methodological Implications and Recommendations: Principles of Practice. Notwithstanding the conceptual debates relative to whether self-directed learning embodies a state of personal autonomy, a process of self-teaching, or perhaps a combination of the two, it is nevertheless recognized that it serves as an important variable in the arena of adult learning. Considering the significance of these factors, it is important to foster a learning environment that recognizes and supports the need for autonomy and self-directedness. Given Knowles' orientation and advocacy for building personal autonomy, which one can argue is an essential element required in self-teaching, he suggests that this is one of the most important dimensions of self-directed learning. As such, he advises that if the tone or climate of the learning environment is reminiscent of the traditional pedagogical model, in which the teacher is the transmitter of information and the learner is the compliant recipient, it may very well result in a disconnect between their need for autonomy and self-directedness. Such conflict may not only dissuade a learner from active participation, but can lead one to abandon the opportunity for learning altogether, which Knowles argues is a primary cause of high dropout rates in many voluntary adult education programs. Underscoring the importance for fostering a climate that encourages learner autonomy and self-directedness, Knowles references the work of Grow (1991), who as noted in the earlier discussion, developed a matrix that represents four stages in learning autonomy, as reflected in Figure 1-6. Grow suggests that self-directed learning is situational and contingent on a learner's readiness level. As such, it necessitates the facilitator to carefully match his or her 'teaching' style to the readiness level of the student, with the ultimate goal of the learner achieving a level of self-directedness. The significance of such a matrix not only recognizes an individual's degree of personal autonomy and self-concept (which nourishes and cultivates one's learning), but that it can similarly be applied to that of a cohort group. Equally apropos is that this model represents flexibility and

contingencies, which contributes to fostering a challenging, yet comfortable learning climate
and environment, which together, underscore an andragogical philosophy.

Andragogical Assumption # 3: The Role of the Learner's Experience

> Adults come into an educational activity with a greater volume and a different
> quality of experience than youths. By virtue of simply having lived longer,
> they have accumulated more experience than they had as youths. But they also
> have had a different kind of experience. This difference in quantity and quality
> of experience has several consequences for adult education.

<div align="right">Knowles, 1998: 67.</div>

Knowles (1998: 66) suggests that the heterogeneity of an adult's experiences in terms
of their background, learning style, motivation, needs, interests, and goals has broad
implications in their learning, particularly in contrast to that of children. He explains that
adults, consistent with their age and maturity, enter a learning encounter with a greater
volume and variety of experiences, which not only enhances their self-concept, but the value
and meaning of their learning. He suggests that 'adults define themselves largely by their
experience, i.e., they *are* what they have *done*', whereas with children, 'experience is
something that happens *to* them; it is an external event that affects them, not an integral part
of them' (1980: 50). 'Because adults define themselves largely by their experience, they have
a deep investment in its value'. In effect, Knowles suggests that the implications of an adults'
experiences are threefold: (1) 'adults have more to contribute to the learning of others; (2)
adults have a richer foundation of experience to which to relate new experiences (and new
learnings tend to take on meaning as we are able to relate them to our past experiences), and
(3) adults have acquired a larger number of fixed habits and patterns of thought', for which
learning techniques may be introduced in order to overcome their inhibitory effects.

Considering the impact of an adult learner's experience, Knowles suggests that
experiential learning techniques such as group discussions, simulation exercises, hypothetical
case scenarios, problem-based learning activities, the use of the case method, and peer-
helping activities, all serve to capitalize on the experiences of the learner, thus enhancing the
learning experience. Understanding and recognizing such experiences on the part of a

facilitator is critical, for when such 'experiences are ignored or devalued, adults will perceive this as rejecting not only their experience, but rejecting themselves as persons' (Knowles (1998: 67).

Referencing the work of Savery and Duffy (1996), who relate a learner's experiences to the cognitive process theory of constructivism, which Knowles suggests 'is emerging as a useful perspective for some adult learning situations', he explains that the premise of constructivism is that knowledge is built or constructed, and is context bound. He notes that 'individuals make personal meaning of their learning experiences'; hence, 'learning can not be separated from the context in which it is used', suggesting that 'new information must be related to other existing information in order for learners to retain and use it'. Knowles (1998: 143) further argues that 'there is a growing recognition from multiple disciplines that an adult's experience has a very important impact on the learning process', and while 'adult learning leaders have long capitalized on adult learners' experiences, they have not adequately recognized its role as a gatekeeper for learning'. Notwithstanding its illimitable benefits, Knowles adds that a learner's experiences can represent a double-edged sword in that it can serve to both enhance and inhibit the learning process. He explains that 'on the one hand, experience can aid in learning new knowledge if the new knowledge is presented in such a way that it can be related to exiting knowledge and mental moods. On the other hand, those same mental models can become giant barriers to new learning when the new learning challenges them', hence, underscoring the importance of the facilitator's role in being able to identify and capitalize on the learner's positive and negative learning experiences (1998: 143).

Other Perspectives. Second only to the concept of self-directedness, a resonant theme among scholars of adult education is the idea that adult learners bring with them a wide 'range of experience and knowledge more or less relevant to the task at hand' (Rogers, 2002: 73). Speaking to the importance of an adult's experience and value systems, Rogers contends that 'new students are not new people'; rather, they possess a set of values, established prejudices and attitudes in which they have invested a great deal of emotional investment'. Thus, the

implications for the *teacher* is that the broad experience of the adult learner is one that should be carefully considered, for if such experience is devalued or ignored, it may imply a rejection of not just the experience, but that of the person as well. Rogers posits that experience, knowledge, and values: (1) determine what meanings are created by the learner, i.e., 'student participants see all new material they encounter through the lens of their existing experiences . . . to see if it rings true or not'; (2) that in the absence of specific experience relative to a particular subject, their general life experience and knowledge can serve to facilitate their learning, i.e., 'it is not a difficult skill for the teacher to acquire to explore with the participants something of what they already know about the matter in hand'; (3) as important as an adult's experience may be in the learning process, it is equally important to recognize that it can serve as an obstacle. Rogers explains that 'there is often as much unlearning to be done as new learning, and because of the emotional investment in the existing patterns of experience and knowledge, the unlearning process is one of the more difficult tasks facing the teacher of adults'; and (4) an adult's experience and knowledge can serve as a 'major resource for learning and can be harnessed into the work of the group; adding that the utilization of the varied experience and knowledge of all the members of the group is essential, not only to ensure effective learning on a personal level, [but that] it will help to bind together the group and make all of its members richer' (Rogers, 2002: 75).

    Life Experience. Addressing the influence of experience and its relationship to age, Rogers (2002: 64) notes that 'unlike the child and the adolescent whose different stages are recognized (even if not universally agreed), adults change and develop more by experience and by the exercise of abilities than by age alone'. He makes a point of mentioning that in the West there is a 'strong emphasis on the physical elements in human make-up; thus aging is frequently seen as a phenomenon to be resisted, something to be overcome rather than valued for the wisdom and status it brings' (Rogers, 2002: 64). While this latter point is typically ignored in discussions about the role that experience plays in adult learning, it is a point worthy of consideration, given the inferred relationship between experience, age, and wisdom.

MacKeracher (1996: 33), addressing the significance of experience, writes that experience allows 'each learner to develop a personal model of reality which includes both meanings and values (constructs or concepts) to make sense of past experiences, impute sense to current experience, and predict future experience'. She explains that life experiences 'are also used to develop skills and strategies (processes or procedures) for reflecting, reconstructing, and organizing the past; acting, reacting and interacting in the present, and anticipating the future'. Experience is an essential component in learning which can involve what she describes as 'tightly interwoven components' which can consist of: (1) one's self-system – 'how we understand ourselves as persons through the meanings we give to ourselves as actors, or our self-concept, and the values we assign to ourselves, or our self-esteem; (2) professional or occupational knowledge – meanings, values, skills, and strategies; (3) practical knowledge about daily living; (4) cultural knowledge about how things work in our society; and (5) one's personal history (1996: 35). Addressing these five points, MacKeracher explains that 'we each invest a vast amount of emotional energy in the development of our personal model of reality and place ourselves at the core of the model since we perceive reality from the centre of our own existence'. She adds that 'adults have more experience than children in the pragmatic realities of life, and have developed many patterned ways of perceiving and understanding that experience', and that 'the adult's personal model of reality simultaneously defines, creates, and restricts perceptions and understanding of new experiences' (MacKeracher, 1996: 36). This reinforces the point made by other experts in the field that the cumulative effect of experience provides learning opportunities as well as challenges. As previously noted, one's past experience can both enhance as well as inhibit learning. These are issues to which both the adult learner and facilitator must attend, and which anecdotally, are wholly ignored with basic police training.

Adults possess existing learning styles. Rogers (2002: 81), suggests that adult learners have developed strategies and patterns for learning. 'Adults are engaged in a continuing process of lifelong learning, and they have already acquired ways of coping with

this. They often fail to see this as 'learning' in the educational sense, but it exists all the same' Rogers explains. Changes in learning, however, 'are not brought about without effort, and the process can be painful. It takes an investment of time and emotions and, once done, no one wants to do it again. Because learning is idiosyncratic, adults have acquired their own techniques and strategies'. This, coupled with their respective experiences, provides them with their unique style for learning. Indeed, adults, because of their experiences in social relationships and roles in life, may 'tend to learn a good deal faster than young people'. Conversely, 'where they have less experience on which to fasten the new material – languages, for example, they tend to learn more slowly and have greater difficulty in mastering the material than their younger counterparts' (2002: 81). Because adults have such a wide range of learning styles and experiences, the important focus for the 'teacher' or facilitator is in their ability to devise methods that will provide adult learners with the 'full scope for exercising their own particular learning method' (Rogers, 2002: 81-82).

   Methodological Implications and Recommendations: Principles of Practice. Adult learners undoubtedly enter an educational activity with a wholly different frame of reference than children, simply as a result of their experience, both in volume and years of living. Their experiences, beyond the typical responsibilities associated with being a full-time employee, spouse, parent, caregiver, etc., include life's daily trials and tribulations. When adults, therefore, join together in a learning situation, there exists a wide-range of diversity in age, gender, cultural backgrounds, employment, training and education, along with differences in learning style, aptitude, motivation, needs, interests, and goals. While the multiplicity of such individual traits may be viewed as an obstacle to learning, an andragogical philosophy capitalizes on the strengths of such diversity, and consequently, places a greater emphasis on group and individualized learning strategies. Such strategies, which emphasize the use of experiential learning, draw upon the experience of the learners and include activities such as group discussions, simulation exercises, problem-solving activities, and the case method. These are supplemented with an equal emphasis on 'peer-helping activities' (Knowles, 1990:

59). Knowles adds, however, that with such broad-ranging experiences, one must be sensitive to potentially negative effects arising from biases, prejudices, bad learning habits, etc., that could potentially inhibit learning and a learner's receptiveness to new ideas. Other strategies that adult educators have used to address such effects have included 'sensitivity training, value clarification, mediation, and dogmatism scales' (1998: 66). In consideration of the *role of the learner's experience*, Knowles emphasizes the importance of recognizing that such experiences often serve to identify who they are as individuals. He explains that while children derive their identities from external definers such as family, residence, and affiliations, adults identify themselves by what they do and have accomplished. In effect, they derive their self-identity from their experiences. 'The implication of this fact for adult education is that in any situation in which an adults' experience is ignored or devalued', may mistakenly be perceived as, not just rejecting their experience, but rejecting them as an individual (1998: 66-67). In sum, when recognizing the multi-dimensional implications of the wide range of an adult learner's experiences, many factors need to be taken into consideration.

Andragogical Assumption # 4: Readiness to Learn

> Adults become ready to learn those things they need to know and be able to do in order to cope effectively with their real-life situations. An especially rich source of readiness to learn is the developmental tasks associated with moving from one developmental stage to the next. The critical implication of this assumption is the importance of timing learning experiences to coincide with those developmental tasks. For example, a sophomore girl in high school is not ready to learn about infant nutrition or marital relations, but let her get engaged after graduation and she will be very ready.
>
> Knowles, 1998: 67.

In his earlier publication, Knowles (1984: 11) writes that 'the andragogical model assumes that adults are ready to learn when they experience a need to know or to do something in order to perform more effectively in some aspect of their lives' and that chief sources of readiness are the developmental tasks associated with moving from one stage of development to another'. Addressing such developmental tasks, Knowles refers to the work of Havighurst (1972), who explains that adults migrate through three phases of social roles:

99

early adulthood, middle age, and later maturity. As adults move through these phases they encounter changing developing tasks, which in turn influence their readiness to learn. Any change, therefore, whether it be the loss of a job, acquiring a new one, divorce, death of a friend or relative, or change of residence, is likely to trigger a readiness to learn (1984: 11). He adds, however, that one does not have to necessarily wait for readiness to develop naturally; 'there are things that one can do to induce it, such as exposing learners to more effective role models, engaging them in career planning, and providing them with diagnostic experiences . . . in which they can assess the gaps between where they are now and where they want and need to be' (1984: 11). The critical implication of this assumption is the importance of timing learning experiences to coincide with those developmental tasks', assuming of course, that the facilitator has instituted mechanisms to appraise any such changes or needs on the part of the learner (1998: 67). While the implications of one's *readiness* relative to beginning a career as a police officer may appear obvious, i.e., a recruit is ready to learn all s/he needs in order to perform effectively as a police officer, the degree of *readiness* as one progresses through basic training may change and vary on an individual basis or within a group, thereby, underscoring the importance of the facilitator's role.

     Other Perspectives. Based on an adult's past learning experiences, coupled with their intentions for entering the learning situation, Rogers (2002: 78-79) suggests that adult learners come with a wide range of attitudes and expectations about the learning process which may or may not predispose their readiness to learn. 'Using their experience over many years, they now construct themselves as 'students', putting themselves into a position in relation to 'their teacher'. As such, their formative years in school may evoke positive or negative experiences, which in turn, influence their expectations and readiness, or what Rogers describes as *self-horizons*, i.e., what sort of material they can or cannot master, which once again, underscores the importance of the teacher/facilitator role in being able to recognize the degree of readiness on the part of the learner and adjusting accordingly.

Given, therefore, the varying degree of readiness on the part of adults entering a learning situation, sensitivity on the part of the teacher/facilitator to a learner's expectations and past learning experiences is critically important. Faced with a mixed group of adult learners requires 'encouraging those with low self-horizons and keeping the more self-reliant satisfied with their own progress'; hence, it reflects a constant process of making balanced choices between the needs of one sub-group with those of another while maintaining loyalty to the subject matter being 'taught' (Rogers, 2002: 80). Citing Leagans (1971: 33-34), Rogers argues that 'learning takes place when an individual feels a need, puts forth an effort to meet that need, and experiences satisfaction with the result of his [sic] effort'.

Methodological Implications and Recommendations: Principles of Practice. Certainly, trying to learn something when one is neither interested or ready to learn can undermine the sincerest of efforts. Given that 'adults become ready to learn those things they need to know and be able to do in order to cope effectively with real-life situations', has significant implications in one's interest for facilitating learning. Knowles (1998: 67; 144), explains that 'adults generally become ready to learn when their life situation creates a need to know'. This suggests that 'the more adult learning professionals can anticipate and understand adults' life situations and readiness for learning, the more effective they can be'. Citing Pratt (1988), Knowles explains that learning experiences are highly situational. An adult learner may be 'highly confident and self-directed in one realm of learning, but very dependent and unsure in another', which calls for varying degrees of *direction* and *support* from the instructors. Pratt (1988) depicts this situation in a four quadrant model depicted in Figure 1-7. While *direction* refers to the learner's need for assistance from other persons in the learning process and is dependent upon one's *competence* in the subject matter, *support* 'refers to the affective encouragement the learner needs from others', this is relative to a learner's level of *commitment* to the learning process and *confidence* about his/her learning ability'. Hence, 'learners in quadrants 1 and 2 need a more highly teacher-directed approach to learning, while those in quadrants 3 and 4 are more capable of self-direction'. As such, the

greater level of commitment and confidence, the less support one will need, where

conversely, the less one's commitment and confidence, the greater support will be required;

hence, learning becomes highly situational (Knowles, 1998: 145). While an experienced

educator might suggest that such a conditional response may be intuitive, to others, such

considerations may be superfluous, e.g., in a traditional model of basic police training,

everyone moves along as a class. As such, it is important to recognize and acknowledge that

a cohort of adult learners may indeed span a wide-range of competencies, commitment, and

confidence, of which the facilitator needs to be cognizant. Additionally, it is important to

bear in mind that one's need for direction and support may change relative to one's changing

level of confidence and commitment: 'the challenges for adult learning leaders are to

recognize where individual learners are at the beginning of learning experience, and be

attentive to changes in needs of direction and support during the learning experience'

(Knowles, 1998: 145-146).

Andragogical Assumption # 5: Orientation to Learning

> In contrast to children's and youth's subject-centered orientation to learning (at least in school), adults are life-centered (or task-centered or problem-centered) in their orientation to learning. Adults are motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems that they confront in their life situations. Furthermore, they learn new knowledge, understandings, skills, values, and attitudes most effectively when they are presented in the context of application to real-life situations.
>
> <div align="right">Knowles, 1998: 67</div>

In his earlier writings, Knowles explains that because adults are motivated to

learn after they experience a need (such as entering a career in policing), 'they enter

the educational activity with a life, task, or problem-centered orientation to learning'

(1984: 11). Consequently, adults are more motivated to devote energy to learning, to

the extent that they perceive that it will help them to better perform their tasks and

deal with problems that they confront in real life situations. The *need to know* on the

part of the learner, therefore, when coupled with the use of experiential learning

activities involving problem-based learning exercises, hypothetical case scenarios, and

simulations serves to enhance, as well as affirm, the purpose and efficacy of the learning process. Underscoring the significance of experiential learning (per the earlier review), Knowles (along with many other adult learning educators), references the work of David Kolb (1984), who defines learning as 'the process whereby knowledge is created through transformation of experience'. Knowles (1998: 146-147) explains that 'for Kolb, learning is not so much the acquisition or transmission of content as [it is] the interaction between content and experience, whereby each transforms the other'. Not only does experiential learning enhance the receptivity of adults toward learning, but it has also been associated with improving one's performance, which is often one of the primary aims of adults entering a learning situation. Knowles suggests that when adults enter a learning situation in which the context is abstract by comparison with the reason for which one is pursuing the learning, the learning may be negated. Conversely, when the context of learning is directly related to discernable outcomes, such as acquiring specific knowledge, skills, and competencies, one's orientation to learning, the value of the content and the techniques used to convey it are validated.

Other Perspectives. *Adults possess competing interests.* Notwithstanding that learning is an important component of an adult learner's life (as an essential part of their decision to pursue education), it is not their primary concern in life. 'Even for full-time adult students, their education is constantly overshadowed by the 'realities' of their life: their job or lack of job, their family situation, their social life, [or] other competing concerns'. Learning, if even in an adjunct capacity, should be an integral part of their life situation. While 'students in other parts of the educational world may be taken out of their life situation to concentrate on their learning, adult learners continue to live within their lifeworld' and seek to apply what they learn to their life situation in varying capacities. 'Indeed, periods of intensive study can hardly be carried through without the identification of support networks around the adult learner, and it is to the advantage of both teacher and student participant to encourage

the full exploitation of these supporting factors', and one 'must not be surprised if our students' attention is at times distracted towards more urgent problems' (Rogers, 2002: 81).

Methodological Implications and Recommendations: Principles of Practice. When considering the means by which an educator facilitates the learning process, it is important to recognize that an adult's *readiness toward learning* predisposes them to what Knowles describes as one's *orientation to learn*. This means that what they will learn will directly impact their ability to better deal with their job and other problems associated with their larger life situation. So, in the case of basic police training, not only is a recruit *ready to learn* what s/he needs to know in order to effectively serve as a police officer, but are 'motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems' that they will inevitably confront given the nature of police work. Knowles (1998: 67) explains that because 'adults are motivated to devote energy to learn something to the extent that they perceive that it will help them perform their tasks or deal with problems that they confront in their life situations', the use of 'real-life', pragmatic, situational exercises best serves to link and enhance the learner's receptiveness to learning. He contends that 'adults generally prefer a problem-solving orientation to learning, rather than subject-centered learning' considering that 'they learn best when new information is presented in [a] real-life context'.

Toward this end, 'the experiential approach to learning has become firmly rooted in adult learning practice' (Knowles, 1998: 146). Referring to the utility of Kolb's (1984: 38) experiential learning model (discussed earlier), Knowles concurs that 'learning is not so much the acquisition or transmission of content as the interaction between content and experience, whereby each transforms the other' (Knowles, 1998: 147). Addressing the utility of Kolb's learning cycle and its application within the classroom, Burke (1997) provides examples of learning activities appropriate with each cycle, thus helping to recognize the significance of the four cycles as illustrated in Figure: 1-4.1. Champion and Hooper (2003: 253-255) who address experiential learning in the context of problem-solving, suggest that experiential

104

learning 'is best characterized as an experience-based process of feeling, watching, thinking, and doing, which everyone uses in the process of solving problems and learning'.

Figure: 1-7
Kolb's Experiential Learning Cycle and Classroom Activities
Figure 1: Kolb's Learning Cycle with Possible Class Activities
Source: Kolb's Learning Cycle: Applying a Learning Style Model to Classroom Practice Bill Burke, Biology, Associate Director, Teaching & Learning Center http://www.uky.edu/UGS/tlc/news/kolb.jpg
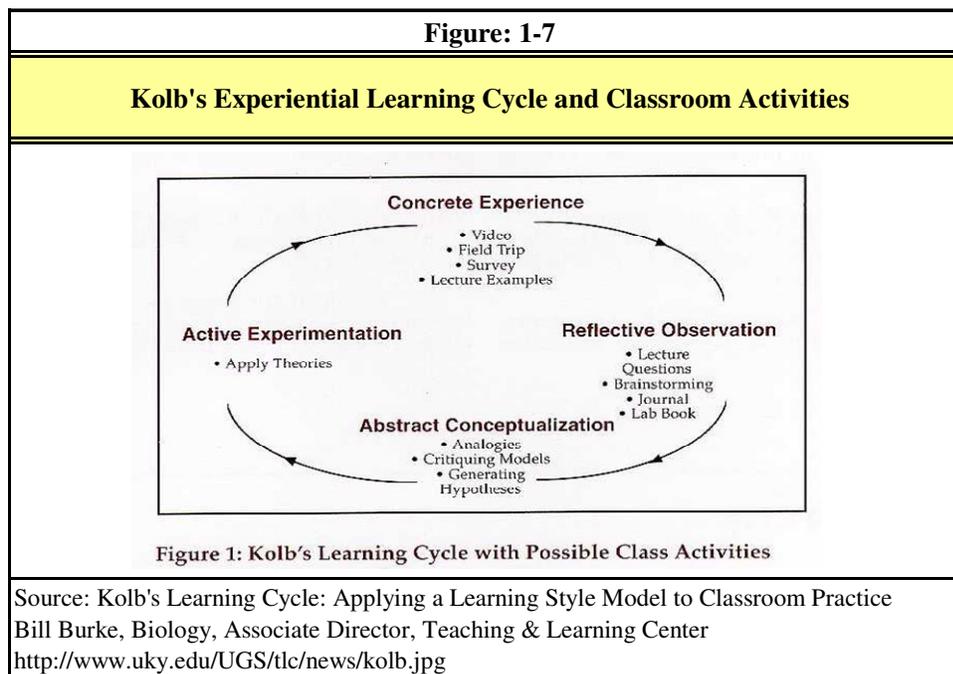
Suggesting that an educator's role 'is not only to transmit or implant new ideas, but to modify old ones that may get in the way of new ones', they point to the efficacy of Kolb's experiential learning cycle which influences the following four learning styles as depicted in Figure 1-8 (Knowles on Kolb, 1998: 147).

1. Concrete Experience – full involvement in new here-and-now experiences

2. Observations and reflection – reflection on and observation of the learner's experiences from many perspectives

3. Formulation of abstract concepts and generalization – creation of concepts that integrate the learners' observations into logically sound theories

4. Testing implications of new concepts in new situations – using these theories to make decisions and solve problems

While the influence of experiential learning is certainly not limited to Kolb's model, Knowles credits him with having made a major contribution to the experiential learning literature in that he has provided both a theoretical and practical basis for experiential learning, adding that the four steps serve as 'an invaluable framework for designing learning experiences for

adults' (Knowles, 1998: 147-148). Given Knowles' contention that an adult learner's orientation to learning is predisposed toward problem-solving, his emphasis on experiential learning activities not only underscores the importance of this assumption, but all aspects of an andragogical instructional methodology.

Figure 1-8		
Kolb's Experiential Learning Strategies		
Learning Style	**Learning Activity**	**Learning-Teaching Strategy**
Concrete Experience	Full involvement in here-and-now experiences	Simulation, Case Study, Field Trip, Real Experience, Demonstrations
Observations and Reflections	Reflection on and observation of the learner's experiences from many perspectives	Discussion, Small Groups, Buzz Groups, Designated Observers
Formation of Abstract Concepts and generalization	Creation of concepts that integrate the learners' observation into logically sound theories	Sharing Content
Testing Implications of new Concepts in New Situations	Using these theories to make decisions and solve problems	Laboratory Experiences, On-the Job Experience, Internships, Practice Sessions
Source: Kolb, D.A. Experiential Leaning: Experience as the Source of Learning and Development. Englewood Cliffs: Prentice-Hall, 1984.		

Andragogical Assumption # 6: The Adult Learner's Motivation

> While adults are responsive to some external motivators (better jobs, promotions, higher salaries, and the like), the most potent motivators are internal pressures (the desire for increased job satisfaction, self-esteem, quality of life, and the like). Tough (1979) found in his research that all normal adults are motivated to keep growing and developing, but this motivation is frequently blocked by such barriers as negative self-concept as a student, inaccessibility of opportunities or resources, time constraints, and programs that violate principles of adult learning.

> Knowles (1998: 68)

Recognizing the work of Maslow (1970, 1972), Herzberg (1966), Vroom (1995), McClelland (1953), and other motivational theorists, Knowles acknowledges that while extrinsic motivators such as job, promotions, salary, policies, and working conditions are important variables, it is the intrinsic variables such as achievement, recognition, advancement, and personal growth that serve as more potent motivators. Knowles explains that 'the andragogical model of adult learning makes some fundamentally different assumptions about what motivates adults to learn', suggesting

that adults 'tend to be more motivated toward learning that helps them solve problems in their lives or results in internal payments', thus speaking to the intrinsic factors that influence satisfaction (1998: 149). In *Enhancing Adult Motivation to Learn*, Wlodowski (1985: 279) suggests that adults are motivated to learn as a result of four factors, which Knowles suggest are worthy of consideration:

1. Success Adults want to be successful learners

2. Volition Adults want to feel a sense of choice in their learning

3. Value Adults want to learn something they value

4. Enjoyment Adults want to experience the learning as pleasurable

Referencing Tough's research (1979), Knowles explains that normal adults are typically motivated to keep growing and developing, however, this motivation is often inhibited in traditional pedagogical learning activities. A consequence of this could lead to a 'negative self-concept, inaccessibility of opportunities or resources, time constraints, and programs that violate principles of adult learning' (Knowles, 1998: 68). In light of this, understanding, encouraging, and sustaining an adult's motivation is a critical component, not only for facilitating adult learning, but as an integral component in the overall schema of andragogy.

Other Perspectives. As noted in the earlier discussion addressing learning theories, motivation is seen as 'the process of instigating and sustaining goal-directed activities' (Schunk, 2004: 484). Rogers, defining motivation in the context to the adult learner, explains it 'as a drive directed towards meeting a need or achieving an intention, those factors that energize and direct behavioural patterns organized around a goal'. He explains that motivation 'is frequently seen as a force within the individual that moves them to act in a certain way. Motivation in learning is that compulsion which keeps a person within the learning situation and encourages them to learn' (Rogers, 2002: 95). Unarguably, motivation is a driving force in the lives of most people, however, when viewed as a factor in the context to learning, Rogers suggests that not all adults are motivated to continue learning in a formal or structured way. As with so many factors in life, whose absence leads to superficial effort,

107

it is the intrinsic needs that serve to drive and motivate people. To this point, Rogers (2002: 95) suggests that while some of what motivates adult learning may be based on extrinsic needs, most of what drives individuals 'is dependent on intrinsic motivational factors', adding that 'intrinsic factors are stronger and more enduring than extrinsic'.

Jarvis (2003: 8-9), discussing adult learning and motivation, observes that 'human beings are active participants in the learning process throughout the whole of life and the reason for this lies both in their nature and their relationship with wider society'. While he acknowledges that lifelong learning is not a new concept, he suggests that now, more than ever, adult learning may be attributable, in great part, to 'rapidly changing social conditions of contemporary society', and as such, there exits a multiplicity of motivating factors among adults that brings them to a learning situation, which as noted in the introduction, is particularly apropos to basic police training.

Galbraith (1991: 18), citing Boshier and Collins (1985) while addressing the motivation of adult learners, explains that adults participate in educational activities for cognitive interests, social stimulation, social contact, community service, professional advancement, and to fulfill external expectations. All of these have psychological, sociological, and developmental implications. Referring to Krupp's research (1982), he suggests that adult learners can best be understood when they are viewed from a holistic perspective, explaining that 'this seems most appropriate, especially when working with adults who have diverse reasons for participating, are at various stages in their adult development, and who possess a multitude of learning styles'. Cross (1981: 82-83), referencing the earlier work of Houle, which she contends still stands as a 'most influential' study regarding the motivation of adult learners, explains that the motivation of adult learners can be categorized into three areas:

1. <u>Goal-oriented learners</u>. These are adults who use learning to gain specific objectives, such as learning to speak before an audience, learning to deal with particular family problems, learning better business practices, and similar concrete objectives. For these adults, learning is series of episodes, each beginning with the identification of a need or an interest.

2. <u>Activity-oriented learners</u>. These adults participate primarily for the sake of the activity itself rather than to develop a skill or learn subject matter. These learners may take a course or join a group to escape loneliness or boredom, to amass credits or degrees, or to uphold a family tradition.

3. <u>Learning-oriented learners</u>. These comprise learners who pursue learning for its own sake. They seem to possess a fundamental desire to know and to grow through learning, and their activities are constant and lifelong.

Methodological Implications and Recommendations: Principles of Practice. As noted earlier, the significance of understanding, encouraging, and sustaining an adult's motivation to learn is a critical and integral component in the overall schema of andragogy. Notwithstanding the foregoing assumptions that serve as motivating factors for adults engaging in learning, sustaining such motivation is a critically important dynamic in the andragogical construct. Recognizing that adults 'tend to be more motivated toward learning that helps them solve problems in their lives or results in internal payments', Knowles underscores the importance of threading experiential learning as an integral component of an andragogical methodology. Considering that the four factors of 'success, volition, value, and enjoyment' serve to motivate adult learners (Wlodowski, 1985), Knowles suggests that instructors (facilitators) also possess certain traits and characteristics that serve to motivate adult learners, namely, that of expertise, empathy, enthusiasm, and clarity (Knowles, 1998: 150).

Figure: 1-9		
Characteristics and Skills of Motivating Instructors		
Characteristic		**Skills**
Expertise	The power of knowledge and preparation	Knows something beneficial to adults
		Knows it well
		Is prepared to convey it through an instructional process
Empathy	The power of understanding and consideration	Has a realistic understanding of learner's needs and expectations
		Has adapted instruction to the learner's level of experience and skill development
		Continuously considers learners' perspectives
Enthusiasm	The power of commitment and animation	Cares about and values what is being taught
		Expresses commitment with appropriate degrees of emotion, animation, and energy
Clarity	The power of language and organization	Can be understood and followed by most learners
		Provide for learners a way to comprehend what has been taught if it is not clear in the initial presentation
Source: Wlodowski, R.J. (1985: 16-43). Enhancing Adult Motivation to Learn.		

While Knowles explains that 'much has been written about the value of clear, student-oriented terminal objectives', he also underscores the importance of clearly articulating them at the beginning of instruction as an instrumental motivating factor. 'By clarifying the purpose and rationale for instruction as it relates to the learner, then by detailing the how, what, and why of the instruction through clear objectives, the learner is fundamentally prepared and motivated to learn' (Knowles, 1998: 189-190).

Andragogy: A process model

In consideration of Knowles' six principles, it is important to emphasize that the means toward facilitating effective learning does not necessarily rest with any single instructional method, practice, or procedure, rather, it embodies a holistic approach embedded in a philosophy that focuses on the overall needs and dispositions of the adult learner. Knowles emphasizes that while the pedagogical model places primacy on *content*, the andragogical model is based on a *process design* so that the emphasis is placed on the *process* of the learning transaction and not necessarily on the goals and aims of that transaction (1998: 2). This is not to suggest, however, that the goals and objectives that inform and direct adult learning are not important. It is based, rather, on the premise that if an adult is comfortable learning, the goals and objectives sought will be more readily achieved. Acquiring this *comfort level*, i.e., one that serves to recognize, understand, and attend to the needs and dispositions of the adult learner per Knowles' six assumptions, underscores the importance of the *process* and *facilitation* of learning. Knowles emphasizes the importance of the facilitator's dual role as inherent to the *process design*. The elements of the role are: (1) to serve as the designer and manager of *processes* and/or *procedures*, which serve to facilitate the acquisition of content by the learner, and (2) to serve as a content resource, which includes providing support materials, media resources, field experiences, and the assistance of peers and other individuals with specialized knowledge or training (skills) (Knowles, 1984: 14).

Underscoring the importance of the facilitator's role for ensuring that appropriate processes exist to ensure effective learning, Knowles posited seven elements for

110

consideration, whose utilization were, in his view, incumbent upon the instructor/facilitator.

Interestingly, while his writings reflect an increased degree of sophistication relative to the

versatility and flexibility of andragogy, these seven elements have remained unchanged

throughout his writings, thereby underscoring their importance. The seven elements are:

1.   Establishing a climate conducive to learning

2.   Creating a mechanism for mutual planning

3.   Diagnosing the needs for learning

4.   Formulating program objectives that will satisfy these needs (content)

5.   Designing a pattern of learning experiences

6.   Conducting learning experience with suitable techniques and materials

7.   Evaluating learning outcomes and re-diagnosing learning needs

Knowles, 1990: 120

Establishing a climate conducive to learning

Given the climate under which traditional learning occurs, Knowles asks, 'what

procedures would be most likely to produce a climate that is conducive to learning?' He

suggests that setting the right climate is critical to learning and is influenced by the *physical

environment* as well as the *psychological atmosphere*; a point that underscores the emphasis

Bloom (1969) places on the affective domain of learning. Knowles suggests that a traditional

classroom setting with chairs and desks lined in a row with the lectern in the front of the

room, telecasts an environment of one-way transmission; one that states that the learner's role

'is to sit and listen'. Convinced that such a setting undermines the learning process, Knowles

maintains that such an environment 'is probably the least conducive to learning that the fertile

human brain could invent' (1984: 14-15). Ecological psychologists recommend settings

where rooms are bright, cheerful, and organized. When participants are seated in small circle

groups, not only does this break down barriers, but it fosters open discussions and

collaborative learning. Other variables such as temperature, ventilation, adequate lighting,

comfortable chairs, good acoustics, and easy access to refreshments and restrooms are all factors that should be taken into consideration.

Even more important than the physical environment, however, is the *psychological climate*, which Knowles suggests, creates an atmosphere of mutual respect, collaboration, trustworthiness, support, openness and authenticity, humanness, and pleasure and gratification. He explains that 'people are open to learning when they feel respected. If they feel they are being talked down to, ignored, or regarded as dumb, and that their experience is not valued, their energy is spent dealing with this feeling more than with learning' (Knowles, 1984: 15). As opposed to an environment that encourages competitiveness, whether for grades or a teacher's recognition, the setting for learning should consist of collaboration and mutual trust among students and the facilitators – one in which learners recognize the experience and resourcefulness of their fellow students. Knowles further posits that 'people learn better when they feel supported rather than judged or threatened', explaining that he accepts 'learners with an unqualified positive regard, matching any diagnosis of weakness with a valuing of strength, empathizing with their problems or worries, and defining [one's] role as that of a helper' (Knowles, 1984: 16).

Rogers (2002: 194-195), addressing the importance and impact of what he terms 'class climate', explains that 'the atmosphere of the learning group may be relaxed, warm and friendly, or it may be tense, cold and hostile', which in effect influences whether students 'could be on the one hand apathetic, obstructive, uncertain and dependent, or on the other alert, responsible, confident and initiating'. He explains that a positive and constructive 'learning climate' has four characteristics: (1) *warmth*, (2) *directness*, (3) *enthusiasm*, and (4) *organization*. He describes *warmth* as the strength of positive emotions and the rapport developed between the teacher and student participants. Warmth describes group interactions that are welcoming, affirming, encouraging; not being dismissive or exclusive. *Directness* measures 'whether the interactions between the teacher and student participants are direct or indirect, whether the teacher does all the work or whether the group stimulates the learners to

do their own work'. *Enthusiasm* includes 'the way the teacher feels about the subject being taught', his or her students, and the degree to which learning occurs. And lastly, *organization* deals with an instructor's competence in organizing the curriculum, the strength and efficacy of managing the learning situation, and 'devising carefully planned and purposeful exercises so that all involved feel they are not wasting time' – a matter addressed in greater detail when discussing the *integration and facilitation of the curriculum* (Rogers, 2002: 195).

Brookfield (1986: 13-14), who also emphasizes the significance of establishing what he describes as a climate of mutual respect, writes that it is important that 'participants feel that they are valued as separate, unique individuals deserving of respect. To behave in a manner disrespectful to others, to denigrate their contributions, or to embarrass them publicly through extended attention to their apparent failings are behaviors that are, in educational terms, disastrous. Such behavior, he explains, will find learners so intimidated by the prospect of public pillorying or private censure that they will be unable to learn' (1986: 13-14). By contrast, good facilitation is characterized by a respect for a learner's uniqueness, self-worth and separateness; one that fosters critical reflection and creates an environment 'in which adults can feel free to challenge one another and can feel comfortable with being challenged'. Toward this end, Knowles advocates what he describes as a *climate of openness and authenticity*, explaining that 'when people feel free to be open and natural, to say what they really think and feel, they are most likely to be willing to examine new ideas and risk new behaviors'. Hence, if 'the teacher or trainer demonstrates openness and authenticity in his or her own behavior, this will be the model that participants will adopt' (Knowles, 1984: 16). Overall, Knowles suggests that learning should 'be one of the most pleasant and gratifying experiences in life; for after all, it is the way people can become what they are capable of being – achieving their full potential. It should be an adventure, spiced with the excitement of discovery'. He maintains that 'learning is a very human activity' and 'the more people feel that they are being treated as human beings, the more they are likely to learn. To

summarize, this means 'providing [for] a caring, accepting, respecting, helping social atmosphere'.

Creating a mechanism for mutual planning

Here, Knowles once again underscores the importance of collaboration, asking the question 'what procedures can be used to get the participants to share in the planning?' (1984: 17). He argues that 'one aspect of educational practice that most sharply differentiates the *pedagogical* from the *andragogical*, the *mechanistic* from the *organismic*, and the *teaching* from the *facilitating of learning* schools of thought, is the role of the learner in planning' (1990: 125). While the sole responsibility in a traditional teaching environment lies with the teacher, an andragogical philosophy advocates learner involvement and participation. Underscoring the importance of this point, Knowles explains that given an adult learners' need to be self-directing, one of the 'cardinal principles of andragogy (and, in fact, all humanistic and adult education theory) is that a mechanism must be provided for involving all the parties concerned in the educational enterprise in its planning'. Toward this end, he suggests the use of sub-groups, planning committees, developing task forces, open group discussions, or other similar initiatives that actively involve the learner with the ultimate design for eliciting opinions, recommendations, and providing feedback in the critique and mutual planning of learning activities. 'One of the basic findings of applied behavioral science research', Knowles notes, 'is that people tend to feel committed to a decision or activity in direct proportion to their participation in or the influence on its planning and decision-making'. Continuing, he notes that 'the reverse is even more relevant', arguing that 'people tend to feel uncommitted to any decision or activity that they feel is being imposed on them without having a chance to influence it' (1990: 125). As such, when initiatives are undertaken for mutual planning, they must be sincere and conducted in good faith, with real delegation of responsibility and real influence in decision making. To do otherwise, he maintains, could seriously undermine the confidence of the learner and the learning group.

Diagnosing the needs for learning

Underscoring the importance of collaboration, Knowles poses the question: 'what procedures can be used for helping learners [to] responsibly and realistically identify what they need to learn?' (1984: 17). This is a most important point, given that many adult learners enter a learning situation as a requirement or prerequisite for employment, training, licensing, certification, etc., and for which there often exists a prescribed curriculum and learning outcomes, as is the case with basic police training. 'One of the pervasive problems in this process', Knowles explains, is coordinating the needs of the learner with that of their respective organizations. This means 'meshing' the students 'felt needs' with that of an organization's 'ascribed needs' (1984: 17). He explains that a learning need represents a gap 'between where you are now and where you want to be, in regard to a particular set of competencies' (1998: 212). Addressing such needs, Knowles suggests developing a model of desired behavior, performance, or competencies that can serve as an effective means for determining learning needs, the sources for which may lie with the learner, the organization, or society at-large. Indeed, his point is well taken considering that the objectives of basic police training strives to achieve the desired knowledge, understanding, skills, attitudes, behaviors, and competencies, which effectively represent the needs and interests of the recruit, the police organization, and society. In that context, he acknowledges that diagnosing needs can be a challenging process, particularly given the competing perspectives and interests that may exist between the learner and the organization. Knowles argues that while cognitive, humanistic, and adult education (andragogical) theorists focus on developing competencies, by considering 'what the learner wants to become, what s/he wants to be able to achieve, and at what level s/he wants to perform', the behaviorist focuses on developing a learners' performance – the manner and behavior with which one conducts himself.

Recognizing that these three sources – the learner, the organization, and society, can aid in diagnosing a learner's needs, Knowles emphasizes that such diagnoses must be conducted in a collaborative context involving everyone in the learning process. To that end,

he explains that there are a variety of strategies that can be employed 'ranging from simple interest-finding checklists to elaborate performance assessment systems, with a balance between felt needs and ascribed needs being negotiated between the facilitator and the learners'. While such practices may have pragmatic limitations within basic police training, conceptually, they could be constituted so as to involve the recruits in diagnosing their real and perceived training needs (1984: 17; 1990: 127; 1998: 212-216). In this regard, Knowles advocates the development and use of learning contracts as discussed in the following section (Knowles, 1998: 211-216).

Formulating program objectives that will satisfy these needs

Addressing the importance of formulating program objectives or what are otherwise referred to as learning outcomes, Knowles (1990: 129-132) declares that the idea of establishing program objectives has given rise to 'raging controversies among theorists'. In his earlier writings he makes a point of discussing what program objectives would mean, or translate into, from the perspective of behavioral and cognitive theorists. Behaviorists, he argues, 'would insist that objectives are meaningless unless they describe terminal behaviors in very precise, measurable, and observable terms', i.e., what will the learner be *doing*, whereas those with a cognitive orientation advance 'principles to guide the formulation of objectives', including the acquisition of knowledge and ideas, reflective thinking, logical reasoning, and values and attitudes. Theorists from other camps, 'see learning as a process of inquiry . . . and reject the idea that there should be pre-set or prescribed objectives at all'.

Considering such varied opinions, Knowles suggests that 'perhaps these differences in viewpoint on objectives are partly reconcilable by assigning the more terminal-behavior-oriented procedures to training and the more inquiry-process-oriented procedures to education', adding, however, that 'according to andragogical theory, the learner is likely to resist unless he [sic] freely chooses them as being relevant to his self-diagnosed needs', upon which he [sic] later advocated the development of learning contracts (Knowles (1990: 132). A *learning contract*, or what he also refers to as a *learning plan* or *learning agreement*, is

based on a collaborative agreement between a student and the facilitator regarding what will be learned and the means for doing so. Knowles argues that this serves as an effective means to providing a sense of structure and semblance that adult learners require. Learning contracts represent a growing response from within adult learning, to the need for diagnosing a learner's specific requirements. Even though it is conceivable that some form of learning contract could be used to involve recruits in diagnosing and formulating their training needs, the prescriptive nature of the basic police training curriculum limits both their relevance and application (Knowles, 1998: 211-216).

Designing a pattern of learning experiences

While acknowledging the strengths and obstacles associated with subscribing to any one of the various theoretical formulations about learning, Knowles (1990: 133), addressing the importance for what he calls *designing patterns of learning experiences*, explains that 'adult education theorists have tended to build design models into which aspects of all these approaches can be fitted'. The andragogical design model, he posits, 'involves choosing problem areas that have been identified by the learners through self-diagnostic procedures and selecting appropriate formats (individual, group, and mass activities) for learning, designing units of experiential learning utilizing indicated methods and materials, and arranging them in sequence according to the learners' readiness and aesthetic principles'. He emphasizes that this approach does not necessarily involve a subscription to any particular methodology, it can, on the contrary, involve any 'number of simultaneous individual and group learning projects' with each project collaboratively planned by the learner; hence 'learners could use the whole gamut of human resources (experts, teachers, colleagues, fellow students, people in the community) and material resources . . . almost without regard for the theoretical orientation underlying them' (1990: 133). Interestingly, he readily acknowledges that designing such experiences involves a high degree of self-directedness and needs to be developed and incorporated within programs. He adds, however, that doing so, could prove to be challenging considering that traditional learners are the conditioned product of a

117

pedagogical philosophy, as is the case with most basic police training programs in the United States. The significance, therefore, for designing patterns of learning experiences – ones that considers all the needs of the adult learner – necessitates a proactive, holistic, and integrative approach that takes into account all the variables that influence the learning experience. This would again underscore the importance of experiential learning activities.

Conducting learning experience with suitable techniques and materials

Referring to this process as program operations, Knowles speaks to the importance of facilitation, i.e., how the learning process will be coordinated and delivered, thereby underscoring the importance of the faculty's role in facilitating the learning process and making evaluations, which, he explains, is intended 'to improve teaching and learning, not, as is so often misunderstood, to justify what we are doing'. Referring to Kirkpatrick's (1971: 80-103) model for conducting evaluation, which Knowles notes 'is most congruent with andragogical principles and the most practical of all the formulations seen', he explains that Kirkpatrick's model calls for evaluating a learner's *reaction*, *learning*, *behavior*, and *results*. To this list, Knowles adds a fifth dimension that he describes as the *rediagnosis of learning needs*.

While addressed in greater detail in this study's methodology, *evaluating reaction* simply speaks to receiving feedback from the participants, i.e., soliciting positive and negative feedback. *Evaluating learning* 'involves getting data about the principles, facts, and techniques which were acquired by the participants'. *Evaluating behavior* involves 'observations about actual changes in what the learner does after the training, as compared with what he [sic] did before', and *evaluating results* involves examining empirical data. And lastly, in what he describes as a fifth dimension, Knowles emphasizes the importance of re-diagnosing learning needs stating that 'if every learning experience is to lead to further learning, as continuing education implies, then every evaluation process should include some provision for helping the learners re-examine their models of desired competencies and reassess the discrepancies between the model and their newly developed levels of

118

competencies. Thus repetition of the diagnostic phase becomes an integral part of the evaluation phase' (Knowles, 1990: 138).

Evaluating the learning outcomes and re-diagnosing learning needs

Discussing learning outcomes, Knowles (1990: 139, 212; 1998: 211) once again makes reference to the significance of learning contracts. He suggests that while traditional education has been overly prescriptive where 'the learner is told what objectives he [sic] is to work toward', which can lead to 'resistance, apathy, or withdrawal', learning contracts empower the learner to identify, achieve, and reassess (rediagnose) their learning objectives. He explains that 'what adults learn on their own initiative they learn more deeply and permanently than what they learn by being taught'. Hence, 'learning contracts provide a vehicle for making the planning of learning experiences a mutual undertaking between a learner and his helper, mentor, teacher, and often peers'. 'By participating in the process of diagnosing his needs [sic], formulating his [sic] objectives, identifying resources, choosing strategies, and evaluating accomplishments, the learner develops a sense of ownership of (and commitment to) the plan'. Not every learning situation, however, lends itself to providing total autonomy. Basic police training is a case in point. In that regard, Knowles acknowledges that the design and objective of some forms of learning, including training, focus on 'improving one's competence . . . in a job or in a profession', and as such, 'must take into account the needs and expectations of organization, professions, and society'. Under such circumstances, he posits that the concept of 'learning contracts can provide for a means for negotiating a reconciliation between these external needs and expectations, and the learner's internal needs and expectations'. Given the prescriptive nature of traditionally conceptualized basic police training, such as a negotiating process could not even be considered. Conceptually, however, it could be realized, contingent upon the academy's institutional and instructional philosophy and orientation, its adaptability, and its creativity (Knowles, 1998: 211).

Andragogy in Practice

In the introduction of his last book, Knowles (1998: 2) explains that andragogy represents a transactional model that speaks to the characteristics of the learning transaction', emphasizing that 'andragogy presents core principles of adult learning that . . . enable those designing and conducting adult learning to build more effective learning processes for adults'. In discussing what he describes as the *practice of andragogy*, Knowles (1998: 181) emphasizes that 'the power of andragogy lies in its dynamic application, not in a rigid recipe for action'. In that context, he offers what he describes as a model of *Andragogy in Practice* (Figure: 1-12), 'as a new approach to more systematically apply andragogy across multiple domains of adult learning practice', which is represented by three rings of practice: (1) goals and purposes for learning, (2) individual and situational differences, and (3) Andragogy: Core Adult Learning Principles. He explains that the outer ring – the goals and purposes for learning, are portrayed as developmental; that 'the traditional view among scholars and practitioners of learning is to think exclusively of individual growth'. He argues, however, that institutional and societal growth are also important factors, and as such, serve as 'critical elements for understanding andragogy in practice'. The second or middle ring, represents individual, subject-matter, and situational differences and variables, which 'are critical elements for understanding andragogy in practice', in that they 'act as filters that shape the practice of andragogy'. The third, or inner ring represents the core principles of andragogy, i.e., the six principles upon which andragogy is based, namely, the learner's: (1) need to know, (2) self-concept, (3) prior experience, (4) readiness to learn, (5), orientation to learning, and (6) motivation to learn, all of which 'come *directly* from the adult learner' (Knowles, 1998: 181).

Figure: 1-10
Andragogy in Practice

Goals and Purposes for Learning
Individual and Situational Differences
ANDRAGOGY:
Core Adult Learning Principles

1. Learner's Need to Know
   –why
   –what
   –how

2. Self-Concept of the Learner
   –autonomous
   –self-directing

3. Prior Experience of the Learner
   –resource
   –mental models

4. Readiness to Learn
   –life related
   –developmental task

5. Orientation to Learning
   –problem centered
   –contextual

6. Motivation to Learn
   –intrinsic value
   –personal payoff

Institutional Growth
Subject Matter Differences
Situational Differences
Societal Growth

Individual Learner Differences
Individual Growth

Source: Knowles, M.S. The Adult Learner (1998: 182)

Using this model, Knowles sets forth what he describes as 'a three-dimensional thinking process for approaching adult learning situations': (1) the core principles of andragogy serve to provide a sound foundation for the planning and facilitation of effective learning for adults, (2) the practice of andragogy is holistic, flexible, and resilient, i.e., it takes into consideration the individual characteristics of the adult learners, the characteristics of the subject matter, and the characteristics of learning situation, and as such, is adaptable to the idiosyncratic nature of basic police training, and (3) the goals and purposes of the learning situation provide a frame that shapes the learning experience, which in the case of basic police training, is distinctively unique from other situations of adult learning.

Finally, considering the uniqueness of the adult learner and the situations under which they engage in learning, Reece and Walker (2005: 8-9), referencing the 'growing literature on andragogy', offer a summary of 'assumptions, values, and beliefs' that relate to the conditions and circumstances of how adults learn as represented in Table: 1-13. While not suggesting that the foregoing assumptions cover all of the circumstances involving all adult learners or police recruits, they nevertheless represent characteristics more likely associated with adult learning, and as such are worthy of consideration.

Figure: 1-11	
Assumptions, Values and Beliefs about Adult Learners	
It is assumed that adults learn best when they:	
Are involved in negotiation	Fully utilize their willingness to learning
Derive their own goals	Are-present centered
Diagnose their own goals for learning	Learn from problems rather than subjects
Accept that learning is an internal process	Are activity-based
Become autonomous	Focus on principles
Have responsibility for learning	Reflect upon experience
Share ideas and feelings	Acknowledge the importance of process
Openness, trust, respect, commitment	Have a sense of progression
Are in a climate conducive to learning	Value transitions
Are willing to alter their way of thinking	Are integrated in their thinking
Are able to accept uncertainty	Can create knowledge
Learn to think with others	Can change
Make use of their experience	Think critically

Source: Reece, I., and Walker, S. (2005: 7-8). Teaching, Training and Learning 5th Ed.

Summary

While Knowles' assumptions about adult learners do not represent a radical departure from the general principles of adult learning posited by other scholars in the field, he clearly distinguishes and explains his advocacy of andragogy by providing a contrast between children and adults. Moreover, by providing a set of unique assumptions arising from these differences, he holds forth andragogy as a holistic and integrative approach to learning that is both realistic and pragmatic. He explains that 'while each principle of andragogy is important, as a set they must be viewed as a system of elements that can be adopted in whole or in part. It is not an ideology that must be applied totally or without modification. In fact, an essential feature of andragogy is [its] flexibility', adding that 'the power of andragogy lies in its dynamic application, not in a rigid recipe for action' (1998: 181). It is the utility, flexibility, pragmatic application, and potential to enhance the training process, that serves as the basis for discerning its efficacy, and hence, the focus of this study.

CHAPTER II: RESEARCH DESIGN AND METHODOLOGY

The purpose of this study is to assess the effectiveness of andragogy as applied in the context of basic police training. The research design is quasi-experimental in nature. It involves comparisons between two contrasting instructional methodologies practiced at two regional police academies in New Jersey: one that subscribed to a traditional, pedagogical, military model of training and the other that subscribed to an andragogical model. The methodology employed to test the hypotheses involved a process of triangulation utilizing multiple instruments of measurement consisting of: 1) observations, 2) interviews, 3) survey questionnaires, and 4) the administration of problem-based learning assessments. This chapter will address the following topics: research questions and hypotheses, conceptualization and operationalization, sample design and population, the research design and methodology, instruments of measurement, reliability and validity of measurement, and causation.

As a preface to the research questions and the hypotheses, it is important to bear in mind that the principles of andragogy as espoused by Knowles focuses the *processes* and *practices* of learning, as opposed to any specifically identified *outcome*. Outcomes, he explains, are specific to the nature, subject matter, purpose, and/or venue of the learning process. This means that the learning outcomes associated with basic police training will be distinctively different from outcomes associated with legal studies or computer training. Considering that this study set out to examine the effectiveness of andragogy, it is important once again, to consider Knowles' emphasis that andragogy presents core principles of adult learning that empowers those designing and facilitating programs to build more effective learning processes. Notwithstanding his emphasis on the efficacy of the transactional processes upon which andragogy is founded, he acknowledges an absence of any definitive empirical data to support his research stating, that 'andragogy is not an ideology . . . but a system of assumptions about learners that needs to be tested out for different learners in

different situations' (Knowles, 1998: 2). The current research is aimed at providing empirical data testing the assumptions of andragogy.

Krajnc (1989), likewise, discussing the absence of any substantive empirical research on the effectiveness of andragogy explains that

> Andragogy has not evolved its own research methods. For the most part it uses the standard ones of the social sciences. The classical experimental method is, however, more rare than in school research, no doubt because adults, as free agents, are less easily manipulated and have less time to give to researchers than children at school. It is also true that whereas cognitive learning may be adequately measured, it has not been possible to observe and evaluate accurately the affective learning outcomes of adult education by methods now in use. Since adult education is largely directed at achieving changes in feelings, values, and attitudes, this is a serious weakness'.

(Krajnc, 1989: 19-21).

In the context of Knowles question, 'what research has been done to indicate under what conditions the andragogical model is appropriate, in whole or in part' (1980: 59) give rise to the focus of this study and the research questions and hypotheses posited in this study's Introduction.

Conceptualization and Operationalization

Conceptualization

Babbi (2002: 122) addressing the process of social research emphasizes the importance of the processes of *conceptualization* and *operationalization* (2002: 53; 126-128). In the context of this study's research questions and hypotheses, the two terms address the significance of clearly defining *what* is to be measured and *how* it will be measured. Because these 'concepts are, by their very nature, not directly observable' they need to be translated into something that can be observed and measured (de Vaus, 2001: 24 in Scarman Centre, 2003). Babbi explains that *conceptualization* involves the process of clearly specifying what is meant when particular terms in research are used, so as to avoid ambiguity, misunderstanding, or misinterpretation. Hagen (2006: 20) describes *conceptualization* as the qualitative 'process of attempting to describe, understand, classify, or to become more sensitized to some element of reality'. One 'can't meaningfully study [a] question, let alone

agree on the answer, without some working agreements about the meaning' about what is being measured (Babbi: 2001: 122). Babbi explains that *conceptualization* is 'the process of coming to an agreement about what terms mean' (2001: 120). As such, the context of the foregoing research questions and hypotheses, andragogy will be understood to be a transactional model of learning, predicated and facilitated based on the six assumptions that Knowles makes about adult learners relative to their *need to know, self-concept, experience, readiness, orientation to learning,* and *motivation*. Given the foregoing definitions and assumptions about adult learners, it is important to understand that while conceptually and operationally andragogy places primacy on the *process* of learning, the implication is that it will positively influence the *outcomes* of the training process, which in effect reflect its efficacy. In light of this inferential *cause* and *effect* relationship, it is imperative to underscore the importance for a clear and cogent operational definition.

<div align="center">*Operationalization*</div>

Addressing social research, Babbi (2001: 53; 125-126) explains the importance of *operationalization*, otherwise referred to as the creation of *operational definitions*. These are defined as the specification of concrete definitions of variables in terms of the operations by which observations are to be categorized, and the specification of the exact operations involved in measuring those variables as a means for testing a hypothesis. Similarly, Hagen (2006: 18) defines an operational definition as the process used to measure a concept, while Fitzgerald and Cox (2002: 66) explain that an operational definition specifies exactly how one will categorize or measure variables.

As a preface to specifying this study's operational definitions, it is noteworthy to address some of the considerations that factored into the process of determining *what* criteria should be established to measure and assess the influence and effectiveness of an instructional methodology within the context of basic police training. Given the inferences by many police scholars as to the efficacy of andragogy in police training, it is important to establish not only *what* one means by effectiveness, but *how* effectiveness is to be measured. Effectiveness

(efficacy) is 'having an expected or intended effect; [one] producing or designed to produce a desired effect' (Webster, 2001: 359). Roberg, Kuykendall, and Novak (2002: 10-19), discussing the meaning of effectiveness in the context to police management, define it as 'the degree to which goals and objectives are accomplished'. Given, therefore, that the characterization or measurement of *effectiveness* can be an inherently subjective process, it requires a contextually specified operational definition (Scarman Centre, 2001: 5-25).

While it was initially considered that the *effectiveness* of a basic police training program could be assessed on the comparative scores of recruits using a variety of measures already collected, it soon became readily apparent that there were a number of variables that could not be controlled for. More importantly, there was a conspicuous absence of any clearly identified or defined programmatic learning outcomes or competencies in the areas of critical thinking, problem solving, decision making, and effective communication skills, despite the emphasis placed on these skill sets with the current literature. While the New Jersey Police Training Commission, under the authority of Police Training Act (N.J.S.A. 52: 17B et seq.), set forth a comprehensive curriculum for basic police training that includes thirteen (13) major functional areas and which collectively encompasses over 1000 performance objectives,[9] they do not identify any clearly defined outcomes (albeit that they may be inferred), nor do they provide for any standardized measurements to assess learning in the cognitive/academic components of the curriculum. Assessments in these areas were based on ad hoc tests that were developed at the discretion of the respective academies and their instructors. While the tests were based on measuring the performance objectives identified in the units as specified in the Police Training Act, the absence of any standard measurement by which comparisons could be made between the academies that would serve as control and experimental groups would undermine the validity and reliability of the study. While some standards did exist for assessing proficiencies in the psychomotor components of training,

---

[9] Performance objectives identified by the New Jersey Division of Criminal Justice Police Training Commission are 'tasks that a law enforcement officer is expected to perform'. (See Appendix A)

most notably in the use of firearms, the primary focus of this study was on measuring the overall effectiveness of the instructional methodologies within a traditional classroom setting, which, anecdotally, set the tone of the training process. It is argued, therefore, that mere graduation from the police academy based on meeting the minimum passing requirements established by the Police Training Commission, does not necessarily measure either the preparedness of the individual recruits, or the comparative effectiveness of the two academies under study.

Despite the existence of strong anecdotal information implying the same, the absence of any clearly identified *outcomes* became one of the central challenges in measuring the effectiveness of an andragogical instructional methodology. Reflection on the constructs and tenets of andragogy, made it evident that Knowles (1998: 65) and his contemporaries placed primacy on the learning *process*, which they expected would lead to 'improving the effectiveness of the learners' performance', i.e., the end product or the *outcomes* of the learning process. Addressing *outcomes*, Suskie (2004: 75) explains that they represent 'the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience', and which, in this case, should be consistent with the desired knowledge, understanding, skills, attitudes, behaviors, and competencies common to the goals and of basic police training. Given this inferential *cause* and *effect* relationship – that andragogical process should give rise to better training outcomes than pedagogy – it was determined that the best means for measuring the comparative efficacy of andragogy and pedagogy was by defining and measuring two principle variables: (1) the instructional methodologies or *processes* employed at the subject police academies, i.e., pedagogy vs. andragogy, and (2) the achievement of desired *outcomes* of basic police training in the areas such as the acquisition of cognitive knowledge, critical thinking, problem-solving, and decision making (Birzer and Tannehill, 2001; Cleveland, 2006).

127

Instructional methodology (process)

In setting out to measure the comparative effectiveness of the pedagogical and andragogical methodologies at the two police academies, a significant amount of research was undertaken to identify which variables could best serve to assess their comparative efficacy. While originally, factors related to affective states, attitude, self-confidence, curriculum delivery and instruction, motivation, satisfaction, understanding, and utility and self-efficacy were identified to serve as the focus of the study, as the research evolved and matured, it became increasingly apparent that some of these variables were not only difficult to measure, but did not serve the purpose of measuring the comparative effectiveness of the two instructional methodologies. As the research evolved and greater insight was acquired into andragogy and the dynamics of basic police training, it was determined that the originally identified variables would better serve the interests of measurement when subsumed under six content areas that were subsequently identified as more appropriate measures of the efficacy of the two methodologies under study. Because of this change, and in light of its ethical implications, it is important to emphasize that the operational definition was not changed to facilitate any desired outcomes of the study in a better light, rather, it was changed only in the interest of providing a more effective and objective means of measurement for the variables under consideration. To this point, Barclay (2001: 57), referencing the writing of Creswell (1998) notes that in the process of conducting qualitative research, 'the researcher has a special perspective on the entire study that allows him or her to evolve the design as the study proceeds,' explaining that 'data analysis is continuous and enables a researcher to work simultaneously with both the process and the product' (2001: 57). Describing this process as the *data analysis spiral*, Creswell (1998: 142) writes that 'data analysis is not off-the-shelf; rather, it is custom-built, revised, choreographed' emphasizing that 'qualitative researchers learn by doing'.

Consequently, six thematic and categorical areas were identified that served as a more reliable and valid means to measure the overall efficacy of andragogy in that they took into

consideration: (1) the generic characteristics and processes associated with basic police training, (2) the comparative effectiveness of the respective instructional methodologies (*processes*) employed at the two academies, (3) the six assumptions Knowles makes about learners in general which serve to distinguish pedagogy from andragogy, and (4) an explanatory framework for understanding the quantitative analysis of the problem-based assessments administered at the end of the training process. Accordingly, the following six thematic and categorical content areas will serve as independent variables and the basis upon the operational definition will serve to compare and measure the efficacy of a traditional, pedagogical, military model of training to that of an andragogical based instructional methodology:

1. Institutional and instructional philosophy

2. Affective orientation: climate, tone, and environment

3. Self-concept and self-directedness

4. Integration and facilitation of curriculum

5. Application and integration of experiential learning

6. Stress and discipline

These variables, therefore, are defined and will be measured using the following criteria.

Institutional and instructional philosophy. An institutional and instructional philosophy characteristically represents an organization's core values, beliefs, ideologies, and the principles by which it operates and carries out its mission. This will be measured by examining the two academies' mission statements and the degree to which such statements reflect their operations. The assessment will further include an examination of the other five thematic and categorical content areas (variables), namely, the affective orientation and practices of the academy, the integration and facilitation of curriculum, the application and integration of experiential learning, matters pertaining to a recruit's self-concept and self-directedness, and the nature and degree of stress and discipline resident at the academy. These five areas will also be identified and measured by observations, responses to the pre

129

and post-training questionnaires, responses to the open-ended questions in the post-training questionnaire, and statements made during the course of interviews with the academy directors and recruits that address and/or reflect their understanding, views, and experiences associated with the philosophies of the two academies.

Affective orientation: climate, tone, and environment. An academy's affective orientation, including its climate, tone, and environment, reflects its overall philosophy, its practices, and the attitudes of its faculty and staff. An affective orientation influences one's attitude, values, appreciations, mood, emotions, interests, and feelings. Collectively, these can affect one's degree of satisfaction, involvement, commitment, learning, and behavioral outcomes (Bloom, 1969: 7; Robbins, 2000: 386). This variable will be identified and measured by observations, responses to the pre and post-training questionnaires, responses to the open-ended questions in the post-training questionnaire, and statements made during the course of interviews with the academy directors and recruits. These indicators will be assessed on the basis of whether responses to the above instruments refer to and/or reflect the affective components associated with a recruit's sense of comfort, ease, relaxation, enjoyment, happiness, and satisfaction. Responses will be assessed for the frequency of use or the absence of these terms or their synonyms within the responses collected.

Self-concept and self-directedness. Knowles (1998: 64-65) explains that self-concept and self-directedness reflect the importance of autonomy and one's sense for being responsible for one's own decisions and managing one's own life. He explains that once adults 'have arrived at that self-concept they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction . . . and resent and resist situations in which they feel others are imposing their wills on them'. Self-concept and self-directedness involves a sense of freedom, flexibility, autonomy, self-governance, control over one's actions, and in context to this study, the ability to plan and collaborate with the academy's faculty and staff. This variable will be measured by observations, responses to the pre and post-training questionnaires, responses to the open-ended questions in the post-

130

training questionnaire, and statements made during the course of interviews with the academy directors and recruits that reflect the degree to which these characteristics are realized. Specific responses indicating the presence or absence of these variables will include positive or negative responses to questions about personal treatment at the academies as well as reflections upon the degree of personal respect shown them during the training period.

Integration and facilitation of curriculum. The integration and facilitation of curriculum reflects the extent and effectiveness of strategic planning to including its designed purpose, content, sequence, the use of resources, cohesiveness, coordination, sequence, instructional processes and delivery (methodology), and the use of experiential learning activities in ways that result in effective learning and recruit satisfaction. These variables will be measured by observations, responses to the pre and post-training questionnaires, responses to the open-ended questions in the post-training questionnaire, statements made during the course of interviews with the academy directors and recruits, and the comparative scores on the problem-based learning case scenarios. These variables will be reflected by responses that make reference to the teacher-student rapport, the use of teaching aids, and coordination of instructional units.

Application and integration of experiential learning. The application and integration of experiential learning reflects the strategic planning, design, purpose, content, sequence, coordination, use of resources, instructional processes and delivery (methodology), and the extent to which hands-on practical training scenarios are coordinated and incorporated throughout the training process. This variable will be measured by observations, responses to the pre and post-training questionnaires, responses to the open-ended questions in the post-training questionnaire, statements made during the course of interviews with the academy directors and recruits, and the comparative scores on the problem-based learning case scenarios. The presence of specific elements of experiential learning in the curriculum will be noted and the weighing of grades on experiential modules will also be used as an indicator of the level to which this element is integrated into the curriculum.

Stress and discipline. Stress and discipline represent a combination of two components that when properly incorporated into basic police training serve to prepare recruits for the challenges associated with physical and emotional stressors inherent to police work in general, including working within a paramilitary organization and encountering the general public in typically adverse or hostile situations. According to Abrams, Puglisi, and Balla (1998: 334-340), *stress inoculation* entails conditioning recruits for the physical and emotional stress related to the real and potential threats and dangers characteristic to police work. Stress can consist of distress or eustress. *Distress* is most commonly recognized as having negative connotations, whereas *eustress* is considered to be a positive form of stress, usually related to desirable events in person's life. Exposing police recruit's to both forms of stress and understanding their relative importance can serve to condition them for the constant challenges of police work. Doing so during training, can also serve an important predictive role, i.e., will recruits over-react or under-react to stressful conditions? Regarding discipline, Webster (2007) defines it as training that corrects, molds, or perfects the mental faculties or moral character; control gained by enforcing obedience or order; an orderly or prescribed conduct or pattern of behavior; or a rule or system of rules governing conduct or activity. Stress and discipline, when properly incorporated within basic police training, can serve an important role in preparing recruits for a professional career of policing. Conversely, when stress and discipline are used in a negative manner, they can not only undermine the design and purpose of basic training, but can have a negative impact on the attitude, understanding, and effectiveness of being a police professional.   This variable will be measured by observations, responses to the pre and post-training questionnaires, responses to the open-ended questions in the post-training questionnaire, statements made during the course of interviews with the academy directors and recruits, and the comparative scores on the problem-based learning case scenarios. The presence of stress, as a generally negative factor, will be reflected by statements and feedback that reflect meaningless screaming and discipline, threats of failure, imposition of fear, and derogatory, demeaning, and belittling

statements. The presence of eustress will be indicated by statements and feedback that reflect

the positive effect of discipline, a sense of being challenged, rewarded for successful

completion of difficult tasks, and the constructive critique even when one failed to complete a

task successfully.

Training Outcomes

Suskie (2004: 74-75) explains that *learning goals*, otherwise referred to as *learning

outcomes*, represents what an institution aims to achieve, i.e., 'the knowledge, skills, attitudes,

and habits of mind that students take with them from a learning experience'; hence, the aim of

the learning process is the successful achievement of such outcomes. While the achievement

of effective goals and outcomes necessitates explaining to learners 'why we do what we do',

it is important to understand that the *process* by which students learn affects the successful

achievement of the outcomes. In that context, it is important to consider that despite the more

than one thousand performance objectives identified by the *New Jersey Police Training

Commission*, no clearly defined or articulated training outcomes or competencies exist for

basic police training in the areas such as critical thinking, judgment, discretion, decision-

making, problem-solving, and effective communication skills; competencies that have been

consistently identified and called for by today's leading police administrators and

educationalists. While one can certainly argue that these commonly identified competencies

are acquired in the process of achieving the *Training Commission's* performance objectives,

their absence is problematic in that you cannot measure something that is not identified, nor

can you assume they will be realized despite inferences that suggest they will. Furthermore,

while a recruit, as an example, may well score high on written tests, doing so, does not

necessarily suggest that they have acquired competencies in areas such critical thinking,

problem solving, decision making, and effective communication skills. Alternatively, a more

effective means for measuring such skill sets and competencies has been realized through the

use of problem-based learning assessments or otherwise referred to as hypothetical case

scenarios, which represent an approach to training that 'builds a curriculum around intriguing

real-life problems and asks students to work cooperatively', or independently, 'to develop and demonstrate their solutions' (Sadker and Sadker, 2005: 99-101). Considering their success in helping to develop, encourage, measure, and reflects a recruit's ability to synthesize and apply what they have learned, and recognizing that they are commonly used throughout the public, private, and non-profit sectors, including within police and military training, a quasi-experimental design utilizing four problem-based learning case scenarios were developed and administered to police recruits at the completion of their basic training. These were based on real-life situations whose design was to assess a recruit's ability to synthesize what they have learned, with particular emphasis on determining their abilities in the areas of critical thinking, judgment, discretion, decision-making, problem-solving competencies, and forms of effective communication – skill sets associated with, and required of contemporary professional police officers (Cleveland, 2006: 29-41; Birzer and Tannehill, 2001: 233-252).

Kirkpatrick (1998: 3), who writes on the importance of *Evaluating Training Programs*, points to the importance of measuring a program's effectiveness as a means for making improvements. While the process of learning and one's attitude to learning is a critical component for assessing the effectiveness of a particular methodology, the process of measurement, as posited by Kirkpatrick, provides a tangible outcome from which actions can be taken, including: (1) to make improvements on the training, (2) to decide whether to continue or discontinue a program, and (3) to provide justification for training itself. Notwithstanding the absence of clearly defined learning outcomes, many factors and variables were identified that embody the effectiveness of basic training. Based on this information and a review of the literature, the second variable that served to measure the *effectiveness* of the two methodologies under study, was measured by responses to four problem-based learning assessment scenarios discussed later in this chapter.

Sample Design and Population

Sampling Procedure

Considering that the availability of police academies that use an andragogical instructional methodology were limited, given the geographical constraints that limited the study, and because the sample populations were pre-identified and consisted of an unequal number of police recruits, a non-probability sampling design was employed which consisted of a combination of non-probability judgmental and purposive sampling techniques (Babbi, 2003: 178-180; Hagen, 2003: 133-135). While judgmental sampling involves selecting participants 'presumed to be typical of segments of the population who as a group will provide a representative panorama of the population', purposive sampling involves selecting 'individuals or behaviors that will better inform the researcher regarding the current focus of the investigation . . . who can help them explore their problem, understand certain phenomena, test their hypothesis, and /or show generality' (Krathwohl, 1998: 172).

Sample Population

A sample population serves to provide a representative group of the general population from which inferences can be made to a larger population. Because of limited access to the institutions, the availability of the researcher and the target populations, the locations of the institutions, and perhaps most significantly, the absence of training academies that subscribe to and utilize an andragogical instructional methodology (to the extent of that employed by the *experimental group academy*) the sample population and the process of sampling had limitations. The sample population of this study consisted of police academy recruits participating in basic police training. Specifically, this study's sample population consisted of eight basic police recruit classes participating at two separate non-residential police academies in the State of New Jersey, both of whom were certified by the New Jersey Police Training Commission. A total of 324 police recruits participated in this study with 187 representing the *control group* ($n = 187$, 57.7%) and 137 representing the *experimental group* ($n = 137$, 42.3%). Basic police training in New Jersey encompasses a course of

approximately 23 weeks, thus from a scheduling perspective, basic police training classes at these two academies are scheduled bi-annually. Given the pre-existing populations that comprised each of the eight basic police training classes, all of the recruits who volunteered to participate in the study were included; hence, a non-probability sampling design was employed. While the Results (qualitative and quantitative analysis - Chapter III) and the Discussion and Conclusion (Chapter IV) will provide a detailed analysis of the differences between the two subject academies, from a design perspective, the *control group academy* represents a traditional, pedagogical, military model of training, and the *experimental group academy* a model of training that subscribes to an adult-based, andragogical philosophy and instructional methodology.

Selecting and Gaining Access to Police Academies

Inherent to the nature of basic police training and education, and the curriculum prescribed by the *New Jersey Police Training Commission*[10], it is important to acknowledge that there exist commonalities that influence all basic training curricula. As a result, a cursory and independent examination of training academies within New Jersey at any point in time may find them indistinguishable to the casual observer. Notwithstanding the existence of such standards and the common interests in preparing a police recruit for the duties and responsibilities of a police officer, the philosophy, operational practices, and instructional methodologies employed by police academies differ, and as such are characteristically distinguishable, as was the case with the two academies selected for this study.

Given this study's research design and methodology, it is noteworthy to point out that the writer's experience within the realm of policing and law enforcement provided unique

---

[10] The Police Training Commission (PTC), a component of the New Jersey Division of Criminal Justice, is granted its authority under the auspices of the Police Training Act, which is "responsible for the development and certification of basic training courses for county and local police, sheriffs' officers, state and county investigators, state and county corrections officers, juvenile detention officers, and a number of other law enforcement positions, as well as several instructor development courses. Training courses are revised and updated on an ongoing basis as necessitated by legislation, court decisions, and advances in technology and the state of knowledge regarding law enforcement practices" (http://www.state.nj.us/lps/dcj/njptc/home.htm). (See Appendix A).

insights, perspectives, experiences, and opportunities that aided in this study. In addition to having been employed as a police officer for 25 years in ranks and assignments that ranged from patrol officer, detective, first-line supervisor, executive administrative officer, and chief of police, other professional training and educational experiences proved beneficial. Those included serving as a certified police instructor for over 25 years in basic and advanced in-service police training, attending the FBI National Academy (which focused on leadership and instructional development), and serving as a lecturer at colleges and universities. In light of this experience, selecting the two police academies for this study was facilitated in great part by having familiarity with their respective reputations, personnel, and training practices and philosophies.

Control Group Academy

The *control group academy[11]* is a regional training centre that provides independent training and education for police, fire, and emergency medical service (EMS) personnel within the greater northeast portion of New Jersey. It services trainees from local, state, and federal agencies from the greater New York City metropolitan area. The academy enjoys an excellent reputation as a regional police training facility and was at one time, the only police academy in New Jersey that was accredited by the *Commission on Accreditation for Law Enforcement Agencies[12]*. While the academy services a wide range of constituencies, this

---

[11] Babbi (2005: 482) defines a control group as consisting 'of subjects to whom no experimental stimulus is administered and who resemble the experimental group in all other respects'. He explains that 'the comparison of the *control group* and the *experimental group* at the end of the experiment points to the effect of the experimental stimulus'. Because quasi-experimental designs are characterized by non-randomized sampling (nonequivalent groups), Maxfield and Babbi (2001: 173) explain that 'the term *comparison group* is commonly used, rather than *control group*, to highlight the non-equivalence of groups in quasi-experimental designs'. Because the authors indicate that a *comparison group* serves the same function as a *control group*, the term *control group* (*control group academy*) – more commonly recognized in social research – will be used to describe the traditional, military, pedagogical academy.

[12] The Commission on Accreditation for Law Enforcement Agencies was formed for two reasons: to develop a set of law enforcement standards; and to establish and administer an accreditation process through which law enforcement agencies could demonstrate voluntarily that they meet professionally-recognized criteria for excellence in management and service delivery. The purpose of the Public Safety Training Academy Accreditation (PSTAA) program is to promote superior public safety training academy services and to recognize professional excellence. This is accomplished by establishing standards derived from the best practices of professional public safety training agencies and institutions. A process is implemented to verify that the standards are met and that public recognition of professional excellence is provided. The PSTAA's 182 standards were developed through a series of meetings of law enforcement and public safety trainers and

study was limited to its role in providing basic police training. It is noteworthy to point out that the academy's major focus is on the training of police personnel, which is conducted independently of any other training activities. As a result these other activities did not influence this study's measurements. Notwithstanding that some of its training practices are congruent with those associated with andragogy, its institutional and instructional philosophy can definitively be described as one that subscribes to a traditional, quasi-military, and pedagogical model of training.

Experimental Group Academy

Similar to the *control group academy*, the *experimental group academy* served as a regional training centre. It was, however, limited to training police and correctional officers; it did not train fire and medical personnel. Its recruits generally represented municipalities within the greater northwest portion of New Jersey, although, similar to the *control group academy*, it provided in-service training to local, state, and federal law enforcement personnel. Furthermore, as a result of its excellent reputation, many municipalities outside of its geographical region enrolled personnel in its basic police training program. Uniquely located on the campus of a community college, many of the academy's activities extended onto the college campus – a dynamic that is addressed as part of this study. It is interesting to note, that it was not until this study was initiated and a search begun for an academy that subscribed to the tenets of adult-based learning and andragogy, that it was realized that the director's doctoral dissertation[13] dealt with the development of police academy curricula, a significant component of which incorporated principles of adult-based learning.

---

executives. Many of the proposed training standards and process are similar to the Law Enforcement and Public Safety Communications Accreditation programs. The PSTAA program is designed not to conflict with national or state POST authorities or groups like the International Association of Directors of Law Enforcement Standards and Training (IADLEST). As with other CALEA programs, the standards, where possible are general and describe what needs to be done giving the local CEO the most flexibility to implement the standards (http://www.calea.org/newweb/accreditation)

[13] Development of a Police Academy Administrator's Handbook Outlining a Comprehensive Curriculum Model of a Police Recruit Training Program (Celeste, 1996).

Securing Administrative and Faculty Approval

In consideration of the foregoing, access to the two police academies was not problematic, although gaining approval to conduct the study required the submission of a formal proposal and numerous meetings to discuss the details of the research study. Given issues dealing with anonymity and confidentially, the nature of certain training practices, the length of time over which the study would occur, and ensuring unobtrusiveness, gave rise to legitimate logistical concerns. Securing approval began with informal discussions with both police academy directors as to the nature and scope of the study. Such discussions led to assurances that the study would be unobtrusive, the identities of the academies would remain confidential and the participants' identities would remain confidential. Beyond that, assurances were made that the findings would not adversely effect their positions, reputations, or the mission of the academy. Rather, emphasis was placed on the potential benefits that could be realized by both academies and the general law enforcement community. Not only could the study provide a critique and an assessment of the strengths of their respective programs from which each could benefit, but the study's findings could also provide reciprocal opportunities for collaboration, improving, and enhancing the training process. Once these assurances had been made, a formal letter of request was submitted, which was followed by meetings to discuss the logistics of employing the study, namely, conducting the observations and interviews, administering the pre-training and post-training survey questionnaires, and facilitating the problem-based learning assessments at the culmination of basic training (see Appendix B: *Letter of Introduction to Police Academy Directors*).

Population Representation. The sample population consisted of a total of eight basic police recruit training classes: four that attended the *control group academy* and four that attended the *experimental group academy*. The population of each of the eight classes can be characterized as being typical of regional police academies within New Jersey with regard to demographic makeup – approximately 95% male, 5% female, 70% Caucasian, and 30% comprised of African American, Hispanic, Asian, and other minority groups. Furthermore,

given that New Jersey is located within the northeast region of the United States and the greater New York City metropolitan area, one can further characterize its police recruits as representative of most police academies, recognizing, however, that the demographic characteristics of police departments within the United States are generally in disproportion to the general population as it relates to gender, race, and ethnicity, despite recruitment initiatives aimed at rectifying the imbalance (Kappeler, 1999, et al.).

Unlike many other countries in the free world, it is important to recognize that the United States subscribes to a philosophy of federalism,[14] a practice in which government powers are shared by the national (federal) government and the respective 50 states (Gaines and Miller, 2005: 12). Consequently, the government of the United States is highly decentralized resulting in many separate and distinct local government entities, many of whom establish their own police departments. Consequently, there exist over 13,900 separate and autonomous police and law enforcement agencies on the local, regional, state, and federal level for which no universal or standardized criteria exist for recruitment and hiring (Gaines and Miller, 2005: 145). Accordingly, the requirements for the employment of police officers range widely from department to department, notwithstanding standard requirements that call for a minimum age of 18, U.S. citizenship, a legal driver's license, and no felony convictions (Gaines and Miller, 2005: 173). While the minimum requirements for some departments consist of having successfully completed high school, others require a two-year (Associate degree) or four-year college degree (Baccalaureate degree). Similarly, while some agencies require basic minimum standards relative to age and other generic criteria, others are extremely demanding and competitive requiring superior performance in a host of academic, aptitude, psychological, physical, and medical exams, including intensive interviews and background investigations.

---

[14] Federalism is a form of government in which a written constitution provides for a division of powers between a central government and several regional governments. In the United States, the division of powers between the federal government and the fifty states is established by the constitution. The framers of the U.S. Constitution, fearful of tyranny and a too-powerful central government, choose the system of federalism as a compromise. (Gaines and Miller, 2005: 12).

Research Design and Methodology

Fitzgerald and Cox (2002: 338) describe an *experiment* as a 'research project bound by the perspective and rules of science, conducted according to a research design, in which the researcher has at least partial control over the environment and some of the variables regarded as independent or causal', while an *experimental design* is 'a research strategy that allows the researcher to attempt to eliminate possible causes for changes in the dependent variable, other than the proposed independent variable(s). As noted, this study was *quasi-experimental* in design in that the *control group academy* was comparable to the *experimental group academy* in critical ways, although its subjects were not randomly assigned. With the purpose of attempting to measure the differences between andragogical methods and those of the traditional, military, pedagogical model, four instruments of measurement were employed: 1) observations, 2) interviews, 3) administration of survey questionnaires, and 4) administration of problem-based learning assessments at the culmination of the training process.

The methodological design employed in this study utilized 'multiple methods to measure multiple traits', a procedure commonly referred to as *triangulation* or *convergent-discriminate validation* (Campbell and Fiske, 1959 in Hagen, 2006: 277-278). The process of *triangulation* which 'consults different sources to determine the validity of data using purposive sampling', was employed to validate the consistency of evidence gathered from different sources of data across time, space, and persons utilizing different research methods (Krathwohl, 1998: 275-276). The use of multiple methods to measure the same phenomenon was selected to identify any differences and/or corroborate this study's findings, as well as to address matters relating to validity and reliability, thus enabling 'the introduction of 'methods used' as a variable or rival factor' (Hagen, 2006: 277). Matters pertaining to reliability and internal and external validity are addressed in detail in *Chapter IV: Data Findings.*

Table: 2-1		
Research Design and Methodology **Quasi Experimental – Convergent-Discriminate Validation**		
Independent Variable (X) = Andragogy (Treatment) **Dependent Variable (Y) = Effectiveness of Instructional Methodology (Outcome)**		
Sample Populations	Control Group Academy	Experimental Group Academy
Variable **Instructional Methodology**	Traditional, pedagogical, military based model	Andragogical
Instrument of Measurement		
1. **Observations**	Police Recruits Faculty and Staff All components of training	Police Recruits Faculty and Staff All components of training
2. **Interviews**	Police Recruits Academy Director	Police Recruits Academy Director

3. **Survey Questionnaires**
    Pre-Training
    Post-Training
	
	Police Recruits
	Police Recruits
		
		Police Recruits
		Police Recruits

4. **Problem-based learning** **Assessment**	Police Recruits	Police Recruits

Means of Measurement

Brookfield (1986: 261-282) addressing the challenges and dynamics associated with evaluating adult learning, prefaces his discussion on measurement by acknowledging that there exits a 'voluminous literature on evaluation, [and] a plethora of evaluative models', much of which inadvertently reflects the parochial interests of the evaluator. Pointing to the respective strengths and weaknesses of many evaluators' assessments and their potential applicability for providing a universal measurement, he explains that many such 'observations are inevitably open to accusations of distortion, subjectivity, and personal bias', and consequently, 'have limited replicability'. He further explains that 'it is impossible to use contextually based criteria to develop any general evaluative framework that might be applied to determine the effectiveness of a particular educational initiative. Hence, in this normative vacuum, evaluation becomes pragmatic, adaptive, and context specific', adding that 'one reason for the infrequency of systematic evaluation of adult learning is the absence of an evaluative model that derives its criteria and procedural features from the nature of the adult learning process' (Brookfield, 1986: 262). Because evaluative models of adult learning are 'rarely grounded in, or reflective of, the concepts, philosophies, and processes of adult

learning' Brookfield suggests that 'emphasis on the value-judgmental aspect of evaluation is the most fruitful', and in doing so, makes a point of differentiating an *assessment* from an *evaluation*. While an *assessment* consists of 'a nonjudgmental checking as to whether or not certain purposes [of a program] have been attained', an *evaluation* by contrast, 'is inescapability a value-judgmental concept', emphasizing that 'the word value is at the heart of the term', with all of its normative associations (Brookfield, 1986: 263-264). Citing Scriven (1967) and Stufflebeam (1975), he argues that an adult learning program 'cannot be considered successful unless the objectives attained are intrinsically worthwhile' (1986: 264), underscoring the point that an *evaluation* encompasses a process 'of examining and judging, concerning the worth, quality, significance, amount, degree or condition of something' (1986: 264; 1975: 8).

In light of Brookfield's argument and definitions, measuring the effectiveness of andragogy within the context of basic police training via an *assessment* would be problematic, given the absence of any clearly identified outcome(s) within New Jersey's police academies. This is notwithstanding the existence of forms of testing prescribed by the *New Jersey Police Training Commission* designed to assess a recruit's acquired knowledge in content areas such as criminal law, domestic violence, laws of arrest, search, and seizures, etc. Similarly, using a single-standardized measurement to assess the effectiveness of andragogy could also be construed as ineffective, biased, or simply reflect the parochial interests of the program for which it was constructed. Taking into consideration the shortcomings of conducting an *assessment* (notwithstanding, however, the importance of doing so), and the emphasis Brookfield places on a *value-judgmental evaluation*, the advantages of conducting multiple measurements to assess the effectiveness of andragogy (*triangulation*) presented clear advantages. This was particularly so, considering that the use of a problem-based learning assessment at the culmination of the training process provided a quantitative form of *assessment* – a matter addressed in greater detail hereafter.

Speaking to the challenges of measuring the effectiveness of adult-learning, Brookfield (1986: 261) contends that 'one reason for the infrequency of systematic evaluation of adult learning is the absence of an evaluative model that derives its criteria and procedural features from the nature of the adult learning process', however, in doing so, he points to the work of Kirkpatrick (1998) who suggests that the effectiveness of a training program can be assessed using a four-step process that consists of measuring: 1) *reaction*, 2) *learning*, 3) *behavior*, and 4) *results*. He describes these four components in the following way:

Reaction. This step 'measures how those who participate in a training program react to it', which Kirkpatrick calls 'a measure of customer satisfaction'. How one reacts to a training program is critical; a participant's reaction, he contends 'can make or break a training program . . . it is important not to only get a reaction but to get a positive reaction'. He explains that 'if participants do not act favorably, they probably will not be motivated to learn (1998: 20-21). Riggio (2000: 146) addressing this component of Kirkpatrick's model, explains that the *reaction* criteria is not intended to measure whether any learning has taken place, but rather to assess trainees opinions about the training and the process of their learning.

Learning. Kirkpatrick (1998: 20) explains that learning can be defined as the extent to which participants change attitudes, improve knowledge, and/or increase skills as a result of attending the training program, which is not inconsistent with Suskie's (2004: 75) explanation of *learning outcomes*. Kirkpatrick contends that 'learning has taken place when one or more of the following occurs: attitudes are changed; knowledge is increased; and skill is improved'.

Behavior. This is the extent to which a change in behavior has occurred because the participant attended the training program. Independent of the foregoing two levels, Kirkpatrick argues that for behavior to be changed, four conditions are necessary: (1) the person must have a desire to change; (2) the person must know what to do and how to do it; (3) the person must work in the right climate; and (4) the person must be rewarded for changing. Discussing these four points, Kirkpatrick interestingly makes reference to

144

Knowles' (1998, et al) research and the practices of andragogy. He explains that 'the training program can accomplish the first two requirements by creating a positive attitude toward the desired changes and by teaching the necessary knowledge and skills', however, with regard to providing the right climate, he underscores the importance that one's supervisor plays (1998: 21). He describes five kinds of climate: preventing, discouraging, neutral, encouraging, and requiring; the latter two are instrumental in leading to positive changes in behavior. Climate is a critical component in the practice of andragogy that is addressed in greater detail in this study's findings. Addressing the significance of rewards, Kirkpatrick states that they can be both intrinsic and extrinsic. 'Intrinsic rewards include the feelings of satisfaction, pride, and achievement that can occur when change in behavior has positive results. Extrinsic rewards include praise from the boss, recognition by others, and monetary rewards such as merit pay increases and bonuses' (1998: 22). Speaking to these factors, Riggio (2000: 146) suggests that 'observational methods of measurement are typically used to assess behavioral criteria', which as noted, are one of the four instruments of measurements employed in this study.

Results. Kirkpatrick explains that results 'can be defined as the final results that occurred because the participants attended the program'. While some results may include increased production, decreased costs, reduced frequency of accidents, reduced turnover and complaints, it also includes improved quality, which Kirkpatrick explains is often the focus of many training programs. On some level, these results are consistent with Suskie's explanation of learning outcomes, which deals with the requisite 'knowledge, skills, attitudes, and habits of mind that students have acquired' (Suskie: 2004: 75-76). Employing Kirkpatrick's model to help give form to this study's array of measurements, should serve as another means to increase the precision and validity of this study's findings.

<center>*Instruments of Measurement*</center>

Measurements, when properly conducted, serve to effectively operationalize a construct under study; as such, when multiple measurements are utilized, there exists a greater probability of ensuring validity and reliability (Krathwohl (1998: 446). Therefore, four

separate instruments were used in testing the hypothesis: 1) observations, 2) interviews, 3) the administration of survey questionnaires, and 4) the administration of problem-based learning assessments at the culmination of the training process.

Observations

Observations involve a strategy of data collection in which the investigator attempts to examine the activity of subjects while keeping one's presence hidden or unobtrusive (Hagen, 2003: 259-265). Babbi (2005: 211) explains that 'the defining characteristic of direct observation is obtaining measurements by observing behavior, traces of behavior, or physical objects without interacting with research subjects'. Addressing observations as a form of qualitative measurement, Schutt (2001: 80) explains that 'observations can be used to measure characteristics of individuals, events, and places. While in some social research observations may serve as a primary form of measurement, in this study it served as one of multiple measurements.

Given their significance for understanding the dynamic characteristics of basic police training, irrespective of the methodology employed, observations provide perspectives and insights that may not be captured through other means of measurement. While various observational methods are available, this study employed a direct method of observation, which Schutt (2001: 81) explains as being the 'method of choice for measuring behavior in natural settings', because 'direct observation avoids the problems of poor recall and self-serving distortions that can occur with answers to survey questions; it also allows measurement in a context that is more natural than an interview'. While conducting observations can have its disadvantages by way of filtering and influencing individuals to act differently, in this study, such influences were minimized because academy classes are regularly visited by outsiders.

Although observations were conducted for all aspects of the training process, the primary observations occurred in the course of classroom instruction. The observations were conducted periodically, however, no less than every three to four weeks, so as to gain

146

exposure to all phases of the training process. Because of the two year duration of the study, the observations conducted yielded a representative sample of nearly every dimension of basic training, including academy directors, faculty and staff, and recruits, and all training and educational activities, i.e., classroom 'lectures' and presentations, problem-based learning assessment scenarios, physical training and drill, and development of psycho-physical proficiencies in areas such as: self-defense, firearms, use of force (OC spray, baton, handcuffing), defensive driving, first-aid, defibrillators, etc. The objective of conducting these observations was to assess and measure all aspects of the basic training process, as well as all individuals involved in the same. To facilitate these observations, a form was developed that served to record measurements and assessments of those indicators specifically related to the dependent and independent variables (operational definitions are provided in Appendix C).

Interviews

Simply stated, an interview has been described as a conversation with a purpose to gather information (Hagen, 2003). Interviews, another means of collecting data or information, were utilized with the objective of providing convergent insights and perspectives on the training process and experience. Orlich (1978) explains that a key advantage of conducting interviews is the personal contact that is made with a respondent, and the ability to immediately clarify any question or response. Orlich cites other advantages including:

1. Feelings of the respondents are revealed

2. Discussion is allowed about causes of problems or solutions to problems

3. The respondent is allowed maximum opportunity for free expression

4. The interviewer can observe and tabulate nonverbal behaviors

5. Respondents may provide personal information, attitudes, beliefs, and perceptions that might not be gained on a written instrument

6. The interviewer has an opportunity to follow-up or probe for leads

Interview Format. The interviews conducted were *unstructured* and open-ended in nature; otherwise referred to as focused, clinical, or nondirective interviews (Hagen, 2003: 173). Unlike *structured interviews*, which 'usually consist of check-off responses to questions that are either factual or to which most responses easily fit an expected pattern', *unstructured interviews* do not involve 'predetermined response categories', they do, however, 'provide qualitative detail and complexity' (Hagen, 2003: 172-173). Open-ended, nondirective interviews are typically more valuable than others kinds of interviews eliciting feelings and attitudes, although, it is important to acknowledge that they yield less uniform and less readily quantifiable data than do controlled interviews (Knowles, 1980: 101). Having been provided with a complete syllabus of each academy's training curriculum, dates and times were identified and coordinated in the interest of conducting convenient and unobtrusive interviews. These were typically conducted during times when recruits had 'free time', such as before or after lunch, or at times preceding or following designated research time or group project assignments. The design of interviews was such that recruits who were to participate in the interviews were selected using a combination of methods that ensured their voluntary participation and confidentiality. With the assistance of the academies faculty and staff, a cross-section of the class was to be identified and asked to participate in the interviews. The selection process took into consideration demographics related to age, race, gender, educational background, life, work, and military experience, size of their department, and their respective performance within the class. Additionally, any other recruits that were interested in participating in the interviews were given the opportunity.

While this procedure worked exceptionally well with the first group of recruits at the *experimental group academy*, for reasons detailed in the data analysis, the procedures for interviewing recruits as detailed above were later amended to allow informal, anecdotal conversations and discussions during the course of basic training. This change arose, principally because when the first series of interviews was initiated with the *control group academy*, the participants had been pre-selected by the academy's faculty and staff. Because

all but one of these recruits represented the same policing agency as did the academy director and the instructional staff, the potential for subjectivity and bias became apparent and appeared to be reflected in their responses (Fitzgerald and Cox, 2002: 34-39).

Interview Questions. While the initial interviews were conducted in a semi-private setting, such as a library, office, or conference room, because of the bias noted, both the venue and the style of the interviews were changed to allow for informal meetings, abbreviated conversations, and eliminating appointed interview schedules. Typically, such discussions were conducted when recruits had down time such as at the beginning and end of class, before and after lunch, following practical scenarios, or waiting for extended periods of time for other recruits to complete assignments, etc. This proved to be a satisfactory process, not only for the faculty and staff, who did not have to dedicate time to accommodate interviews, but the procedure minimized the perception among recruits that they were being formally interviewed. Assuring their informed consent, the conversations would begin with ice-breaking questions such as 'how are things going', 'what department are you from', 'did you enjoy this particular session', or 'I remember when I was in basic training we did . . .', etc. Most often, this would lead the way to an open and light-hearted conversation which would often lead to meaningful, and sometimes, candid, in-depth discussion. Cognizant that if a recruit was of the opinion that the conversation took on an 'official' overtone, not only would s/he cease to participate, but s/he would quickly advise other recruits of the same, thus potentially, limiting any such dialogue. Fortunately, this did not occur. With the exception of a few recruits, whose answers were simply 'yes' or 'no', the overwhelming majority of recruits interviewed appeared to be comfortable, forthcoming, and at times, extremely opinionated about their experiences. Sensitive to limiting these mini-conversations to an average of 5 to 15 minutes, the focus was to not only ascertain their opinion about the activities of the day, but their overall impression, opinions and experiences as they related to the six thematic and categorical areas that comprised the operational definition. During the course of the interviews, whenever a recruit made a point that was of particular significance,

149

that seemed worthy of documentation, they were asked if they had any objection to this writer

making a written note of the same. At the same time the interviewer was careful to ensure the

confidential nature of their response. Whenever practical, the essence of the interviews was

recorded on a form entitled, *Police Recruit Interview Recording Form* (Appendix D).

Survey Questionnaires

'Survey research, an area that is emerging as a strength in criminal justice research, is

an excellent tool for primary data gathering' (Hagen, 2003: 144). Schutt (2001: 209) explains

that 'survey research involves the collection of information from a sample of individuals

through responses to questions' and 'owes its popularity to three features: versatility,

efficiency, and generalizability'. One of the most popular and useful methods of conducting

survey research is through the use of survey questionnaires, which Babbi (2001: 239) explains

is 'an instrument specifically designed to elicit information that will be useful for analysis'.

Questionnaire Construction. The objective of the questionnaires was to determine the

extent to which a respondent holds a particular attitude or perspective (Babbi, 2002: 242).

Since no known standardized measurement exists that measures andragogy in the context of

the variables related to this study, two questionnaires were developed: a pre-training

questionnaire and a post-training questionnaire (Appendix F and H). In order to ensure the

reliability and validity of each of the instruments, particular attention was given to their

construction, taking into consideration issues that may adversely skew a respondent's

understanding of the question. Such areas included matters relating to: parsimony, specificity,

a respondent's knowledge, interest, single variable item, simplicity, sensitive areas, semantics

of construction, manageability, positive wording, avoiding bias, and item sequencing (Orlich,

1978: 19-40; Hagen, 2000: 149-154). Because of the potential for questions being

misunderstood, misinterpreted, perceived as misleading, biased, or ambiguous, each item was

reviewed by professional colleagues within higher education, as well as within the police

service, many of whom had specific experience in the construction and administration of

survey questionnaires. So as to ensure the reliability and validity of the questionnaires, a pilot or pre-test was administered for each of the questionnaires, which is addressed hereafter.

The questionnaires were designed to provide for a forced-response utilizing a Likert coding scale in which participants select one of five categories that best describes their opinion toward a question, e.g., strongly agree, agree, undecided, disagree, and strongly disagree. The response categories for a Likert scale item have a quantitative relationship in which consecutive scores are assigned to consecutive categories ranging from a code or value of 5, assigned to the most positive response to a code of 1 which is assigned to the most negative response. The scoring weights for each item range from 1 to 5. The range of possible scores, on a thirty item questionnaire, ranges from 30 to 150, with 150 (strongly agree) representing the most positive responses, 30 (strongly disagree) representing the most negative responses, and 90 (undecided) being the neutral point. Likert scaling, a type of composite measure, 'is based on the assumption that the overall score, based on responses to the many items seeming to reflect the variable under consideration, provides a reasonably good measure of the variable' (Babbi, 2002: 164-165).

With the objective of increasing the reliability of responses, multiple questions were designed to measure the same attitude or opinion from different perspectives, which is sometimes referred to as a *scale of measure*. Scales are constructed 'by assigning scores to patterns of responses, recognizing that some items reflect a relatively weak degree of the variable while others reflect something stronger' (Babbi, 2002: 147-148). These were distributed throughout the questionnaire 'so that a respondent had to consider each question individually rather than simply falling into a response pattern syndrome' (Orlich, 1978: 65). Furthermore, some of these questions were composed with reverse wording to eliminate a response bias on the part of the respondent. When such questions were used, an affirmative response toward an issue was coded in one direction, e.g., it received a code of 5, while a negative response was coded in the opposite direction receiving a code or value of 1. Given the design and importance of each question, a coding chart was developed for both

questionnaires with an explanation of each question, its objective, the variable being measure, whether the question is cross-referenced to another question measuring the same variable (scale of measure), and the Likert Scale value. See the *Police Recruit Pre-Training Questionnaire Coding Chart* (Appendix G) and the *Police Recruit Post-Training Questionnaire Coding Chart* (Appendix I).

Pre-Training Questionnaire: Measurement Design and Objectives

The *Pre-Training Questionnaire*, which consisted of thirty (30) questions, was principally designed to measure: (1) the applicability of Knowles' andragogical assumptions among police recruits, (2) a recruit's affective and vocational orientation toward police work, and (3) any associative relationships between responses and recruit demographics. With the objective of identifying such potential relationships, associations, patterns, and correlations, a number of open-ended questions were asked at the end of the questionnaire which sought demographic data, including gender, age group, level of education, military experience, number of years since being in school, and the number of years of work experience. Recruits were also asked questions pertaining to their 'greatest concerns regarding basic training', and to describe themselves as a student.

In the interest of ensuring anonymity during the course of administering the questionnaires, no personal identifying data was solicited from the first group of participants in the study. However, in collaborating with colleagues while analyzing the first group's raw scores, it was recognized that the absence of an identifier could have proven problematic in any later attempt to identify any changes or correlations between a recruit's response to the *Pre-Training Questionnaire* and the *Post-Training Questionnaire*. Considering this factor, it was decided that the last four digits of a recruit's social security number would serve as a unique identifier that would reliably identify individual participant's confidentiality. Underscoring the importance of maintaining a participant's confidentiality, the recruits in the subsequent testing groups were assured that disclosing their last four digits of their social

security number would not be used for any other purpose than cross-referencing responses in the pre and post training questionnaires.

Post-Training Questionnaire: Measurement Design and Objectives

The *Post-Training Questionnaire*, which consisted of thirty (30) questions was designed to: (1) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (2) measure the effectiveness of andragogy as defined by the six thematic and categorical content areas that comprised the operational definition, (3) measure any differences in pre and post training questionnaire responses within and between groups, and (4) measure any associative relationships between responses and recruit demographics including gender, age group, level of education, military experience, number of years since being in school, and number of years of work experience. This questionnaire additionally queried recruits about what thing(s) they liked best and least about training, and what changes and/or recommendations they would make relative to improving basic training – questions that provided responses that were exceptionally candid and insightful. Lastly, on a scale of 1 to 10 (with 10 being the highest) recruits were asked to rate: (1) the overall quality of their training, and (2) the academy had prepared them for the police service. Responses to these last two questions were tested for statistical differences in and between groups, as well as for a correlation to a respondent's overall mean score for the post-training questionnaire.

Pilot Study: Pre-testing the Questionnaires. A pre-test or pilot study involves the process of administering newly developed questionnaires to a 'small number of respondents similar in background to the target population to read the cover letter, listen to or read the introductory statement, and complete the questionnaire', with the ostensible purpose of identifying and questions that might be misunderstood, misinterpreted, perceived as misleading, biased, or ambiguous (Fitzgerald and Cox, 2002: 114). During this process, participants were interviewed within 30 – 60 minutes following completion of the questionnaire. They were queried about their reaction to each question, including its

interpretive meaning, the intent and meaning of their response, why the question was answered (rated/scored) in the way it was, and their overall reaction to the questions (Krathwohl, 1998: 372). As a consequence, three questions in the *Pre-Training Questionnaire* and six in the *Post-Training Questionnaire* were deemed to be misunderstood, misinterpreted, misleading, or ambiguous (often associated with an 'undecided' response); these were then edited, reworded, changed, and/or eliminated. While the primary response mode of all the questionnaires was a forced-response, i.e., requiring the participant to select one of five responses (strongly agree, agree, undecided, disagree, and strongly disagree), as a consequence of the pre-testing, minor editing was undertaken of the open-ended questions.

Questionnaire Administration. By design, the two questionnaires were administered at the beginning of training (pre-training) and at its culmination (post-training). At the beginning of each recruit class, recruits were introduced to this writer by one of the academy's commanding officers who explained that the academy regularly collaborates with graduate students and institutions of higher education in the area of research. After a brief introduction to this writer's background and goals, a letter of introduction (Appendix C) was distributed to the recruits, then, the author provided a general overview of the study, its potential contribution to the field of basic police training, a few words of encouragement as they prepared to embark upon their basic training, and whether they had any questions. It was emphasized that the study would be unobtrusive, strictly voluntary, and would ensure their anonymity and confidentiality, to which their informed consent was received. Before distributing the questionnaires, the recruits were advised that the questionnaires took approximately 10 – 15 minutes to complete, although additional time was available. After fielding any questions pertaining to the study and/or the procedures for completing the questionnaires, the questionnaires were distributed. The recruits were instructed to read the instructions and then to begin answering.

Problem-based learning assessment scenarios

Krathwohl (1998: 498), addressing the methods of social research, explains that 'some social scientists believe that the strongest chains of reasoning can be built only through experimental design'. He explains that experimentation 'typically follows a quantitative approach, has a design with a treatment, and provides a comparison of one or more treated with untreated conditions either over time or between groups' (1998: 29). He further contends that experimentation is one of the most effective methods for creating a consensus around the existence of a cause-and-effect relationship, the design of which, encompasses the subject, situation, treatment, observation or measures, a basis for sensing attributes or changes, and the procedure (1998: 501-502).

Despite Knowles' emphasis that andragogy focuses on the transactional process of learning, he nevertheless suggests that andragogy leads to 'improving the effectiveness of the learner's performance', thus implying that andragogy bears upon and influences the outcomes of the learning process. Notwithstanding the qualitative strengths of this study's observations, interviews, and survey questionnaires, the absence of a quantitative component to measure the effectiveness of andragogy, as suggested by Krathwohl, gave rise to the prospective inconclusiveness of this study's findings. Given this potential problem, Kirkpatrick's (1998: 23-24) process for *Evaluating Training Programs* was consulted as providing tools for measuring the effectiveness of andragogy in a quantitative context. As discussed earlier, his four-step process consists of measuring reaction, learning, behavior, and results. Addressing the last step, he explains that 'it is difficult if not impossible to measure final results for programs on such topics as leadership, communication, motivation, time management, empowerment, decision making or managing change'. According to Champion and Hooper (2003), Birzer and Tannehill, (2001), and Brewer and Wilson (1995), these are skill sets that are analogous to many of the outcomes sought of police officers and trainees in areas such as critical thinking, decision making, and problem-solving. Recognizing the challenges of measuring the effectiveness of training programs whose definition of outcomes inevitably

155

differ from one another, Kirkpatrick suggests that one means of evaluation can be made by identifying and measuring 'desired behaviors', which in turn can often lead to tangible (measurable) results (Kirkpatrick, 1998: 23-24). Despite the 1000 plus performance objectives that comprise the *Police Training Commission's* curriculum, the absence of any clearly articulated outcomes or competencies make this measure particularly problematic. Acknowledging the challenge associated with measuring a training program's effectiveness, Kirkpatrick provides guidelines that can be applied to measuring the effectiveness of andragogy, namely:

1. Use a control group if practical. The reason for doing so is to eliminate the factors other than training that could have caused changes observed to take place.

2. Allow time for results to be achieved. Recognizing that 'there is no sure answer to the time needed for results', the time needed for evaluation is relative to a number of factors.

3. Be satisfied with evidence if proof is not possible. Recognizing that rival causal factors exist, Kirkpatrick states that results may serve to provide a 'preponderance of evidence' as opposed to 'evidence beyond a reasonable doubt'.

Given Kirkpatrick's emphasis on 'desired behaviors' and the process he posits for evaluating training programs, it is important to again re-emphasize the point that Brookfield (1986) makes in differentiating the processes of *assessment* from that of *evaluation*. While 'assessment is a value-free ascertainment of the extent to which objectives determined at the outset of a program have been attained by [its] participants', the process of evaluation is inescapably a value-judgmental concept; one that involves examining and judging its worth, quality, significance, amount, degree, or condition (Brookfield, 1986:264). Referencing Kirkpatrick's work, Brookfield states that his 'third level of evaluation is concerned with the transference of behaviors learned in the classroom to real life settings', while his fourth level deals with measuring 'desired behaviors', or what can be described as *outcomes*, which represent 'the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience' (Suskie, 2004: 75).

As noted in this study's introduction, basic police training entails a complex process of learning which involves the acquisition of the knowledge, understanding, skills, attitudes, behaviors, and competencies necessary to successfully perform the duties and responsibilities of a police officer. Despite individuals who achieve superior ratings in standardized testing, performance on such measures does not necessarily serve as a predictor of one's overall competence, which as noted earlier, involves the ability to effectively synthesize and apply the acquired knowledge and skills in real-life situations. Despite the 1000 plus performance objectives identified by the *New Jersey Police Training Commission*, the curriculum does not specifically identify such skill sets and competencies in the areas of critical thinking, decision-making, problem solving, and effective communication skills – qualities that have been identified as the hallmark to effectively facilitating community-oriented policing (Birzer and Tannehill, 2001: 233-252).

Given the emphasis placed on these competencies, different training programs employ a wide range of instructional methodologies and techniques that include standardized written tests, oral interrogatories, group discussions, brainstorming, demonstrations, simulation exercises, role playing, practical training exercises, and problem-solving case scenarios. While no single practice, in and of itself, serves as a universal predictor of future performance, experiential, problem-based learning scenarios have been identified as an effective means of conditioning effective performance. Underscoring this point, Knowles explains that the emphasis in adult education is indeed on experiential techniques; 'techniques that tap into the experience of the learners, such as group discussion, simulation exercises, problem-solving activities, [and the] case method', which is a 'method of instruction based on real-life examples' (Marsick, 1990: 225-226). Developed by Langdell of Harvard's Law School in the 1880's, the case method 'has been adopted and adapted by many other fields, [including] medicine, social work, engineering, theology, communications, and management development' (Marsick in Galbraith, 1990: 225-226). Riggio (2000: 142) addressing these techniques, explains that problem-solving case scenarios (similar to the practices of the case

157

method), is a common and popular training technique in which trainees are presented with a written description of a real or hypothetical problem in which each trainee is allowed time to study individually and come up with a solution. He adds that they are important training tools that serves 'to help trainees develop skills in diagnosing and dealing with problems'. Experiential learning is an integral component of basic police training at the *Royal Canadian Mounted Police* (RCMP). They refer to its as an 'integrated problem-based approach', the use of experiential learning provides 'learning opportunities in which cadets can integrate knowledge and skills necessary to manage real police situations' (RCMP, 1999: 4). According to Riggio (2000: 492-493), problem-based learning involves the following strategies: (1) recognizing that a problem exists, (2) defining the problem, (3) identifying alternative courses of action for solving the problem, (4) evaluating alternative solutions, (5) selecting and implementing a strategy, and (6) evaluating the effectiveness of the strategy for solving the problem.

Anderson and Krathwohl (2001) addressing the process of learning in the context of 'cognitive science research on the development of expertise, expert thinking, and problem solving', suggest that knowledge is typically domain specific and contextualized, and can be categorized into four areas: (1) factual knowledge, (2) conceptual knowledge, (3) procedural knowledge, and (4) metacognitive knowledge (2001: 41). *Factual knowledge*, they explain, pertains 'to the basic elements students must know to be acquainted with a discipline or solve problems'. *Conceptual knowledge* relates to 'the interrelationships among basic elements within a larger structure that enable them to function together'. *Procedural knowledge* involves 'how to do something, methods of inquiry, and criteria for using skills, algorithms, techniques, and methods'. And, *metacognitive knowledge* relates to 'knowledge of cognition in general as well as awareness and knowledge of one's own cognition' (2004: 46). These four categories of knowledge not only reflect the educative processes associated with attaining the curricular goals and objectives of basic police training, but as suggested by Anderson and Krathwohl, are also essential elements in problem solving – a key skill set and

responsibility of today's police officer. Recognizing that no single exercise is predictive of a police officer's future performance, the increasing use of problem-based learning within the private sector, as well as in high profile police and military training programs such as the U.S. Marine Corps, the Federal Bureau of Investigation, the Royal Canadian Mounted Police, and the London Metropolitan Police, serves as a quantitative measure for evaluating the effective *results* of a training program per Kirkpatrick's model. Sadker and Sadker (2005: 101) define problem-based learning as 'an approach that builds a curriculum around intriguing real-life problems and asks students to develop and demonstrate their solutions'. As such, the use of problem-based learning assessment scenarios serve to measure the ability with which a police recruit can effectively solve problems, thus providing for a quantitative assessment of a recruit's training, i.e., measuring the degree to which they acquired the requisite knowledge, understanding, skills, attitudes, behaviors, and competencies. While it is acknowledged that the use of problem-based learning assessment scenarios are not wholly predictive of future performance and do not necessarily measure the overall competencies of a police officer, they can serve to develop, reflect, and measure the products of a recruit's training. As such, the use of problem solving case scenarios was employed as a fourth and quantitative measurement in this study.

Development of problem-based learning assessment scenarios. Given the utility of problem-based learning assessments, four case scenarios were developed and administered to all of the subject police recruits on the completion of their training. Subscribing to a format and protocol commonly used in the development of such scenarios, a team of five police officers collaborated in the development of four such scenarios. These officers, all of whom possessed a wide-range of professional qualifications and experiences, were selected based on whether: (1) they represented a cross-section of policing agencies within the State of New Jersey, (2) all were State certified with over 15 years experience in police field operations, supervision, management, and administration, (3) all possessed Bachelor and Master degrees (4) all were State certified police instructors with experience in basic and advanced police

159

training, and (5) all served as adjunct lecturers in colleges and universities. Similar to the philosophy employed by the *Royal Canadian Mounted Police*, the 'scenarios were designed to support incident-based approaches to service, protection, enforcement and prevention', as well as to measure the 'skills and techniques in the identification of problems, problem analysis and response, and evaluation and assessment' (RCMP, 1999: 4). The significance of these problem-based learning assessments is that the problems developed not only required the recruits to have attained the requisite knowledge, understanding, skills, attitudes, behaviors, and competencies inherent to the basic police training curriculum, but had also acquired an ability to synthesize and respond to situations/problems that are typical within the field, albeit that these exercises were restricted to timed written responses. In planning the development of the scenarios, the team held a series of meetings to brainstorm the nature and format of the exercises with an emphasis on providing major real-life situations that required an officer to critically assess, evaluate, synthesize, and respond to a situation typical of what one would encounter in the field. Accordingly, it was decided that the four scenarios would involve matters pertaining to: (1) domestic violence, (2) the use of force, (3) *probable cause*[15] associated with a stopping and searching a motor vehicle, and (4) legal and ethical decisions involving police misconduct – topics that were specifically addressed within the performance objectives of the *New Jersey Police Training Manual*.

Once each of the scenarios were developed, they were independently and collaboratively critiqued by the other team members so as to ensure that the scenarios: (1) were representative of typical and realistic situations a recruit would encounter, (2) were relatively uniform in terms of length and content of the problem, (3) necessitated critical thinking, problem-solving, and decision making, drawing upon all components of their training, (4) elicited from the writers unanimity on the desired course of actions and/or outcomes, and (5) allowed the necessary time to provide a satisfactory written response, the

---

[15] *Probable cause* is a concept derived from the 4th Amendment to the U.S. Constitution based on the concept of reasonableness, i.e., law enforcement must have reasonable grounds to believe the existence of facts warranting certain actions for alleged violations of the law (Gaines and Miller, 2003: 189).

latter of which was specifically defined in an effort to simulate stress associated with encountering such situations. Notwithstanding the recognition that any number of plausible responses could occur, a consensus was reached among the team members as to what type of responses would be the *most desirable* and which would be the *least desirable responses,* mindful of the reasoning, rationalization, and thought processes articulated by the respondents. Based on the overall response to each scenario, the raters provided a numerical assessment based on the following criteria and values:

Table: 2-2		
Problem-based Learning Assessment - Grading Rubric		
Rating	**Criteria**	**Value**
Excellent Response	Based on the facts and circumstances presented, all pertinent issues were identified and addressed appropriately; all action(s) taken were legal and ethical.	3
Satisfactory Response	Based on the facts and circumstances presented, most of the pertinent issues were identified and addressed appropriately; all action(s) taken were legal and ethical.	2 – 2.5
Poor Response	Based on the facts and circumstances presented, there was a failure to identify or address many of the pertinent issues, and/or the response was inappropriate; all action(s) taken were legal and ethical.	1 – 1.5
Unsatisfactory Response	Based on the facts and circumstances presented, there was a failure to identify and/or address most or all of the pertinent issues; and/or one or more of the action(s) taken were illegal and/or unethical.	0

Administration of Problem-Solving Case Scenarios. The administration of the *problem-based learning assessments* immediately followed the administration of the *post-training questionnaire*, both of which occurred at the culmination of basic training; typically, during the last two weeks before commencement – a period in which a recruit should ideally have acquired the requisite knowledge, understanding, skills, attitudes, behaviors, and competencies of basic training. The recruits, now familiar with the study and this author, were thanked for their participation and congratulated on completing their training. Following a brief overview of the problem-based learning assessment and its objective, the

161

questionnaires were distributed to the class (Appendix J). Following the reading of

instructions, it was emphasized that the responses to each of the four case scenarios were

allotted 5 minutes. Once they completed each scenario, the recruits were instructed not to

continue onto the next case until prompted. Upon completion of the entire exercise, the case

scenario booklets were collected and the recruits were once again thanked, congratulated, and

advised that an abstract of this study's finding would be available to them at its conclusion.

<div align="center">Data Analysis</div>

Babbi (2005: 371), addressing research design and measurement writes that 'the most

effective evaluation research is one that combines qualitative and quantitative components.

While making statistical comparisons is useful, so is gaining an in-depth understanding of the

processes producing the observed results – or preventing the expected results from appearing'.

Further, in the interests of providing research objectivity, validity, and reliability, a process of

triangulation was employed which consisted of the use of multiple instruments of

measurement consisting of: (1) observations, (2) interviews, (3) survey questionnaires, and (4)

the administration of problem-based learning assessments (Campbell and Fiske, 1959 in

Hagen, 2003: 277-278); Krathwohl, 1998: 275-276). Given the qualitative and quantitative

nature of these instruments, data analysis made use of two methodologies. The qualitative

analysis ostensibly involved recording and interpreting the substance of the interviews,

observations, and the responses to the open-ended questions contained in the post-training

questionnaires, while the quantitative data analysis employed various statistical applications

using SPSS software. To assess the demographic data and any variations between groups, a

cross-tabulation with chi-square was employed. For the pre and post training questionnaires,

a repeated measure analysis of variance was used to compare both groups (experimental vs.

control) over time (pre to post-test) on the average of item responses for both the pre and post-

study questionnaires. To determine whether any significant differences in pre or post training

factors may have influenced the effect of the two training methodologies, specific item

responses for the pre and post-study questionnaires were examined using multivariate

analyses of variance (MANOVA) and analysis of variance (ANOVA) (Bachman and Paternoster, 2004: 411-415). ANOVA was used to compare mean scores and standard deviations of both groups' rating of the overall quality of their academy training and their sense of preparedness. And lastly, with regard to the problem-based learning scenarios, which represented the quantitative component of the data analysis, a one-way analyses of variance (ANOVA) was conducted to examine mean response ratings by study group.

Causation

As noted at the beginning of this chapter, 'one of the chief goals of social science researchers is to explain why things are the way they are', i.e., 'specifying the causes for the way things are'; which is commonly referred to as *causality* or *causation*. Hagen (2007: 76), discussing *causality*, notes that the 'ultimate purpose of all scientific investigation is to isolate, define, and explain the relationship between key variables in order to predict and understand the underlying nature of reality'. He explains that three essential steps are taken for resolving what he describes as the *causality problem*: (1) demonstrate that a relationship or covariance exits between the key variables, i.e., that one variable increases or decreases in value in some predictable manner along with another variable, (2) specifying the time order of the relationship, i.e., which variable is the independent or predictor variable, and which is the outcome or dependent variable, and (3) the elimination of rival causal factors, which ostensibly involves eliminating other variables that could conceivably explain away the original relationship(s) or hypotheses. Simply put, rival causal factors or other extraneous variables, as they relate to this study, are any variables other than the treatment, that may be responsible for the relationship between andragogy and the effectiveness of the training process. Referring to the work of Campbell and Stanley (1963), Hagen explains that rival causal factors may be attributable to the internal or external factors. Internal factors may consist of 'variables within the study itself that may tend to invalidate one's findings and conclusions. External factors consist of 'elements outside of one's immediate study that may imperil' generalizations from the study (2007: 79). Stated otherwise, rival causal factors or

163

extraneous variables could be spurious in nature, which can affect the relationship between the dependent and independent variables, yet they cannot be controlled or influenced (Schutt, 2002: 382-385). That being the case, the following variables have been identified as extraneous relative to this study, although, given their potential for affecting decisions relative to employing a particular instructional philosophy or methodology, they should be considered in future research:

- The political and organizational culture and influences that exits at the respective police academies

- The internal and external political and organizational culture and influences that exists among the wide range of police departments from which recruits originate

- The availability and allocation of resources both in terms of human resources and operating expenses

Research Validity

Maxfield and Babbi (2005: 80) discussing research validity contend that 'many important and difficult questions about causality and validity occupy researchers in criminal justice'; adding that it is 'important to keep in mind that that cause in social science is inherently probabilistic'. Social science research must be concerned not only with the existence of competing explanatory elements, but it must, more importantly, ensure the accuracy or correctness of research, which is otherwise referred to as a study's validity, i.e., 'does the instrument in fact measure that which it purports to measure' (Hagen: 2005:391). While internal factors question the *internal validity* of research, i.e., whether a variable other than the treatment (andragogy, independent variable) is responsible for the study's outcomes (effectiveness, dependent variable), *external validity* 'asks what other variables may limit one's ability to generalize the findings' to a larger population. Recognizing the many internal and external factors that could compromise the validity of this study, deliberate attention was given to this study's research design which involved: (1) employing multiple variables to measure the effectiveness of a basic police training curriculum, namely, the institutional and instructional philosophy, affective variables, self-concept and self-directedness, integration and facilitation of the curriculum, integration of experiential learning, and stress and

164

discipline; (2) utilizing multiple measurements to assess the efficacy of andragogy, namely, the pre and post test training questionnaires, observations, interviews, and the administration of hypothetical case scenarios; (3) employing four separate population groups at the two subject academies, and (4) factoring in Kirkpatrick's schema for evaluating the effectiveness of training programs. While the mere nature of social research precludes scientific exactness, it is respectfully submitted that the foregoing instruments and methodology serve as a valid and reliable means for testing the hypotheses.

CHAPTER III: RESULTS

Part I: Qualitative Analysis and Findings

Introduction

As detailed in the foregoing chapter, multiple instruments were utilized to measure the efficacy of the two police training methodologies under study. Given the nature and characteristics of the instruments employed, the qualitative analysis and findings are presented first, followed by the quantitative data analysis. Discussing the former, Creswell (1998: 139) writes that 'analyzing text and multiple forms of data presents a formidable task' in deciding how best to present qualitative data. He explains that inherent to the unique and evolving nature of conducting social research, the researcher often 'engages in the process of moving in analytic circles rather than in a fixed linear approach'. Creswell suggests that moving in a cumulatively progressive or heuristic mode leads to a *data analysis spiral* which is comprised of five incremental procedures which were consistent with this study's experiences. These involved: (1) data collection, (2) data management, (3) reading and synthesis, (4) describing, classifying, and interpreting, and (5) representing the data (139-146). Referencing Creswell, Barclay (2001:57) writes that in 'the heuristic process, the researcher has a special perspective on the entire study that allows him or her to evolve the design as the study proceeds', explaining that 'data analysis is continuous and enables a researcher to work simultaneously with both the process and the product'. In this regard, while no changes were made in the use of the instruments originally identified, there were, however, incremental and pragmatic adjustments in the manner in which data was collected and analyzed. These were influenced by: (1) unanticipated changes in the original protocols set forth for interviewing recruits, (2) a rapport that was developed with recruits, faculty and staff at both academies that enhanced open dialogue and feedback, and (3) an ever-increasing insight into and understanding of the training process, the organizational culture, and the characteristically distinct operating procedures of the two academies. Considering these changing developments, as the study progressed, it became increasingly apparent that while

the goals and objectives common to both academies were similar, there existed distinct philosophical and methodological differences between the two that influenced every aspect of the training process. Hence, what was initially observed as subtle nuances and minor differences between the two academies, eventually led to the identification of six distinct thematic and categorical constructs that served to differentiate between the methodologies employed at the two academies, but were also used to assess the respective instructional methodologies. These six content areas not only subsumed the variables originally defined in the study design, but took into consideration Knowles' six andragogical assumptions and the four areas of assessment posited by Kirkpatrick (1998). Accordingly, the analysis of this study's data, findings, and subsequent discussion will be based on the following six thematic content areas:

1. Institutional and instructional philosophy

2. Affective variables: climate, tone, and environment

3. Methodological integration and facilitation of curriculum

4. Use and facilitation of experiential learning

5. Self-concept and self-directedness

6. Discipline and stress

Director Interviews: Control Group Academy

As a preface to this discussion and analysis, it should be noted that while the interviews with the two academy directors were conducted separately, they ran concurrently, in order to provide the opportunity to compare and discuss different issues of common interest with the two directors. For example, if one director was experimenting with a new program related to community policing, this would be discussed with the other director; thus providing an added insight into the two academy's operations, as well as their respective positions and orientations. Because the two academy directors knew one another and were aware that both their academies were under study, such discussions served to provide opportunities for them

to examine their respective operations. These discussions, however, did not affect their instructional methodologies (a matter discussed in greater detail later in this chapter).

To begin, it is important to note that during the course of the interviews with the academy director of the *control group*, it became evident that the academy was influenced to some degree by internal and external politics. These pressures, not only influenced its organizational culture, but in effect, governed its institutional philosophy and operational activities. It is important to acknowledge that, not unlike the manner in which the educational background and expertise of the director of the *experimental group* influenced that academy's subscription to an adult based and andragogical instructional methodology (discussed hereafter), the *control group academy* was also influenced by its past traditions and practices. Consequently, there were broad expectations that its training methodologies would follow a similar format, despite the fact that its director expressed some differences of opinion with regard to adhering to past practices that ostensibly subscribed to a traditional, pedagogical, military model of training.

With regard to the director's background, he possessed an undergraduate degree in theology, had four years military experience, held the rank of lieutenant with the county police, and was in charge of basic police training – a position he had held for eight years. Oversight of the two academies flowed from different sources. Whereas the *experimental group academy* operated under the auspices of the county prosecutor's office, training at the *control group academy* was overseen by the county police. Notwithstanding the director's expressed interest and influence in bringing about some degree of change in the basic police training process, his discretion and authority was limited due to the existing organizational culture, the internal and external political influences, the academy's history of providing a traditional, pedagogical, quasi-military format of basic training, and his own orientation towards maintaining the status quo, i.e., 'don't fix it if it's not broken'. The following represents a synopsis of the interviews conducted with the director of the *control group academy* over the course of the two year study as it relates to the six thematic and categorical

areas identified; where appropriate, some components of conversations are paraphrased, while others are direct quotes.

Institutional and instructional philosophy

An educational institution's philosophy, often reflected in its mission statement, characteristically represents an organization's core values, beliefs, ideologies, and the principles by which it operates and carries out its mission. O'Keefe (2004: 30-31) addressing the education and training of American police officers writes that 'the first pillar of proper form and function of a professional police training facility is a training philosophy'. He explains that 'a training philosophy must be established first because all other operational and administrative decisions should effectively flow from the philosophy', adding that without one, 'knee-jerk reactions, political considerations, special-interest group pressures, or even the short-term 'crisis of the day' challenges can distract or disrupt an ongoing well-thought-out training agenda'. While many educators and educational institutions enunciate their instructional philosophies in a separate written and articulated statement, others incorporate them as part of their vision and mission statements, as was the case with the *experimental group academy*. However, because the *control group academy* also served to train firefighters and medical personnel, its mission statement was of a general nature, and consequently, made no specific reference to the police academy or its subscription to an instructional philosophy or methodology. As such, the mission statement of the *control group academy* stated that its purpose was:

> To provide relevant, quality, training and educational programs and opportunities to police and law enforcement officers, firefighters, emergency medical personnel, correction officers, government employees and the general public in all aspects of public safety.
>
> Life safety programs which encourage and inspire participation and leadership by professionals and the public in meeting the ever changing cultural, social, educational and personal needs of citizens of [the] county to assure safety and improve the quality of life.
>
> Opportunity to everyone for life long learning in public safety credit, certificate and non-matriculated education. Programs to encourage volunteerism, individual initiative, teamwork and pro-active management to achieve the highest level of public safety. An educational environment, with a

minimum of barriers, to all motivated persons at the lowest cost to the student and the public.

In discussing the foregoing, the director pointed out that the mission statement was generic to the academy at-large, and in his opinion did not reflect anything specific to basic police training, nor had he had any input into its authorship. When specifically asked about whether the police academy possessed its own mission statement, or whether it subscribed to a particular institutional or instructional philosophy, he explained that the training program was ostensibly bound by the curriculum set forth by the *New Jersey Police Training Commission* (PTC) and was predicated, in great part, upon the traditions and methodologies that were in practice upon his arrival at the academy. While undoubtedly conscientious and dedicated to the police training program, he expressed a degree of resignation in continuing with the traditional, linear, pedagogical, and military model that was in place, which he explained, placed great emphasis on strict discipline and an adherence to rules and regulations. Of the view that he and his colleagues' role was to prepare recruit's for police work pursuant to the curricular guidelines set forth by the *Police Training Commission*, on numerous occasions the Director expressed exasperation with the voluminous content of the curriculum and the fact that the Commission had not provided specific lesson plans or any recommended strategies for delivering the curriculum. He also explained that 'we do the best we can to cram everything into twenty-two weeks'. While he acknowledged an awareness of adult based learning principles when the subject was brought forth, he nevertheless reiterated that the system that was currently in practice 'worked', emphasizing once again that a strict adherence to rules and regulations served to maintain structure and discipline, as it did to facilitate the presentation curriculum in an orderly fashion. While he explained that he was not necessarily adverse to entertaining other instructional methods that considered the needs of the adult learner, given the over 1000 performance objectives prescribed by the *Police Training Commission*, he expressed a degree of resignation and exasperation, stating that 'something like that just wouldn't work here'.

Because the director of the *experimental group academy* added a number of enhancements to the basic training curriculum, the director of the *control group academy* was asked whether he undertook similar initiatives. While he acknowledged that the curriculum could stand some improvements, he indicated that due to its prescriptive nature, there existed little room for discretionary instruction, emphasizing that 'we do what we have to do, but we kind of miss the boat academically'. When queried about the *Police Training Commission's* requirement for incorporating the philosophy of community-oriented policing as part of the basic curriculum (which was a priority at the *experimental group academy*), the director acknowledged that the topic was addressed, however, due to the size, geographic location, and demographic makeup of the numerous communities and police departments represented in the typical recruit class, it was not considered an important part of the training process.

Recruit Orientation. Orientation day was held to be an important part of the training by the director of the *experimental group academy*. Given this emphasis, the director was asked about the nature of the recruit's first day at the academy. He explained that orientation day focused on underscoring the fundamental importance of basic police training and that its success would be realized by a strict adherence to the academy's rules and regulations – emphasizing the importance of structure and discipline inherent to the process of basic training and that of police work at-large. The recruits, he explained, were informed that his faculty and staff had established a 'choreographed system' designed to serve their training needs, intimating that they had little discretion or input into the training process. When asked about whether there was any form of explanation or discussion relative to the academy's instructional philosophy, student learning, or a prescribed methodology, he readily acknowledged the potential benefits of such explanation. He explained, however, that time did not allow for such luxuries, adding that 'we tell them what they need to know . . . we try provide them as good a foundation as possible'.

Faculty and Staff. When asked about the role and influence of faculty and staff in the training process, the director explained that his full-time staff, excluding an administrative

171

assistant, consisted of himself and two other police officers whose principal responsibilities included regulating the recruits daily activities, overseeing physical training, and coordinating the teaching schedules of adjunct part-time staff, which consisted of police officers, prosecutors, public defenders, psychologists, social workers, and other professionals that work within the criminal justice system. Notwithstanding their respective professional experience, expertise, qualifications, and interest in teaching in the basic police training program, the director explained that while some were certified as police instructors, they did not receive any form of orientation or specialized instruction with regard to a common shared institutional philosophy or instructional methodology, nor was there any general meeting of the faculty to discuss common interests germane to teaching or their role within the basic training curriculum. He explained that 'we invite them to teach the areas of instruction where they are needed', and as such, most employed a traditional lecture format, particularly in light of the fact that their blocks of instruction were presented in an auditorium setting. While not suggesting that these adjunct faculty were opposed to adult-based, andragogical learning principles, they did not necessarily employ them as part of their course of instruction. It was also clear, however, that given the absence of an institutional and instructional philosophy, the academy's mode of operations and course of instruction principally subscribed to a traditional, pedagogical, and military style of basic police training.

Affective variables: climate, tone, and environment

Upon entering the grounds of the *control group academy*, it was obvious that much of it was of new construction, well appointed in terms of landscaping and walkways, but unmistakably, a training center for emergency personnel. While the inside of the academy reflected recent additions and upgrades in the form of new lecture halls, auditorium, locker rooms, and audio-visual equipment, the director explained that these improvements had little impact on the basic police training program. He indicated that, for all intents and purposes, their use of the facilities were relegated to the original, older part of the training complex, which consisted of very large open space classrooms, one of which was used as a gym. Aside

172

from physical training, self-defense, and firearms training, which took place in different locales within the training center, the director pointed out that the academic components of the program, which represent the greater part of basic training, took place within a single, large, open classroom, which as suggested by Knowles, is not necessarily conducive to learning. The classroom was arranged in a traditional manner, where recruits were seated behind folding conference tables, positioned in twelve to fourteen rows from front to back, with the instructor positioned at the front of the class. Asked whether any other venues were used for instruction, the director explained that while other, smaller classrooms were available and were used on rare occasions, most of the time, academic instruction was restricted to the auditorium type classroom.

Explaining to the director that the *experimental group academy* would at times bring their recruits to outside venues, such as schools, corporate headquarters, or community centers, in order to extend the learning activities beyond the conventional classroom, he was asked whether he conducted similar activities. Acknowledging the potential benefits of such initiatives, he dismissed any consideration for doing so, given the logistics involved in coordinating and supervising such activities, along with the perception among some recruits and their sponsoring agencies that such exercises might be non-essential and not germane to basic police training.

Queried on whether any consideration was given to the recruit's comfort relative to providing an atmosphere conducive to learning, he once again acknowledged an awareness of such variables, however, at the same time, intimated that the academy's mission was to train police officers and was not necessarily concerned with making them comfortable. On this point he reiterated the political and organizational needs, interests, and orientations of the more than seventy-five police departments and jurisdictions that utilized the academy, explaining that even if he were interested in adapting or changing the existing training program, there would be pervasive resistance.

Self-concept and self-directedness

Without making specific reference to the terms *self-concept* or *self-directedness*, when asked about what latitude and discretion recruits were given in participating, recommending, or deciding learning activities, such as working in breakout groups, developing case scenarios, or collaborating in extra-curricular activities, the director explained that there was little time for entertaining such discretionary activities given the limitations of time and the need to keep the recruits 'on point'. During this discussion, it was once again evident given the academy's subscription to a traditional, pedagogical, and military style of training, that the opportunity for recruits to experience any discernable degree of autonomy, self-concept, or self-directedness was effectively inhibited. While this is not to suggest that the recruits were intentionally discouraged or prevented from pursuing self-initiated activities beyond the scope of their curriculum or the training program, the mere fact that they were operating in a prescriptive, autocratic, and military style environment undermined any opportunity or motivation to engage in self-directed activities. Because the pedagogical model, as Knowles suggests, assigns to the teacher full responsibility for making all the decisions about what, how, when, and whether something should be learned, the 'role' of the learner predisposes a learner to submissiveness, which was consistent with the preferences of the *control group's* director. Notwithstanding this environment, it is important to recognize that many, if not most individuals who are attracted to, and qualify for the position of police officer, possess a relatively high degree of motivation, self-concept, and self-directedness, as a result, they are not easily dissuaded from pursuing self-directed activities. Given the climate and environment to which recruits were exposed, particularly during the initial stages of basic training – which were clearly autocratic in nature – there was no incentive for pursuing self-directed activities. While this is not to suggest that the director was necessarily adverse to the notion of self-directedness; given his preference for streamlining and maintaining control of the training process, little room existed for fostering or advancing Knowles' notions of self-concept and self-directedness.

Integration and facilitation of curriculum

As noted in earlier discussion, the *New Jersey Police Training Commission* (PTC) sets forth a comprehensive curriculum for the basic training and certification of police recruits, which includes over one thousand performance objectives – statements that identify the specific knowledge, skill, or attitude desired of the learner as a result of a specific instructional activity (Appendix K). Notwithstanding the depth and breath of these performance objectives, which ostensibly reflects the core of the basic training curriculum, the *Police Training Commission* does not, however, identify or define any training competencies or programmatic outcomes as they relate to the acquisition of critical thinking, problem-solving, decision making, and communication skills – traits that are increasingly identified as necessary for today's police officer. Furthermore, the *Commission* does not provide any form of assessment (testing), nor does it suggest or prescribe any methodology for delivering or facilitating the same (aside from providing a limited number of case scenarios); rather, it leaves such decisions to the discretion of the respective police academies located throughout the State. Discussing this problem, i.e., prescribing such a comprehensive curriculum, without providing any recommended lesson plans, assessment tools, or instructional methodology, the director pointed out that this was a thematic concern shared among his counterparts throughout the State. Given these circumstances, he contended that to deviate from the curriculum and the order in which it was presented would prove problematic given his lack of available time and limited number of full-time staff. While not suggesting that he was adverse to exploring other options, he explained that the academy had developed a system that works as best it can; stated otherwise, he explained that 'we accept it for what it is and try our best to adhere to its mandates; principally, we follow the 'script' with little deviation'. When asked about whether any consideration was given to how the different parts of the curriculum are sequenced, integrated thematically, and/or designed to serve as pre-requisites to others, he acknowledged the advantages of doing so, but once again intimated

175

that such initiatives required too much time, energy, and resources; commodities he argued, he did not possess.

Use and integration of experiential learning

When queried about what techniques the academy used to facilitate the learning process and the extent to which it employs and integrates experiential learning activities that involve case studies, case scenarios, and other hands-on practical learning exercises, the director indicated that they were used, however, not far beyond the examples that were provided by the *Police Training Commission*. While visual demonstrations and hands-on training exercises were readily used in developing the necessary skills and proficiencies associated with the development of psychomotor activities in areas such as administering first-aid, defensive driving, self-defense, firearms, and similar training, the director noted that the academy's use of experiential learning activities in non-related psychomotor exercises, i.e., in 'conventional' classroom learning situations were generally limited in scope. The only exception was with the use of case scenarios related to domestic violence training, which he explained, was the one area in which the academy spends a substantial period of time and employs role playing techniques.

In contrast to the *experimental group academy*, where the use of case scenarios were integrated throughout most of the training curriculum, it was apparent in discussions with the director that the use of experiential learning was very limited and generally served an ancillary function of the training curriculum, once again indicating that such activities required the use of scarce resources in terms of time and personnel. The issue of personnel further implied their need for deeper commitment, higher levels of creativity, and more thorough understandings of the issues and outcomes. While the director acknowledged the prospective benefits of incorporating experiential learning activities into the training curriculum, he explained that subscribing to the traditional, pedagogical, military model of training was pragmatic and less complicated.

Stress and discipline

As previously noted, a cursory review by a casual observer of either academy might lead them to believe that both institutions subscribed to a strict, disciplined, military based environment, i.e., one where 'discipline and acquiescence to command are stressed' (Holden, 1994: 286). However, such superficial observations were deceiving and quickly dismissed as the observations progressed and it became clear that the two academies subscribed to two distinct philosophies, especially when considering the significance of stress and discipline. Nevertheless, there were times when both academies used similar techniques. When discussing the role of discipline and military bearing with the *control group academy*, the director pointed out that the sustainability of its operations were fundamentally attributable to an adherence to strict discipline and control. Underscoring this notion, during one particular interview with the director and his chief instructor, the latter stated that 'it's such a controlled environment that if we tell them [the recruits] that elephants are purple, they believe it'.

While the director downplayed the notion that all of the academy's operations were wholly predicated upon strict discipline and the military model, and forthrightly acknowledged that too much discipline could be counter-productive, he nevertheless underscored its significance as a fundamental component of the training program. Emphasizing that nearly every component of police work involves some form of stress and discipline, whether dealing with the demands associated with working within the hierarchal structure of the police organization or dealing with the physical and emotional challenges and demands made by either the general public or the criminal element, he argued that strict discipline prepares police recruits for what they can expect on the streets, although he made no specific reference to the term 'stress inoculation' as did the director of the *experimental group academy*. He was of the opinion that by indoctrinating recruits in this type of discipline they are conditioned for when they 'hit the streets'.

When asked whether he thought the pervasive climate of stress and discipline characteristic of the training process could inhibit the learning process, he acknowledged the

possibility, however, was quick to add that the current system seems to work given the thousands of recruits that had already graduated from the academy. Asked about whether the emphasis on stress and discipline may conflict with the goals of community policing, i.e., whether the tone, climate, autocratic, and overbearing behaviors they were exposed to for six months could adversely influence or inhibit a recruit's ability to communicate and collaborate with the community, he dismissed its relevance due to changing trends and sentiments among some police departments who questioned its significance and applicability, despite the continued support and enthusiasm of many others. Addressing the sentiments of those who were less than enthusiastic about community-oriented policing, the director contended that its support had waned, in great part, due to the lack of financial support from the federal government, which purportedly had redirected its funding away from community policing to the 'war on terrorism'. He further explained that some police administrators 'felt it was a waste of time' in that it did not serve to mitigate crime and that their jurisdictions had more important things to attend to than making friends'.[16]

Given this study's interviews and observations, it was apparent that the *control group academy* not only subscribed to a traditional, pedagogical, military model of training, but took great pride in preparing its recruits for the physical challenges and hardships of police work, i.e., a 'us versus them' mentality. While the concept of stress inoculation was by design incorporated into the *experimental group academy*, it was evident, based on the discussions with the director that they were at best, a by-product of the underlying perspective at the *control group academy*. An issue of concern developed in detail in this study's *Discussion*, is whether the nature of the stress and discipline resident at the *control group academy* served to adversely condition recruits in behaviors that were contrary to the qualities associated with community-oriented policing.

---

[16] While ancillary to this study, future research could examine whether an associative relationship exits between police administrators who subscribe to the philosophy of community-oriented policing and an andragogical instructional methodology versus those who dismiss the efficacy of community-oriented policing and subscribe to a traditional, pedagogical, military model of training.

As a preface to this discussion and analysis, it is important to point out that the director of the *andragogical-experimental academy* was a twenty-eight year police veteran, possessed military experience, held the rank of Deputy Chief, and possessed a doctorial degree in education specializing in adult learning. While particularly familiar with the principle tenets of andragogy and adult-based learning, he explained that not all of its principles and tenets were applied within the *experimental group academy's* basic training curriculum. He attributed this in great part to the unique nature of the police academy's mission, goals and objectives, and the prescriptively limited period of time allotted to the basic training process, which over the course of the past twenty years has doubled within the State of New Jersey. The director, who was instrumental in the development of the academy, served in his position for the past eighteen years and as a consequence, possessed a great deal of autonomy in its operations.

Similar to the interviews conducted with the director of the *control group academy*, these interviews were *unstructured* and open-ended in nature, and could be best described as a continuing dialogue. In this context, the interviews consisted of informal 15 to 30 minute discussions, most often during times when observations were in progress. At other times, they would involve 1 to 2 hour conversations typically as a follow-up to qualitative research on the subject of andragogy. These studies served as stimuli for further inquiries into the methodological principles and practices followed at the academy.

Institutional and instructional philosophy

As noted in the foregoing section, an educational institution's philosophy, as with its instructional philosophy, characteristically represents its core values, beliefs and principles by which it operates and carries out its mission. While many educators and institutions represent their philosophies in a written statement, others may reflect them as part of their vision and mission statements, as in the case of the *experimental group academy*. The director explained

179

that while his academy does not have an expressed institutional or educational philosophy, it

is represented as part of its mission statement, which states:

> The mission of the Academy is to provide a high quality educational environment to all those who attend the Academy. The underlying principle common to all programs offered at the Academy is the fact that the training, wherever possible, will have a hands-on or practical component.
>
> Our experience has shown that hands-on training is the most appropriate method for effectuating a lasting transfer of learning for the student. It is the mission of the comprehensive basic training programs to foster the development of character, knowledge of what is right, and the courage and commitment to act accordingly.

It became increasingly apparent while discussing the academy's philosophy over the course of

the study that the director subscribed to a holistic, integrative, and interactive approach to

learning based on the principle tenets of andragogy, with a particularly strong emphasis on

experiential learning as reflected in its mission statement. He underscored its importance by

referring to the acronym HASAD, emphasizing that learning is best attained through 'hearing

and seeing and doing'. The significance and the specifics of this perspective is discussed in

greater detail in a later section that addresses the *use and integration of experiential learning*.

The director further explained that institutionally, the academy placed a strong emphasis on

the philosophy of community-oriented policing, which among its principle tenets, places high

value on developing collaborative and meaningful partnerships with the community. He

explained that while the *Police Training Commission* addresses the principles of community-

oriented policing as a block of instruction within its curriculum, his academy incorporated it

as an integral component of its entire curriculum.

 Recruit Orientation. Perhaps one of the most immediate reflections of the academy's

philosophy was evidenced on the first day of recruit orientation when the academy's

philosophy was thoroughly explained. This included discussing the academy's mission,

vision, and values. In concert with its philosophy, the recruits were introduced to the

academy's thematic motto: *A Matter of Pride*. From this motto a pneumonic was developed

that represented guiding principles for basic training and one's police career. The director

explained that the word *pride* stood for the values placed on *p*erseverance, *r*espect, *i*ntegrity,

*d*edication, and *e*nthusiasm. Underscoring its importance in promoting the values, principles, and practices of the academy, it was explained to the recruits that responsibility for maintaining the integrity of the training process rested with each recruit and any behavior that was inappropriate or inconsistent with the values of the academy would be addressed on an individual basis.

Underscoring the importance of Knowles' first tenet that 'adults need to know why they need to learn something before undertaking to learn it' (Knowles, 1998: 64-65), the director reiterated the importance of explaining to the recruits: (1) the purpose of the training process, (2) the nature of the curriculum, (3) the use, value, and integration of experiential learning, (4) how the training would be facilitated, (5) the specific methodologies utilized, and (6) how and why the recruits would be challenged throughout the training process. Supplementing the director's and other instructors presentations, the recruits received the *Police Academy Manual* which addressed the academy's rules, regulations, protocols, and expectations; the *Basic Recruit Training Manual*; and the *Basic Police Training Curriculum* as provided by the *New Jersey Police Training Commission*. At the time of this writing, the director was in the process of developing a *Recruit Support Manual* to explain the purpose and the stressors associated with the challenges of basic training. He noted that the stressors were 'engineered' by design, as part of the basic police training process. He added that the manual also provides strategies and counseling services available to the recruits, acknowledging the importance of peer counseling and the value of family and friends during the process of basic training.

Faculty and Staff. When asked about the role and influence of the faculty and staff and whether they understand and subscribe to the academy's philosophy, the director explained that he had developed a system that provided him the opportunity to identify personnel who not only expressed an interest in teaching, but who possessed the requisite knowledge, skills, experience, values, and integrity necessary for effective teaching (facilitation), while at the same time those identified would serve as positive role models.

Responding to inquiries as to how often meetings were held that included discussions pertaining to the academy's institutional and instructional philosophy and methodologies, he explained that many informal and impromptu one-on-one meetings were held regularly to discuss general state-of-affairs and the progress of the recruit class. These meetings typically represented discussions about subject materials, the progress of the class as a group, classroom dynamics, and any recruits that were experiencing difficulty. Toward this end, new faculty were issued an *Instructor's Guide Book* which provided them a high degree of autonomy and discretion to adjust the curriculum to the specific needs of the individual recruit and the class as whole, provided that such decisions did not severely compromise the timelines needed meet the respective learning outcomes for the various lessons.

Affective variables: climate, tone, and environment

Perhaps the most obvious determinant of the academy's climate and tone was that it was located on the campus of a community-college, where recruits interacted with college students. Notwithstanding the rigors, demands, and challenges of basic training, the campus environment (which was nestled in a wooded hillside) provided an open and uninhibited atmosphere conducive to learning. Although the recruits had open access to all parts of the college campus, such as the library and research center, most of their activities were limited to two main buildings, namely, the gym and several large classrooms and lecture halls. The director also explained that during the training period, different instructional units would take place in different venues dependent on the nature of the learning activities and subject content. Explaining the importance for providing small group breakout sessions for brain-storming activities and the like, the director pointed to the importance of creating a physical environment that was conducive to such activities. He further explained that he would select venues, both on and off campus, such as conference rooms and faculty lounges that provided a comfortable setting, i.e., one with softer lighting, carpeting, cushioned chairs, and small tables, that would be more conducive to the facilitation of self-directed activities as well as appealing to the recruits' affective needs and interests. There were other occasions when

recruits would be working with outside organizations on community projects during which times the organizational representatives at their offices, thus not only providing them a change of environment, but orienting them to the diverse nature and of the environments in which they would be working.

Beyond the significance of providing a physical environment conducive to learning and self-directed activities, the director also acknowledged the importance of setting the proper tone and climate, not only in terms of fostering a certain degree of comfort and autonomy, but also by providing the structure and discipline necessary to prepare recruits for the challenges associated with policing. In that context, the director emphasized the importance of developing an officer's tactical vigilance against potentially adverse conditions, while remaining sensitive to the needs and interests of society at-large. To this point, he explained that 'we place a strong emphasis on understanding human behavior, i.e., we look to the reasons why people do things. As an example, when someone cuts someone off [while driving a car], maybe there are a number of other reasons beyond being inconsiderate; maybe it was an elderly driver, or they entered the other driver's blind spot, or simply because the other driver wasn't paying attention. The recruits need to understand that most situations are not black and white, rather 90% of situations are gray'. It was evident in our discussions that the director was sensitive to both the positive and negative subtleties of the climate, tone, and environment within the academy, not only with regard to its influence on the learning process, but its message with regard to how to deliver professional policing services.

Self-concept and self-directedness

Taking into consideration the idiosyncratic nature of learning and the diverse backgrounds of police recruits, the director was asked what considerations were given to the different learning styles of the recruits. He explained that 'we recognize that everyone learns differently and take that into consideration, while at the same time are painfully cognizant that we need to move the class in the same direction within a limited period of time'. With that in mind, the question was raised whether any consideration was given to meeting the intrinsic

needs of the recruits, to include their needs for *self-concept* and *self-directedness*. While the director acknowledged that the combination of time and a voluminous curriculum limited the degree of autonomy and self-directedness that recruits could enjoy, there were a number of initiatives that he developed that considered such needs; these included developing daily training scenarios, reporting on current events, initiating community service projects, and participating in two highly self-directed activities, namely, a *Community Policing Capstone Project* and a *Careful Crossings Program*, the latter of which involved interacting with the community during times when school children were traveling to and from school.

   Recruit Feedback and Assessment. Two times during the course of basic training, mid-way and at the end, recruits were provided the opportunity to critique the training process and its activities. By means of a voluntary and anonymous questionnaire, the recruits were asked to provide constructive feedback on a wide range of activities. These inquiries included soliciting their opinions and suggestions on the extent of their participation (self-directed activities). The director noted that over the years, the questionnaire had produced a wide range of responses that afforded him and the instructional staff the opportunity to adjust their curriculum, based on recommendations by recruits for a greater degree of control and autonomy in the training process. The director pointed out that while some of the recommendations were genuinely constructive, others were unrealistic or simply impractical. In all cases, however, the feedback received from the recruits, whether positive or negative, was openly addressed with the recruits in a general forum.

Integration and facilitation of curriculum

   As already noted, the *New Jersey Police Training Commission* sets forth a comprehensive curriculum for the basic training and certification of police recruits, however, in doing so, it neglects to identify any specific outcomes or competencies despite that fact that many have already been identified by police professionals and within the literature. These include skill sets in the areas of critical thinking, problem solving, decision making, effective communication skills, ethical behavior, etc. Beyond this conspicuous absence, the director

also pointed out that while the *Police Training Commission* provides some direction for the delivery and sequence of the curriculum, including a number of recommended case scenarios, there is no reference to or recommendations regarding to any form of instructional methodology. In essence, the director stated that 'the PTC tells you what to teach, but not how to teach it', adding that while the *Police Training Commission* certifies officers as 'police instructors', their training curriculum principally focuses on lesson preparation and public speaking; little, if any attention is directed to learning theory or instructional methodologies. Notwithstanding the more than 1000 performance objectives identified by the *Commission* and the sequence recommended for their delivery, the director explained that following their 'boilerplate curriculum' in a linear fashion was problematic considering that many of its units are inter-related and that many conceptual areas within the curriculum need to be presented concurrently. He further explained that because the learning outcomes of one unit often serve as pre-requisites to another, it would be illogical to present it in the order prescribed by the *Commission*. Accordingly, he and his faculty arranged the curriculum in an order that provided a greater degree of flow, meaning, and connectivity, which in his opinion, improved understanding. While he did not necessarily point to the writings of Knowles or other authorities of adult learning, it was evident in our discussions that he was sensitive to the recruits' *orientation*, *readiness*, *motivation*, and *experiences*, the latter upon which much of the curriculum centered and is discussed hereafter.

Considering the academy's mission, goals, and objectives for what the director described as 'the daunting task of preparing recruits for the streets in a relatively short period of time', he explained that the training process was broken down into three transitional periods. Sensitive to the recruits' need for enhanced self-concept and self-directedness, and a further need for maintaining their motivation, he described these three phases in terms of how three roles assumed by the faculty: (1) as parent/authority figure, (2) as facilitator, and (3) as coach. These roles correspond in principle to the stages of learner autonomy described by Grow (1991) in his review of the literature. The director explained that the first stage

185

involves instilling a high level of discipline, structure, and order in the class of recruits. Explaining that he did not have the luxury of time that would provide for an easy transition as in a traditional college program; but twenty-four weeks, he said 'because of the limited time span, we need to get their attention fast', adding that 'when they leave here they will be carrying a gun, searching and arresting citizens, and making life and death decisions'. It was during this first phase, he explained, that he needed to underscore the importance of the training process in order to meet their collective needs and satisfy their interests in preparing them for a professional career. He added that they needed to place their trust and confidence in the faculty and staff given their experience and track record. Despite explanations and assurances to the recruits that nearly everything that occurs during the training process was 'engineered' by design, the director explained that it is during this initial phase that the highest number of recruits resign from the academy, typically 5% to 10% per class. While he acknowledged that this initial phase served as an important indicator as to whether a recruit possessed the necessary disposition, commitment, determination, perseverance, and self-discipline to complete basic training, as well as an ability to assimilate into the culture of police work, he emphasized that a decision to withdraw from the academy did not adversely reflect on one's character, but rather that a career in policing may not necessarily be suited to everyone, an issue that he discussed with each recruit that decided to resign.

Having provided the necessary indoctrination, in terms of setting the proper tone, climate, and establishing a mutual understanding of the respective roles and responsibilities of the recruits and the instructional staff, a transition was made into the second phase of the training process where the instructional staff principally assumed the role of facilitators as opposed to 'teachers'. He explained that this phase was one where the recruits were encouraged to assume ownership and responsibility of their training. At this point, they are 'challenged to think for themselves, such as when they pose questions, they are asked, well, based on your experience, what would you do, how do you think it should be handled?' He continued to explain that given their prospective roles as leaders and authority figures to

whom the community rely upon as decision-makers and problem-solvers, they must come to appreciate the importance of this transition and how it will effect their abilities to make decisions once they graduate from the academy. These are the factors consistent with Knowles' *need to know*, *self-concept*, *orientatio*n, and *readiness*, and *motivation*.

Lastly, once the faculty and staff recognized that the recruits had acquired a significant degree of maturity in the training process, on both the individual and group levels, i.e., having demonstrated that they can work as a team, the staff members then transition into the final stage – one in which they serve in the capacity as mentors, coaches, and future colleagues. This final phase, the director explained, provided the recruits with a high degree of autonomy and empowerment, while at the same time was designed to increase and affirm their acquired knowledge, understanding, skills, attitudes, behaviors, and competencies, thus building their confidence and self-efficacy.

Use and integration of experiential learning

As noted in its mission statement, the *experimental group academy* placed a high value on the use of 'hands-on or practical' exercises, which the director explained was holistically integrated into the entire training process. Acknowledging that the use of experiential learning was in some cases either non-applicable or impractical, he explained that in the overwhelming number of instructional units he and his faculty were able to develop some form of experiential learning activity that served to reinforce the acquired knowledge and understanding. In this manner they provided for the integration of the requisite instruction as experiential components of the training. He explained that depending on the nature of the learning objective, activities would range from simple demonstrations and group discussions to case studies, simulations, and multi-faceted problem-solving activities. In addition, he emphasized that such activities, which involve the use of visual, auditory, verbal, and kinetic functions, illustrating the importance of reinforcing learning through hearing, seeing, and doing.

Integrated Problem Solving Model. In light of the importance that the director placed

on experiential learning, he explained that he developed what he called an *Integrated Problem*

Solving Model (IPSM) which served to integrate some form of practical exercise into as many

components of the learning/training process. He explained that, depending on specific

learning objective(s), the *Integrated Problem Solving Model* uses case studies, case scenarios,

'mini' practical exercises, and/or 'full-blown, hands-on practical case scenarios'. As part of

the process for enhancing, measuring, and synthesizing the acquired knowledge,

understanding, skills, attitudes, behaviors, and competencies, each scenario is designed to

challenge and measure a recruit's critical thinking, problem-solving, and decision making

abilities in contexts that similar to those typically encountered by a police officer in the field.

Despite awareness that these IPSMs were training exercises, when properly orchestrated, they

provided an atmosphere of reality, including the stress and anxiety typically associated with

having to make split second decisions. Following these exercises, the recruits and instructors

would move on to critique the performances of those who participated in the scenario, thus

providing for a constructive and collaborative evaluation of their actions. Explaining the

details of the *Integrated Problem Solving Model,* each recruit was provided a document that

stated:

> One of the key issues in developing a quality Recruit Training Program is to
> have built into the curriculum a process whereby recruits are taught the
> required material and at some point in the training they are 'challenged' to
> begin integrating the training they received.

After providing a set of detailed instructions for completing the experiential exercise, the

document explained that the *Integrated Problem Solving Model* is 'a step in your learning

continuum which will properly prepare you for practical' exercises and 'your job' as a police

officer. Further evidence of the academy's subscription to andragogical principles, the

instructions explained that the recruits would be afforded the opportunity to develop scenarios

as part of the training process, thus underscoring the importance of the recruit's *self-concept*

and need for *self-directedness*.

Complimenting the daily experiential learning activities associated with nearly every learning unit, the director explained that the academy also developed a two-day and four-day practical training exercise, one mid-way through the training process and the other during the last week. The scenarios, which took place at a Boy Scout Camp, afforded the academy a natural outdoor setting with roadways, garages, bungalows, homes, and office buildings. The last, consisting of four days of experiential exercises that incorporated thirteen separate scenarios designed to synthesize the recruit's acquired knowledge, understanding, skills, attitudes, behaviors, and competencies, which reflected among other things, their ability for critical thinking, decision making, problem solving, and communication skills. The director pointed out that the anonymous critiques that the recruits voluntarily submit at the end of their training consistently rated the experiential learning activities, and especially these scenarios, as one of the best components of their training experience.

Stress and discipline

When asked whether he thought a dichotomy existed between the stress and discipline of basic training and the ability of recruits to learn, the director acknowledged the possibility, although he argued that the two do not have to be antithetical. He believed that he and his staff were able to strike a delicate balance between providing the necessary stress and learning, a concept he referred to as *engineered stress*. He explained that while a certain degree of stress and discipline was important for preparing recruits for the profession of policing, too much negative stress and discipline could be counterproductive particularly as it related to the process of learning. He emphasized that stress and discipline had to be contextualized, i.e., recruits needed to understand its purpose in context to the situations.

Referring to the term *stress inoculation*, i.e., conditioning recruits for the physical and emotional stress related to real and potential threats and dangers inherent in police work (Abrams, Puglisi, and Balla, 1998: 334-340), he explained that 'stress was engineered into the training process by design for two principle reasons: (1) to expose and condition recruits for

the challenges and conditions they will encounter in the field, and (2) to assess how they will react when placed in stressful situations'.

He pointed out that the 'nature of police work is that it involves physical and mental stress, whether its source comes from within the organization, dealing with the general public, or confronting the criminal element; to ignore it would be unrealistic'. On the other hand, 'by incorporating too much stress and for the wrong reasons can also be counter-productive, adding that 'I have witnessed all too often the negative impacts of overbearing, autocratic, meaningless discipline'. He explained that he and his faculty introduce a wide variety of stress and discipline into the curriculum including demands related to academic preparedness, completing reading and research assignments, and public speaking. Non-academic stressors included demands on conformance, accountability, punctuality, unannounced inspections, verbal challenges, and at times, simply being 'yelled' at and reprimanded – all of which, the director explained, reflect the types of stressors that officers experience on almost a daily basis once out in the field. 'What will happen when an officer's mere presence means nothing to some individuals and s/he is verbally or physically challenged – how will they react? This is where we find out; better here [in the academy] then out in the street'. He further explained that after an exercise or situation in which a recruit was mentally or emotionally challenged or was the recipient of some form of 'verbal abuse', the recruit and/or the class would be asked 'how did that feel?' Emphasizing the affective and emotional associations of such experiences, he would explain to the recruit and/or the class, 'now you know how not to treat others, particularly considering how your presence and position can intimidate others'.

Continuing his explanation of the significance of *stress inoculation*, the director added that when recruits fail to perform satisfactorily, they can receive 'demerits' which take the form of a written reprimand that is placed in the recruit's personnel file. When a demerit is issued, the recruits have the opportunity of removing them by addressing the source or reason for the demerit. The over-riding theme was that there are consequences for one's actions,

whether they apply to the general public who are subject to the enforcement actions by the police, or the actions of individual police officers themselves.

Recruit Interviews and Responses to open-ended questions

As set forth in the methodological design, the interviewing of police recruits as one of multiple measures for assessing and comparing the efficacy of the two instructional methodologies was deemed to be an important component of the research. Notwithstanding the receptivity, cooperation, and professional courtesy extended by the directors of both academies, there were pragmatic considerations that limited random and unfettered access to the recruits considering their respective training schedules and available free time. Furthermore, because the directors of the two academies had very different notions as to how the recruit interviews would proceed, a change in procedure had to be conducted.

At the beginning of the study, when the interviews were initiated, a random sampling of recruits was planned. The interviews began with the *experimental group academy* because their training commenced a few weeks earlier than the *control group academy*. Discussing the research design and the importance for interviewing a random sample of each academy class, the director at the *experimental group academy* suggested that such a process could be readily facilitated by randomly selecting recruits from a variety of sub-groups so as to ensure a representative cross-section that would take into consideration age, gender, race, ethnicity, work and military experience, and geographical jurisdictions. While this suggestion was considered and a variation of this methodology was initially employed to select recruits, this procedure was pre-empted based on the following experiences encountered at the *control group academy*.

Arriving at the *control group academy* on the day on which the interviews were scheduled, this researcher was introduced to five recruits who were assembled and waiting in a conference room. Given that the academy director had anticipated the interviewer's arrival, he had enthusiastically committed a part of his day to assist in the facilitation of the interviews. While the interviewer's preference, for methodological reasons, would have been

to randomly select recruits in a similar fashion to that of the *experimental group academy*, to dismiss the recruits he had assembled or to suggest an alternative procedure for selecting other or additional recruits held the potential for being misinterpreted, or worse, could have compromised the already-established rapport, access, and completion of the study. Notwithstanding the goal to interview a representative cross-section of the academy class, the interviews commenced. In doing so, it became readily apparent that all of these recruits had been hand-picked and were from the same policing agency as that of the director and the instructional staff. While they appeared to be genuinely enthusiastic about participating in the interviews, their individual and collective responses described every aspect of their training as excellent. When asked about what changes could be made to improve the training process they tendered no negative comments, complaints, concerns, reservations, or any form of constructive recommendations. This stood in stark contrast to the responses and dialogue experienced at the *experimental group academy*. While the interviews conducted with the recruits at the *experimental group academy* proved to be engaging, uninhibited, and resulted in an open dialogue during which the recruits shared their positive and negative opinions about their training experiences, the interviews with the recruits at the *control group academy* did not appear to be candid and open. While not suggesting that their responses were prompted by their supervisors or reflected any form of collusion, the possibility that they wanted to be 'loyal soldiers' to their superiors and organization, and did not want to reflect the academy in anything other than a positive light, gave rise to questions about the validity and reliability of their responses.

Consequently, in the interest of obtaining honest and uninhibited feedback from the recruits at both academies, consideration was given to conducting informal, abbreviated, and impromptu interviews, rather than continuing with what was originally planned. Because this required less coordination on the part of the faculty and staff at both academies, this procedure was readily accepted as a better alternative by both directors. As such, five to fifteen minute interviews (mini conversations) would take place throughout the course of their

twenty-five week training period, typically during times when recruits had 'free time' such as before or after lunch, and/or during times preceding or following designated research time, group project assignments, or practical training exercises. These discussions proved to be quite fruitful, considering that they were not perceived to be formal or deliberate, rather, they were seen as casual discussions about their training perceptions and experiences. With the exception of a few recruits who appeared to be wholly pre-occupied with getting through the training, the overwhelming number of recruits actively and enthusiastically participated in the interviews.

Responses to open-ended questions. Because much of the information acquired during these informal interviews proved to be consistent with the responses to the open-ended questions in the post-training questionnaire, the results of the interviews have been combined with the responses to the open-ended questions (principally to avoid redundancy in reporting). In analyzing the recruits' responses to the open-ended questions, it is important to consider that unlike the questions in the post-training questionnaire, which called for a forced response (strongly agree, agree, etc.), the open-ended questions prompted 'respondents to answer in their own words', which provided for 'greater detail and a broader range of responses' (Fitzgerald and Cox, 2002, 109-110). Based on their candid and descriptive responses, it was apparent that the recruits felt assured of complete anonymity and possessed a certain degree of confidence knowing that they had successfully completed their training. In evaluating their responses, not only was it evident that their assessments were consistent with the data acquired during the course of the interviews, but that their responses were of such a nature that they contributed to the identification of the six established thematic and categorical areas that serve as this study's operational definition. Accordingly, the following findings and analysis represent a synthesis of the interviews conducted with the police recruits and their responses to the open-ended questions which asked:

1. What thing(s) did you like best about basic training?

2. What thing(s) did you like least about basic training?

3. What changes and/or recommendations would you make to improve basic training?

Institutional and instructional philosophy

Although little of the information acquired from the interviews or open-ended questions specifically addressed the academies' mission and/or philosophy, the tenor of the recruit's attitudes and experiences may have reflected the resident philosophies of the two academies which is addressed in the observations that follow this section.

RECRUIT ID	GROUP	Table: 3-1
		Control Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions***
		Institutional and Intructional Philosophy
		What things did you like best about basic training?
		N/A
		What things did you like least about basic training?
26	1	Community policing, too much detail not imperative to police work
3110	2	Too many warm and fuzzy classes
7183	3	There were quite a few classes that are required like community policing that only apply in rare cases.
		What changes and/or recommendations would you make to improve basic training?
7183	3	The logic or reasons for such training [and discipline] should be explained
4	1	Change the military training philosophy. . . So we can feel like real cops and adults.
* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.		

It is nevertheless important to point out that the recruits in the *experimental group academy* generally appeared more at ease and less guarded in their conversation than the recruits at the *control group academy*. While not to suggest that the latter did not express their opinions, there were, however, numerous occasions during the course of the two year study that the recruits at the *control group academy* wanted assurances that our conversations would 'not get back to the instructors'. To this point, when asked about what things they liked best about basic training, a recruit in the *control group academy* wrote: 'this questionnaire for the reason that it allows us to be honest and open'; suggesting that the opportunity for doing so was not readily available or encouraged.

		Table: 3-2
RECRUIT ID	GROUP	**Experimental Group: Post-Training Questionnaire** **Thematic and Categorical Responses to Open-Ended Questions**
		Institutional and Instructional Philosophy
		What things did you like best about basic training?
6144	2	Instructors that explained why we do things the way we do them.
		What things did you like least about basic training?
		N/A
		What changes and/or recommendations would you make to improve basic training?
8953	2	Realized what the training was for (the training philosophy)
1644	4	Periodic peer and instructor evaluations, positive reinforcement to know how you are doing in training and what you need to do to improve it.
* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.		

By contrast, such concerns were never raised by the recruits at the *experimental group academy*. Overall, the recruits at the *experimental group academy* appeared to feel more comfortable, engaged, expressive, and uninhibited in their conversations than those at the *control group academy*. While many of the recruits at the latter appeared somewhat cautious and reserved in their conversations, they nevertheless made a point of expressing their opinions, although they did so in a measured response.

Affective variables: climate, tone, and environment

While recruits from both academies expressed the affective benefits of collegial friendships and comradery, such positive feelings were unfortunately offset by a pervasive insensitivity on the part of instructors, who, with the intent of instilling discipline, caused a great deal of consternation – sentiments that were significantly more prevalent among recruits at the *control group academy* than those from the *experimental group*. Perhaps the one area of concern expressed by the recruits from both academies dealt with the attitudes of the instructors and the manner in which they were treated. While such concerns are also addressed in the sections that discuss *self-concept and self-directedness*, and *discipline and stress inoculation*, given the importance that instructor attitudes play in establishing a climate conducive to learning, the following observations are warranted. Almost without exception, when recruits at both academies were casually asked during the course of initiating conversations 'how are you making out' or 'how are things going', there were consistent

195

complaints with regard to the manner in which they were being treated; not so much with regard to the discipline per se, i.e., matters dealing with regimentation, uniform inspections, or meeting deadlines, rather, they complained that their training involved too many superfluous activities and in particular, they resented 'being treated as children, and not adults' – sentiments that were repeated throughout the course of the study. In response to the open-ended question that asked *what things did you like least about basic training*, a typical response was: 'I did not like the fact that we were treated like little kids', 'treating recruits as children, yelling and screaming for no reason', 'tedious childish games', and 'not being treated like an adult'. While these complaints were consistently expressed during the course of the interviews and the open-ended questions, they were markedly more prevalent among recruits at the *control group academy*. One sentiment repeatedly expressed by recruits from the *control group academy* in the interviews and open-ended questions was 'how do you learn when all you do is get yelled at'.

		Table: 3-3
		Control Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions***
RECRUIT ID	**GROUP**	**Affective variables: climate, tone, and environment**
		What things did you like best about basic training?
2603	2	Meeting other recruits from different departments
7338	2	The friendships that I built and the paramilitary way of doing things really is great for motivation to succeed. I do things very differently than I did before I started basic training. My way of life is different and I look at things much differently, more tactical really.
7792	2	I enjoyed the teamwork and discipline associated with it
8876	3	Building teamwork
9354	4	This questionairre for the reason that it allows us to be honest and open.
0248	2	Instructors attitude towards the recruits
5303	2	The size of the class and the personal interest the instructors have with the class
		What things did you like least about basic training?
8876	3	11 hour days not conducive to learning
2045	4	Doing pointless activities or having pointless lectures
3899	4	Drill and ceremony and wasteful amounts of time
0231	4	The academic environment was pitiful
4562	4	Too much stress
17	1	Trainers attitude towards recruits being worthless
4502	4	The training advisors attitudes
		What changes and/or recommendations would you make to improve basic training?
16	1	Get training advisors who care about recruits and their progress, not about bossing around lowly recruits
9606	3	Make lecture times shorter because peoples attention span does not keep up for so long
5765	4	More individual attention to ensure recruit progress
3899	4	Use time more wisely and break up class and practicals so you can do a little of both every week to keep motivated
1312	4	Instead of reading it from the text, the instructors should make it more interesting. Not a good learning environment.
51	1	How do you learn when all you do is get yelled at
6666	3	More emphasis on people skills
* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.

While the principle concerns regarding the affective variables focused on the attitudes of the instructors and the manner in which recruits were treated, other concerns expressed during the course of the interviews and the open-ended questions focused primarily on behaviors. As an example, in response to the question *what things did you like best about basic training*, the general theme of responses among the recruits from the *control group* emphasized the importance of team work, comradery, discipline, and 'the paramilitary way of doing things' – statements that were consistent with what they expressed during the informal conversations. While the recruits at the *experimental group academy* shared similar sentiments with regard to team building and comradery, they also expressed the importance of a climate and environment that provided 'nonstop challenges', 'accomplishing goals as a class, training and learning', and applauded activities related to building confidence and developing responsibility. Considering that the questions were not presented in a forced-

choice structure, a number of recruits from the *experimental group* emphasized the significance of the learning environment with statements that suggested that they enjoyed being in 'a relaxed classroom environment', that training focused on learning and 'using your brain', and that 'educational blocks [were] somewhat discipline free which leads to a better learning environment'.

Conversely, when asked about *what things did you like least about basic training*, statements from the *control group academy* indicated that 'drill and ceremony was a waste of time', 'the academic environment was pitiful'. Some expressed frustration with 'doing pointless activities or having pointless lectures'. By contrast and consistent with the responses to the first question, statements from the *experimental group* indicated that 'there was so much information that sometimes it was just cramming it in; there was so much to know'. While these comments address issues relative to the *integration and facilitation of the curriculum*, it nevertheless underscored the importance of learning; a concern that was not as readily emphasized among the recruits at the *control group academy*. Perhaps the most consistent concern expressed by the recruits at both academies, both during the course of the interviews and during the open-ended questions, (although once again, to a greater degree at the *control group* than the *experimental group*), was the deleterious impact of negative stress and discipline that suffused every dimension of the training process. While this is addressed as a point later in this section, it is a point worth noting given its affect on the climate, tone, and comfort level of the academy, and consequently, its impact on the process of learning and the recruits' overall attitude toward basic training.

RECRUIT ID	GROUP	**Table: 3-4**
		Experimental Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
		Affective variables: climate, tone, and environment
		What things did you like best about basic training?
21	1	Nonstop challenges: physically, mentally and emotionally*
20	1	Getting out into the communities gave me an idea of what and how people react to cops*
17	1	Making friends
6026	2	Accomplishing goals as a class, training and learning
4151	2	Confidence it gave me and pride in myself*
4090	2	Overcoming fears
3893	2	I feel training focused not only on discipline and learning but also on just using your brain and accepting responsibility
4771	2	Working as a team
5393	4	Relaxed classroom environment
6087	4	Educational blocks are somewhat discipline free which leads to a better learning environment*
8953	2	Bonding between recruits and instructors
1831	2	Classroom environment and academics
		What things did you like least about basic training?
14	1	There was so much information that sometimes it was just cramming it. There was so much to know.
1030	2	Other peoples attitudes
3893	2	I felt that recruits are kind of 'pushed through'. There are still some recruits I would not want as my backup.
		What changes and/or recommendations would you make to improve basic training?
8953	2	Realized what the training was for (the training philosophy)
8803	2	I would do this all over again if I had to
8413	4	More education, less B.S., a nicer learning environment
2238	2	Instructors saying "good job" more often when it is deserved.*

* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.

With regard to the last question on the open-ended questionnaire which asks *what changes and/or recommendations would you make to improve basic training*, responses from both groups were mixed. One response from a recruit from the *control group academy* stated 'get training advisors who care about recruits and their progress, not about bossing around lowly recruits'. Two others wrote that this is 'not a good learning environment', and that the academy should provide 'more individual attention to ensure recruit progress'. While one statement by a recruit from the *experimental group academy* indicated that 'I would do this all over again if I had to', another's recommendation called for 'more education, less minutia [paraphrased], provide for a nicer learning environment'. In summary, the principle affective concerns among recruits at both academies, although to a greater extent at the *control group academy*, centered on the occasional condescending attitudes of the instructors, the deleterious effects of negative discipline, and being treated as children and opposed to adults.

Self-concept and self-directedness

In assessing the importance of self-concept and self-directedness among the recruits, much of the feedback related to this area was intertwined with concerns regarding the nature and degree of the stress and discipline within basic training. Despite the varying degree to which recruits at both academies were exposed to stress and discipline, they readily acknowledged its place within the training process with statements such as 'the structure and military based instruction were appreciated and understood'. However, because of the derogatory manner in which stress and discipline were incorporated into the training process, albeit to significantly different degrees into the two academies, it served to undermine the recruit's sense of self-concept and self-directed activities. This gave rise to the principle complaint of recruits from both academies that they were treated as children and not as adults. Because many activities at the *experimental group academy* served to engage and empower recruits in the planning of their own training, this group produced limited comments on this topic.

With regard to the question *what things did you like best about basic training*, none of the respondents from the *control group* addressed this area, however, responses from the *experimental group* included statements which indicated that they enjoyed 'nonstop challenges: physically, mentally and emotionally', 'getting out into the communities gave me an idea of what and how people react to cops', '[the] confidence it gave me and pride in myself', 'educational blocks are somewhat discipline free which leads to a better learning environment', and 'practical exercises, hands-on activities, [and] being involved improved the learning experience'.

RECRUIT ID	GROUP	Table: 3-5
		Control Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
		Self-concept and self-directedness
		What things did you like best about basic training?
		N/A
		What things did you like least about basic training?
2	1	Getting treated like a child.
4	1	Getting treated like a child.
6	1	Being treated like a child throughout the academy. At some point it becomes counter-productive. Running is more important than having a brain.
8	1	Rules and regulations, not being treated like an adult at times.
13	1	Not being treated like an adult.
30	1	Being treated as a child for 6 months
36	1	Not being treated like an adult.
4313	2	Treating the recruits as children, yelling and screaming for no reason
7308	2	The way they treat you like a child
7905	2	Being treated like a child, getting homework on weekends, no personal time or time for friends and family. It makes it much harder and causes a lot of crap in others lives.
4280	3	Not being treated like an adult.
1793	3	Not beating treated like a man
3899	4	Being treated like a kid
0231	4	The overall treatment by the training advisors. We were treated like children.
6697	4	I did not like the fact that we were treated like little kids
		What changes and/or recommendations would you make to improve basic training?
7	1	More training less punishment. Treat like an adult not lower than whale shit. Punish individual not the class.
11	1	Be treated like an adult towards the end.
33	1	Less discipline; to be treated as adults
38	1	More hands on applications. Less screaming; discipline doesn't mean treating recruits like children.
8876	3	We are supposed to be gaining confidence but to this day we are still treated like kids."
5567	4	Treat people attending the academy like adults, not three year olds.
0231	4	Start treating recruits as adults and instill values which will be necessary for success.
9444	4	As an older recruit, I would like to be treated more like an adult. I feel like for the past 20 weeks we have been treated like little kids'

* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.

When asked, *what things did you like least about basic training*, the responses from both groups were consistent. What they didn't like were things such as 'getting treated like a child', 'treated like kids, not like adults', 'being treated as a child for 6 months', 'tedious childish games', 'treating the recruits as children, yelling and screaming for no reason', and with one long response stating 'a lot of time [was] lost entertaining childish games; after a certain point in our training it should become more professional. Individual recruits should be punished for their actions, not the entire class'.

		Table: 3-6
RECRUIT ID	**GROUP**	**Experimental Group: Post-Training Questionnaire** **Thematic and Categorical Responses to Open-Ended Questions**
		Self-concept and self-directedness
		What things did you like best about basic training?
21	1	Nonstop challenges: physically, mentally and emotionally*
20	1	Getting out into the communities gave me an idea of what and how people react to cops*
4151	2	Confidence it gave me and pride in myself*
6087	4	Educational blocks are somewhat discipline free which leads to a better learning environment*
6087	4	Educational blocks are somewhat discipline free which leads to a better learning environment
8095	2	Practical exercises. Hands on activities. Being involved improved the learning experience*
4151	2	Confidence it gave me and pride in myself
3893	2	I feel training focused not only on discipline and learning but also on just using your brain and accepting responsibility
		What things did you like least about basic training?
22	1	To be in uniform and to act like a robot, not a free thinker
20	1	Tedious childish games
17	1	Not being treated human
13	1	Treated like kids, not like adults.
4151	2	Being treated like children
8803	2	I understand the concept of discipline, however, I feel at times we could have been treated more humanely.
3720	3	Sometimes I felt we were not treated as adults
4380	4	Being treated like a kid again. I know it's important to the training program, but I didn't enjoy it. (paraphrase)
2642	4	A lot of time lost entertaining childish games; after a certain point in our training it should become more professional. Individual recruits should be punished for their actions, not the entire class.
0513	4	Individuals not being held accountable for their actions and vague instructions on what we were to accomplish
		What changes and/or recommendations would you make to improve basic training?
2566	4	Discipline without childishness
9175	4	Give the recruits in the future some breathing room and time to vent their issues face to face with the instructors
13	1	The academy should listen to recruits where a grey area may exist.
22	1	Allow for some freedom and flexibility
* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.		

When examining the recruits' feedback to the question *what changes and/or recommendations would you make to improve basic training*, the *control group academy* continued to express concerns about disparate discipline and not being treated as an adult. These concerns were further indicated by statements such as 'more training and less punishment; treat us like adults . . . 'less discipline; to be treated like adults', 'more hands-on applications; less screaming – discipline doesn't mean treating recruits like children', and 'start treating recruits as adults and instill values which will be necessary for success'. The *experimental group academy* responded with similar, although less intense statements such as 'discipline without childishness', 'the academy should listen to recruits where a gray area

exists', and 'give the recruits in the future some breathing room and time to vent their issues face to face with the instructors'.

Integration and facilitation of curriculum

While generally, the recruits at both academies did not make specific reference to the terms *integration and facilitation of the curriculum*, many of their comments, both in the course of their interviews and in their responses to the open-ended questions, addressed this area with particular concern to course content, matters of time management, and experiential learning activities. When asked about *what things did you like best about basic training*, the thematic responses from the *control group academy* were generally complimentary of their instructors knowledge and experience as indicated by statements such as 'the instructors were very knowledgeable', 'the training and experience of the instructors added to the class', and 'I liked the instructors, but they were a little bit boring'.

		Table: 3-7
RECRUIT ID	**GROUP**	**Control Group: Post-Training Questionnaire** **Thematic and Categorical Responses to Open-Ended Questions***
		Integration and facilitation of curriculum
		What things did you like best about basic training?
1790	2	The instructors were very knowledgable
2857	2	The training and experience of the instructors added to the class
1594	3	The motivation and determination of our instructors to teach us to the best of their ability.
4313	2	I liked the instructors, but they were a little bit dry and boring
		What things did you like least about basic training?
0230	2	Having boring instructors who couldn't teach. 6 straight hours of sitting in a classroom is not conducive to learning. Sometimes I just tried to stay awake.
0832	2	Classroom work, punishment assignments, days too long.
1686	2	Some blocks of instruction could have been half a day instead of a full 8 hours of instruction.
2686	3	Lectures were boring which made it hard to stay motivated on subject.
4280	3	Some of the classes were about things we will not be doing
9354	4	"Poor academics, wasted time, not enough training, discipline."
9354	4	The lectures. Most were boring
2513	4	Classroom work that we will never use in our field of work
5567	4	Long, boring classroom lectures
11	1	Many classes repeated hours of information from previous classes
24	1	The dry teaching of certain topics of our education portion
0248	2	Instructors who just read off a power point presentation
7096	2	The testing could have been more challenging
0878	3	There is only so much learning a person can do in a day.
0445	3	Limited amount of time alloted for certain blocks of instruction
3872	3	Classes were too long and non-stimulating
0882	4	Schedule was mismanaged
2045	4	Doing pointless activities or having pointless lectures
		What changes and/or recommendations would you make to improve basic training?
23	1	Stop classes from having same info
24	1	Plan out class lectures or class time
2045	4	Focus more on academics
9354	3	Break up lessons throughout training
2686	3	Have an older person in charge
7792	2	More challenging exams
2686	3	More focus on education during classes, instead of just getting test question answers from instructors.
4280	3	Better prepare the schedule. Some classes were given more time than needed causing a waste of time.
7183	3	The logic or reasons for such training [and discipline] should be explained
1594	3	Better management of classes / instructors

* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.

While many of the recruits at the *experimental group academy* also lauded the quality of their instructors, their comments with regard to *what they liked best* were somewhat more expansive and in-depth, indicating that they enjoyed 'the classroom curriculum', 'getting into the communities', 'the instructors were very helpful and understanding', 'the fact that they [instructors] were geared towards education more than physical training', and that the 'instructors explained why we do things the way we do them'. While caution was taken

during the course of the interviews to avoid leading questions specific to the integration and facilitation of the curriculum, there were some comments from members of the *experimental group*, albeit limited, that the 'classes related to one another', 'the instructors were well prepared', 'I think the program was pretty well coordinated', and general comments that acknowledged the importance of writing and communication skills that were integrated throughout the curriculum.

When asked, however, about *what things did you like least about basic training*, the responses were more revealing and in greater contrast. Clearly, the *control group* expressed their dissatisfaction with statements such as 'a lot of classes are a waste of time', 'having instructors that couldn't teach', 'classes that dragged on', 'lectures were boring which made it hard to stay motivated', 'the schedule was mismanaged', and 'poor academics'. These statements, obviously more candid, were indicative of the sentiments expressed by many recruits during the course of their interviews, which suggested that the curriculum was to some extent, disorganized, perceived as piecemeal, and lacked any form of flow or cohesiveness. The responses to the same question by the *experimental group* principally referred to the complexity of the curriculum and the amount of homework associated with it, as indicated by statements such as 'I understand the theory behind it and the necessity of it, but I feel the homework impeded on my personal time' and 'this was a very complex course of study'. Other statements indicated the fast pace of the curriculum, the lack of time to learn, and 'a lack of consistency between instructors orders and methods of teaching'.

RECRUIT ID	GROUP	**Table: 3-8**
		Experimental Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
		Integration and facilitation of curriculum
		What things did you like best about basic training?
12	1	Instructors were very helpful and understanding
8953	2	Bonding between recruits and instructors
5641	2	The fact that we were geared towards education more than physical training
6466	2	The personal interest instructors take in relating to individuals
25	1	Report writing procedures
1030	2	Classroom curriculum
8034	2	Well prepared instructors
1831	2	Classroom environment and academics
9323	3	I was impressed about how knowledgable the instuctors were
1493	4	Classroom instructors were very knowledgable
1978	3	Staff extremely passionate about teaching
20	1	Getting out into the communities gave me an idea of what and how people react to cops
2922	4	The practical applications with outside instructors made it enjoyable on given days as well as easier to relax and learn.
		What things did you like least about basic training?
5813	2	I understand the theory behind it and the necessity of it, but I feel the homework impeded on my personal time
8953	2	Too much homework
20	1	How fast-paced the acdademy is
12	1	Too much to learn in so little time
8803	2	At times there was a lack of consistency between instuctors orders or methods of teaching material
		What changes and/or recommendations would you make to improve basic training?
26	1	More time learning things that would be used on the road
4413	2	Make the educational aspect more difficult
3977	2	Incorporate the academic part more regularly with practical applications
7394	4	More time spent establishing the verbal skills necessary for every-day law enforcement.
1926	2	Use computers to type reports, no departments still write them
5393	4	At the end, give encouragement to help recruits succeed
1644	4	Periodic peer and instructor evaluations, positive reinforcement to know how you are doing in training and what you need to do to improve it
		* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.

With regard to the question *what changes and/or recommendations would you make to improve basic training,* the *control group academy* responded with statements such as 'teach stuff you know', 'plan out class lectures', 'focus more on academics', 'break up lessons throughout training', 'better prepare the schedule', and emphasize 'the logic or reasoning for the training'. While the recruits at *experimental group academy* recommended improvements in curricular integration with statements such as 'incorporate the academic part more regularly with practical applications', they also offered constructive recommendations such as 'make the educational aspect more difficult', 'be more consistent with education and testing', and

integrate the use of computers more readily into the curriculum considering their regular use in the field.

Use and facilitation of experiential learning

Although already noted, it nevertheless bears emphasis, that the value and importance that recruits placed on experiential learning activities far exceeded any other expressed concerns. With few exceptions, the overwhelming response from recruits in both academies, both during the course of the interviews and in their responses to the open-ended questions, dealt with the value of what they characterized as 'practical training', 'hands-on training', practical exercises', 'practicals' and 'simulations'. In response to the question *what things did you like best about basic training*, with the exception of a limited few, the majority of the recruits in the *control group academy* provided short answers affirming the benefits of experiential learning activities. Some did, however, provide more detailed comments such as 'the hands-on training improved the learning experience', 'practical training was a good way to understand the connection between the classroom and real life scenarios', and 'the practical applications with outside instructors made it enjoyable on given days, as well as easier to relax'. While the *experimental group academy* similarly expounded on the benefits of experiential learning activities, their responses were generally more expansive as indicated by statements such as 'I learned a lot from hands-on practicals', 'practical exercises put classroom knowledge to use', 'practical training was a good way to understand the connection between classroom and real life scenarios', 'and 'hands-on training was the most enjoyable and rewarding element of training'.

RECRUIT ID	GROUP	**Table: 3-9**
		Control Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
		Use and facilitation of experiential learning
		What things did you like best about basic training?
26	1	Practical training exercises were excellent
20	1	I learned a lot from hands on practicals
19	1	Hands on training was the most enjoyable and rewarding element of training
17	1	Learning off-site training
16	1	Practicals were the best part because it is the greatest way to learn
14	1	Getting ready for real life situations
11	1	Practical exercises, instructors insight into our training
8	1	Hands on training
7796	2	Practical exercises put classroom knowledge to use
4876	2	Hands on practicals were great
5813	2	Practical training was a good way to understand the connection between classroom and real life scenarios
1359	2	Practical exercises, simulations
4413	2	I enjoyed the hands on training that we did
2238	2	Growing as an individual. Interesting hands-on practicals and training
6090	2	Hands on practical training
8095	2	"Practical exercises. Hands-on activities. Being involved improved the learning experience"
8803	2	Practical exercises and hands on training
3720	3	Practical training, spanish homework
2922	4	The practical applications with outside instructors made it enjoyable on given days as well as easier to relax and learn.
4380	4	While the physical training was hard and I never look forward to it, I did and continue to enjoy the results
1493	4	Practicals involving real life scenarios
2566	4	Hands on practicals and classroom training
9189	4	Practical training helped me out with understanding different situations
2642	4	Practical training. Great instructors. Classroom group exercises
6412	4	I felt the hands on training was very enlightening
0832	2	More practical training, more physical training, more defensive tactics and more weight room.
1686	2	More hands on, less classroom on non-essential courses such as history of law enforcement
3648	2	Spend more time on the daily things you do as a police officer. Do more hands on training.
7096	2	More hands on training, more training with agency
2001	3	Spend more time on real life scenarios
9307	3	More time spent on real world situations
7183	3	More emphasis on hands on roleplaying activities that test our skills and thought processes
0638	4	Increase hands on training and decrease classroom lectures
2513	4	More practical training exercises. I learn better with hands on training
6123	4	We should get more hands on training instead of just sitting in our seats and listening to lectures all day

RECRUIT ID	GROUP	Table: 3-9 (Continued)
		Control Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
		Use and facilitation of experiential learning
		What changes and/or recommendations would you make to improve basic training?
29	1	More practical exercises
27	1	More hands on activities
19	1	More scenario based training exercises
11	1	Adjust training to allow for more practicals
9	1	More practical exercises and less drill
1926	2	More practical exercises
1030	2	More cadence runs, they were very motivating
6466	2	More time on practical application of skills and knowledge
6144	2	More practical scenarios.
9342	2	More hands one exercises
1978	3	More practical exercises
9323	3	More hands on training and practicals
6243	4	Utilize more practicals
6412	4	More hands on training as well as example interactions with the public

* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.

Underscoring the value and importance of experiential learning, when asked *what things did you like least about basic training*, the only response on the part of either group relative to this category was that there were not enough practical training exercises, although experiential learning activities were more prevalent at the *experimental group academy* than that of the *control group academy*. Similarly, when asked *what changes and/or recommendations would you make to improve basic training*, the overwhelming concern among recruits from the *control group academy* was a call for more experiential learning activities as indicated by over a hundred distinct statements reflecting that they wanted 'more practical exercises', 'more hands-on exercises', 'more scenario based training exercises', 'more practical exercises and less drill', and 'adjust time for practical application of skills and knowledge'. To summarize, during the course of discussions with the recruits and after analyzing the open-ended questions, nothing received as much attention and positive feedback than experiential learning, although its use and facilitation was significantly more prevalent at the *experimental group academy*.

RECRUIT ID	GROUP	Table: 3-10
		Experimental Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
		Use and facilitation of experiential learning
		What things did you like best about basic training?
9342	2	Police officers teaching us in class about real life situations
26	1	Practical training exercises were excellent
20	1	I learned a lot from hands on practicals
19	1	Hands on training was the most enjoyable and rewarding element of training
17	1	Learning off-site training
16	1	Practicals were the best part because it is the greatest way to learn
14	1	Getting ready for real life situations
11	1	Practical exercises, instructors insight into our training
7796	2	Practical exercises put classroom knowledge to use
4876	2	Hands on practicals were great
5813	2	Practical training was a good way to understand the connection between classroom and real life scenarios
2238	2	Growing as an individual. Interesting hands-on practicals and training
8095	2	Practical exercises. Hands on activities. Being involved improved the learning experience
3720	3	Practical training, spanish homework
2922	4	The practical applications with outside instructors made it enjoyable on given days as well as easier to relax and learn.
9189	4	Practical training helped me out with understanding different situations
3648	2	Spend more time on the daily things you do as a police officer. Do more hands on training.
2001	3	Spend more time on real life scenarios
7183	3	More emphasis on hands on roleplaying activities that test our skills and thought processes
2513	4	More practical training exercises. I learn better with hands on training
8095	2	Practical exercises. Hands on activities. Being involved improved the learning experience*
		What things did you like least about basic training?
6144	2	Integrate more full day practical exercises
8803	2	More time for practicals
		What changes and/or recommendations would you make to improve basic training?
19	1	More scenario based training exercises
11	1	Adjust training to allow for more practicals
9	1	More practical exercises and less drill
6466	2	More time on practical application of skills and knowledge
8034	2	Not much. Maybe more practical hands on exercises than homework
		* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.

Stress and discipline

Second only to the feedback received regarding the importance of experiential learning activities, the recruits at both academies were adamantly outspoken in expressing their dissatisfaction with the nature and extent to which stress and discipline were incorporated within the basic training process, although the responses among the recruits from the *experimental group academy* were generally more tempered and restrained than those of the *control group*. While generally, the recruits at both academies acknowledged understanding the significance for incorporating some degree of stress and discipline as part

of the training process, the extent to which recruits expressed their contempt on this matter far outweighed any other complaints received.

RECRUIT ID	GROUP	Table: 3-11
		Control Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
		Stress and discipline
		What things did you like best about basic training?
28	1	Some instructors treating us as equals
5004	2	The discipline I believe is a very important part of my training. I also liked the instructors very much for their concern about our training and it was good because they would take what we learned in the classroom and show us real life examples
		What things did you like least about basic training?
1	1	Punishment with no teaching value: having someone write for 7 hours when they return home because another recruit is late is idiotic at best
5	1	Group punishments for the actions of a few individuals.
12	1	Some of the discipline was not geared in the right fashion
16	1	The instructors are only on a power trip and enjoy being "tough guys" to the recruits
16	1	Doing things as punishment which are in no way related to police work
20	1	Discipline, being punished for actions of others when I had no control of the situation
23	1	Being treated like an inmate
27	1	Group punishment assignments. One person can ruin things for many other people.
28	1	I did not like being treated as less than an adult. I understand team concepts but individuals who deviate should be made responsible individually
30	1	Walking on egg shells for 6 months entirely! I can understand it for the first few weeks but I still don't feel like an officer today an I have 2 days left of training
31	1	Punishment that took away from my family time at home.
32	1	Being punished for other peoples "screw-ups"
33	1	Discipline by instructors.
50	1	Feeling your walking on egg shells
51	1	Getting treated like an asshole, being disciplined for other peoples mistakes after 21 weeks never got treated any better as time went on (it got worse). Instructors are good teachers but think they're better than you.
52	1	Being punished for the actions of others when I had no control over those actions.
1281	2	Being talked down to I still feel was uncalled for, I learned nothing from that, and it is not that I don't understand why they do it, its that that type of "training" is uncalled for and outdated.
2603	2	At times, I felt that the "team" responsibility was used too much. People at times should take accountability for their own actions
7096	2	Listening to some instructors who care more about pounding their chest than anything else
8318	2	Too much emphasis on discipline during classroom work
8665	2	Getting yelled at
2686	3	Writing rules and regulations as punishment.
2001	3	All the screaming and belittling of recruits is not conducive to learning
0638	4	I did not enjoy getting in trouble for everyone elses mistakes
1312	4	Too much time/energy spent playing baby games
4908	4	Some of the instructors like to act as tough guys. They don't care about teaching they just like to break people down.

Underscoring the tenor of Knowles' assumptions, the recruits at both academies readily acknowledged that the nature of policing necessitates preparing them for the stress associated with the physical and psychological challenges of police work and that the paramilitary organizational structure in which law enforcement operates necessitates a high degree of discipline. Hence, when asked about *what things did you like best about basic training*, they wrote 'I enjoy some of the discipline', 'a certain amount [of discipline] is always good',

		Table: 3-11 (Continued)
		Control Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
RECRUIT ID	GROUP	**Stress and discipline**
		What changes and/or recommendations would you make to improve basic training?
1	1	Base punishment on an individual level
10	1	More constructive discipline.
12	1	Make punishments that force us to learn
17	1	Stop the nonsense discipline
20	1	The way recruits are disciplined
27	1	More individual discipline
27	1	Stricter entrance guidelines
31	1	Treat people like humans so they can learn.
32	1	Treat people like people instead of animals
35	1	Treat recruits like humans
42	1	After discipline has been established teach recruits info needed
45	1	A little less discipline and more practical.
46	1	Kick people out who don't belong here
46	1	Quit punishing people who did nothing wrong
1281	2	Treat recruits with respect
1756	2	Treat recruits like adults not children.
2001	3	Reduce the nonsense such as yelling and belittling individuals.
1793	3	Build up recruits earlier to give more confidence
8876	3	"There should be a way to find a more productive way to motivate without using 100% fear."
9354	3	Instructors need to focus on training instead of playing games. As a class no one feels this training prepared us for becoming a police officer
7358	4	There are too many baby games in basic training
0231	4	The philosophy is to break down and build back up - I think our class is still waiting to be built back up again.
	4	Spend more time teaching us to be cops instead of punishing us or giving out meaningless homework
6697	4	Treat people like human beings
* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.		

'the discipline I believe is a very important part of my training', and 'the stress allows recruits to face what a police officer could face during his or her career'.

When asked, however, about *what things did you like least about basic training*, the responses from the *control group academy* were voluminous and vehement, thus reflecting sentiments that were echoed during the course of the interviews. Many of the responses included complaints about 'not being treated as an adult', 'being treated as a child for 6 months', and 'treating the recruits as children, yelling and screaming for no reason'. Other responses were more candid and contemptuous with a number of recruits stating that they did not appreciate 'punishment with no teaching value', 'feeling you're walking on eggshells', 'getting yelled at', 'unnecessary degradation', 'being treated like an inmate', 'all the screaming and belittling of recruits is not conducive to learning'. One recruit stated that I did

not like 'being talked down to . . . it was uncalled for; I learned nothing from that; it is not that I don't understand why they do it, its that that type of training is uncalled for and outdated'.

Perhaps the one area where recruits expressed a profound dislike was the disparaging treatment of the entire recruit class for the mistakes and indiscretions of a few. While the recruits acknowledged that the intentions of such 'tactics' were to build comradery, cohesiveness, and teamwork, their collective assessment was that it was not only unproductive and compromised the learning process, but was the root cause of a great deal of contempt and consternation. This was expressed with statements such as 'people were punished as a whole rather than individuals when the group had no control', 'being punished for other people's screw-ups', 'too much time and energy spent playing baby games', 'having to pay for another's mistakes . . . too afraid to make mistakes', 'I didn't like being treated less than an adult. I understand team concepts, but individuals who deviate should be made responsible individually'.

Further undermining the intended design of discipline and the notion of *stress inoculation* was the perception by recruits at the *control group academy* that some of the instructors were over zealous. This was suggested by statements such as 'the instructors are only on a power trip and enjoy being tough guys to the recruits', 'instructors are good teachers but think they're better than you', and that they didn't appreciate 'listening to some instructors who care more about pounding their chest than anything else'. While the *experimental group academy* also expressed their dislike for some of the discipline, their remarks were significantly tempered compared to the comments of the *control group academy*. Their comments suggested that 'too much time was wasted on games', 'time that could have been used on practical training was wasted on head games', 'at times, excessive discipline was enforced to only waste time training [sic]', and 'some of the ways that we were remediate[d] for making mistakes. I understand the need for it, but I felt like some of it wasted training time'.

213

With regard to the question *what changes and/or recommendations would you make to improve basic training*, the tenor of the responses by both groups were consistent with those in the first two questions. The *control group academy's* recommendations consisted of statements such as: 'stop the nonsense discipline', 'more constructive discipline', 'treat people like humans so they can learn', 'quit punishing people who did nothing wrong', and 'there should be a way to find a more productive way to motivate without using a 100% fear', 'the philosophy is to break down and build back up – I think our class is still waiting to be built back up again', and 'instructors need to focus on training instead of playing games. As a class no one feels this training prepared us for becoming a police officer'. Responses on the part of the *experimental group academy* included statements such as 'more hands-on, less discipline', 'drop the Marine boot camp idea around week 11-15', 'less time spent on un-needed discipline', 'train us as police officers and not soldiers; this allows for more learning', 'I feel that after week 10, cut the military discipline. Your last 14 weeks should be gaining as much knowledge as possible', and, 'spend less time worrying about drill movements and more time on teaching about problems we will face in the field'. In sum, while the recruits understood the need for and the importance of structure, discipline, and *stress inoculation*, it was the means by which they were brought to bear on the recruits that became a major point of contention at both academies.

		Table: 3-12
		Experimental Group: Post-Training Questionnaire **Thematic and Categorical Responses to Open-Ended Questions**
Recruit ID	Group	**Stress and discipline**
		What things did you like best about basic training?
9	1	The stress allows the recruits to face what a police officer could face during his or her career
5635	2	I enjoy some of the discipline. A certain amount is always good.
3977	2	How training progressed and how discipline played a role in our duties as a police officer
8803	2	The discipline challenged me
		What things did you like least about basic training?
27	1	Some of the discipline
9	1	Military aspect of drill and training
4090	2	Too much time wasted on games
8669	2	Discipline, screaming was not necessary. In week 21 I feel we should have been treated like cops.
5635	2	Yelling and screaming, but I realize it was part of the learning experience.
3977	2	Time wasted on discipline rather than training
3475	4	Time that could have been used on practical training was wasted on 'head games'
5393	4	At times, excessive discipline was enforced to only waste time training
8413	4	Too much time wasted on un-necessary discipline and mind games. The time can be better spent on educating and preparing us for our jobs
1400	4	Some of the ways that we were remediated for making mistakes. I understand the need for it, but I felt like some of it wasted training time
		What changes and/or recommendations would you make to improve basic training?
3483	2	More hands on, less discipline
6144	2	Lessen the discipline towards the end of training. Make recruits feel more like officers
2238	2	Instructors saying "good job" more often when it is deserved.*
1831	2	Refrain from the personal attacks until the recruits have assimilated
1831	2	The structure and military based instruction were appreciated and understood
1978	3	Don't mold us as robots with the military discipline. Just teach us how to be good police officers.
2622	4	Less time spent on un-needed discipline
3356	4	I feel that after week 10, cut the military discipline. Your last 14 weeks should be gaining as much knowledge as possible.
3900	4	Train us as police recruits and not soliders; this allows for more learning.
4380	4	I admire the program. Maybe there could be a "build up period". Today we are being "torn down" and we hit the streets in 4 weeks. It's tough to be an effective officer if your confidence is still wounded.
8728	4	As for the discipline, the yelling/screaming should be focused on those who need it. I like the discipline, but yelling for every minor thing gets old after some time.
9167	4	Less discipline. Because many law enforcement officers that I spoke with told me that when they think back to their training in terms of discipline it was all games. I agree, I do not believe the discipline has helped me learn at all. I was, and still am a disciplined adult.
9739	4	Drop the marine boot camp idea around week 11-15
0513	4	I believe that in the beginning everyone should be punished and discipline but when it is the same recruits who are messing up and getting in trouble, those recruits need to be dealt with individually.
* Note: The foregoing verbatim responses are thematically representative of recruits in this group and category. Responses with an asterisk (*) are also cited in other tables due to their applicability.		

Considering the goals of triangulation and the heuristic nature of this study, the observations of the two academies served not only to corroborate the findings of the foregoing interviews, but to identify distinctive characteristics and/or differences between the two academies, thus providing a concurrent indicator of the reliability and validity of the measurements. While the importance of using multiple instruments can serve to identify inconsistent or contradictory data, this was not the case with regard to the observations that were undertaken. To the extent that the observations served to corroborate and affirm the findings of the interviews, care was taken to avoid replication and redundancy, while at the same time underscoring points significant to the analysis of data. Furthermore, given the parallels that exist between the two academies relative to the six thematic and categorical areas upon which the operational definition is based, the observations from the two academies are presented simultaneously, thus allowing for comparisons between the two. Furthermore, considering that the findings and analysis presented in the foregoing interviews were consistent with the subject observations, the following has been abbreviated to avoid unnecessary redundancy.

At first glance, to someone unfamiliar with basic police training, it would appear that the *control* and *experimental group academies* were similar in nature considering that the recruits were similarly dressed in standard kaki uniforms, sported close cropped 'buzzed' hair cuts, and moved about in military formation, i.e., standing 'at attention', marching in cadence, and responding to verbal commands in the affirmative and negative, i.e., 'yes sir, no sir', etc. Despite these initial impressions, and setting aside that the two academies shared a common curriculum as set forth by the *New Jersey Police Training Commission*, the differences between the two academies became distinctively clear over the course of the two year study, so much so, that it served in the identification and development of the six thematic and categorical content areas that served as the basis for the operational definition.

With regard to the operational and procedural dynamics observed at the two academies, it is important to point out that each academy had a cadre of four to six full-time lead instructors whose primary responsibilities were to oversee and facilitate each day's training events. While this cadre of instructors all taught subjects in their respective areas of expertise, the majority of instruction throughout basic training involved the use of adjunct faculty from various outside criminal justice agencies who possessed experience and expertise in the areas that they were 'teaching'. As such, the cadre of lead instructors would coordinate and oversee nearly every aspect of the recruits' daily activities, including the introduction of the adjunct faculty. Given their ubiquity throughout the training process, this core group of instructors tended to characterize in their presence and attitudes the essence of each academy's philosophy and practices. These, in turn, not only influenced the organizational culture, but to some extent the attitude and practices of the adjunct faculty. In this regard, it is important to point out that the adjunct faculty, notwithstanding their own styles of 'teaching', was influenced to some extent by the philosophical framework of the two academies.

Institutional and instructional philosophy

Although noted in earlier discussions, it nevertheless bears repeating that an academy's philosophy not only represents the nature and purpose of its mission and vision, but reflects in great part, its values, principals, and ideals, and so permeates all aspects of the training process. Whether by design, default, or a combination thereof, over the course of this two-year study it was readily apparent that the mission and philosophy of the two academies, in both principle and practice, influenced nearly every dimension of the training process. Perhaps the most immediate reflection of the two academies' philosophies was evident in the first week of training orientation during which recruits were introduced to the academy, its faculty and staff, its mission, and the means by which the training would be facilitated. While both academies undoubtedly wanted to set the 'right' tone to the extent that basic training would require hard work, perseverance, and discipline, there were differences that, in

retrospect, served to predict and underscore the philosophies that would guide and underpin the two programs.

At the *control group academy*, it was indisputably evident that it subscribed to a traditional, pedagogical, military model of training where it was clear that the training instructors were in control and that communication was one-way, from the 'drill' instructor to the recruit. The tone was autocratic: orders and commands were demonstratively loud, clear, and non-negotiable; there was strict and at times, overbearing discipline where recruits were quickly indoctrinated in military protocols, i.e., standing at attention, eyes forward, hands-at-the-side, etc. Replies by recruits to questions and demands from the instructors were, characteristically, always wrong, and in response to which there would typically be loud and offensive rebukes and reprimands, which were perceived by many, if not most, to be demeaning, humiliating, and intimidating. When some recruits appeared to be overwhelmed or confused, demands such as 'drop down and give me twenty' (meaning pushups), would serve as a consequence, with little or no explanation. Given the nature of policing and the stereotypical perception that basic police training is similar to military boot camp, some recruits argued that it was naïve on the part of others not to expect such treatment. In fact, during the course of informal conversations with some recruits, they stated that 'it's just a game to see if they can break us'; while others were patently uncomfortable and overwhelmed by the process, and as a consequence, resigned from the academy and their pursuit of a police career. When such resignations or dismissals occurred, it was the practice at the *control group academy* to conspicuously post in the front of the main lecture hall, the crossed out names of such recruits. Labeling them as those who 'washed out' or 'couldn't hack it', this running list would remain posted throughout the duration of that particular class to serve as a reminder to others. While the rationale on the part of the academy personnel was to build an *esprit de corps* among the recruits from the perspective that 'I can make it and I won't quit', many recruits expressed displeasure and discomfort over seeing the names of their former friends and colleagues on display, labeled as failures.

Other common practices observed that underscored the *control group academy's* philosophy included the requirement that whenever superior officers and outside lecturers would enter a room, the recruits would rise, stand at attention, and loudly chant their class number along with a welcome greeting. When recruits would encounter superior officers or outside guests in a hallway, they would shout out a command to 'make way', thus prompting all recruits to back up against an outer wall and stand at attention until that person passed. Unannounced uniform inspections were common, which included a requirement for keeping their heads shaved; female recruits were required to keep their hair cut short and trimmed over the ears. Other observations which occurred repeatedly during the middle of class would involve lead instructors barging unannounced into the classroom screaming and demanding one or several recruits to exit the room for some purported infraction. The reverberations from such actions were evident as recruits were observed making subtle eye contact with one another and passing whispered comments when the instructor left the room. The recruits seemed to know fair well that they could be the next target of such an outburst for some unknown infraction for which the entire class would be held accountable. A common complaint expressed by recruits was that the entire class would bear the consequences of a few; while the rationale on the part of the lead instructors was that group discipline helps to coalesce a sense of team spirit and build comradery, it was a major cause of consternation and resentment. Meanwhile, the instructor whose class was interrupted was left to reorient the recruits and continue his or her presentation.

While not to suggest that there were no times when instructors were civil, carried on regular conversations with the recruits, and even shared jokes, often such times were infrequent and wholly unpredictable. More often than not, when the core group of instructors at the *control group academy* appeared to be sincere and benevolent, the recruits remained guarded in their behavior. On a number of occasions when the instructors appeared to befriend recruits with humor and conversation, the latter would often be rebuked with statements such as: 'who said you could laugh', 'who said you could talk to me', and 'I am

219

not your friend'. The notion that such actions on the part of the instructors served to prepare and condition recruits for the stress and demands of police work and 'weed out' those who could not withstand such rigors is a factor addressed later in the section and in the final chapter's discussion.

Perhaps the one and most important factor that differentiated the two academies from one another was that the *experimental group academy* actively and consciously sought to advance their mission and philosophy. In doing so, they made a point of explaining and reinforcing it to its faculty and staff, as well to its recruits throughout the training process. This was a practice that was conspicuously absent at the *control group academy*. In advancing this approach, the *experimental group academy* provided both the recruits and its faculty with a written manual that explained its philosophy and the methodologies by which the training would be facilitated. It made a point of explaining the nature, purpose, method, and reasoning that supported the training process. While the *experimental group academy* in some ways resembled a military model, considering that its recruits were required to participate in drill type exercises and were expected to conform to some degree of military protocol, it was evident during the first week of training that the tone and tenor of its lead instructors were distinguishably different than the *control group academy*. These differences became more evident when the recruits were explained in great detail, not just the goals and objectives of basic police training, but the nature and reasoning for the methodologies employed. The mere fact that recruits were provided an explanation of the principles of adult based and multi-sensory learning, and were encouraged to ask questions with regard to any aspect of the training process, served to reinforce its andragogical philosophy and set the tone for the recruits. As the observations progressed over time, this became an important factor, for while the recruits did not necessarily agree with many of the practices employed, particularly with regard to the inculcation of stress and discipline, they understood its reasons and rationale.

Considering the nature of the *experimental group academy's* mission statement, it was clear that its philosophy supported and was expressed in every aspect of its training program, which not only placed a high value on adult based and experiential learning, but made a strong commitment to the principles and practices of community-oriented policing. In a practical manner, the academy's philosophy led to explaining not only the academy's mission, goals and objectives, but its values, principles, methodologies, and expectations. Perhaps most importantly, the academy's philosophy required explaining *how* and *why* the training process would proceed, including the structure and discipline necessary to succeed in the program. It further addressed the reasons and importance of the cognitive, affective, and psychomotor dimensions of training and explained that the stress imposed on them was engineered by design with the intent of preparing them for the challenges of police work. Its philosophy not only served as a guidepost to recruits and the academy's faculty and staff, but served to underscore the overall tone, climate, and environment, as it drove and shaped the delivery of the curriculum, the training/learning process, and the objectives for achieving the outcomes of the training process.

By contrast, the *control group academy* neither acknowledged its mission or philosophy, nor did it make any conscious effort to address or explain it; rather, consistent with its past practices, it was explicit that basic training was a wholly prescriptive, conforming, and non-negotiable exercise, and as such, no explanation was proffered or warranted. Principally, the mission statement of the *control group academy* appeared to exist in name only. It did not represent any philosophical insight or guiding principles; rather, it subscribed by default to a traditional, pedagogical, military model of training.

To summarize, the latent philosophy of the *control group academy* espoused a traditional, pedagogical, military model of training; one that was principally prescriptive in nature and teacher centered with its focus on preparing recruits for the physical challenges, dangers, and perils of policing. The philosophy of the *experimental group academy* by contrast, subscribed to more of a collegiate, humane, andragogical, student-centered, holistic,

and integrative philosophy. The philosophy placed a strong emphasis on community-oriented policing and developing the skill sets and competencies recognized and espoused by progressive police professionals and society at-large.

Affective variables: climate, tone, and environment

Over the course of this two-year study it was apparent that the training processes at the two academies were clearly influenced by their respective missions and philosophies. These, in effect, set the overall climate, tone and environment at the academies, the latter more so in terms of mood rather than physical features. Perhaps the single most important manifestation of the two philosophies that resonated throughout the training process was in the attitudes and disposition of the two academy's faculty and staff, and perhaps most importantly, in the recruits themselves. Robbins (2000: 381), addressing the influence of attitudes on behavior and performance, explains that attitudes comprise cognitive, affective, and behavioral components and represent evaluative statements about how one feels about something, whether objects, people, or events. These attitudes are discussed in greater detail in the last chapter.

Notwithstanding the normal amount of stress and discipline associated with basic police training, there was a discernable difference in the overall mood that resonated within the two academies. This was a dynamic that may have escaped the casual observer, although it was a dimension that became increasingly apparent over the course of the study. While it was clear to the recruits at both academies that instilling some form of structure and discipline aided in their training and preparation, it was the manner and spirit in which such discipline was instilled that distinguished the two academies. At the *experimental group academy* it was obvious that its design was to instill in its recruits a sense of self-discipline, responsibility, and structure that would encourage teamwork, comradery, and the continuing capacity to work within a quasi-military organizational structure. While outside the classroom, there was more of an emphasis on drill and discipline, i.e., in terms of attending to military decorum, uniform inspections, marching in cadence, etc., within the classroom the atmosphere was friendly,

collegial, engaging, collaborative, and respectful; one where the recruits felt comfortable, uninhibited, and engaged by the activities of learning. Had it not been for the kaki uniforms and the short cropped haircuts, the climate, tone, and environment resembled a typical college classroom that fostered active learning. As such, there were many times, given the controversial nature of the topics covered within the curriculum, that there was heated debate and differences of opinion among the recruits and instructors, which not only served to enhance their mutual respect, but served to build comradery and critical skill sets upon which the recruit would inevitably rely. Interestingly, the climate and tone was such that, once the academic classes were completed and the recruits entered another component of the training process that necessitated more regimentation and disciplined activities such as drill, self-defense or firearms proficiency, the tenor of the academy's faculty and staff would transition to being more leadership oriented. Such changes in tone and posture were facilitated in such a way that the recruits came to understand that changing situations and circumstances necessitate adaptation, while at the same time such changes do not imply the need for a change in one's attitude. While there were times when the climate and tone at the *experimental group academy* became tense and stressful relative to the nature of the training situation, the overall atmosphere remained positive, collaborative, and respectful.

By contrast, while not to suggest that learning did not occur at the *control group academy* or that there were no times when the recruits and instructors engaged in some degree of congeniality, the overall climate, tone, and environment appeared chronically uncomfortable, tense, anxious, and stressful. One example, which was indicative of behaviors observed throughout the training process, involved the actions of a lead instructor who literally burst through the doors of the main lecture hall where recruits were assembling at the beginning of the day. Yelling out the last name of a recruit about some purported infraction, he approached the recruit in a rage of anger and proceeded to shove all of the trainees' books, binders, notepapers, and other personal effects off his desk and across the floor. The recruit, apparently startled by the instructor's actions, had to stand at attention while the instructor

223

continued on a tirade about the recruit's alleged transgression. Having endured the wrath of the instructor's reprimand, the recruit was left to collect his personal effects off the floor unassisted by the other recruits who appeared willing to assist, but were not permitted to do so. The combined sense of tension, fear, anger, and contempt for the actions of the instructor, irrespective of the recruit's culpability, resonated for a good portion of the morning, creating a climate that undermined any form receptivity toward learning.

Although the study did not allow for full-time observations, there were very few times during visits that some degree of yelling, screaming, demeaning, humiliating, and disrespectful treatment did not occur. It is, however, important to note that there was never a time when recruits were observed being physically abused. The underlying principle appeared to be reminiscent of a *break them down and build them up* mentality common to military boot camp training – one that was predicated on operating in an autocratic environment with a strict adherence to a chain-of-command organizational structure and preparing them for the *dangers of the jungle*. While this orientation was principally subscribed to by the cadre of lead instructors and consequently set the tone for the entire training process, it had a residual effect and influence on the adjunct faculty. While some made a conscious effort to ignore such behaviors and did not want to send contradictory messages to the recruits, others would shake their head and roll their eyes in disagreement. Still others perceived it as a cue to mimic similar behaviors.

Finally, it is also important to point out that the *experimental group academy* held regular faculty meetings to ensure continuity in the integration and delivery of the curriculum and to brainstorm new and existing instructional strategies. Not only did this provide an opportunity for ensuring operational continuity and a collective orientation to the academy's philosophy, but it served to re-enforce a positive climate, tone, and environment. By contrast, because the *control group academy* was not in the practice of conducting faculty meetings, its instructors did not have the opportunity to brainstorm or collaborate on the curriculum, teaching methodologies, or the academy's philosophy. As a consequence, the adjunct faculty

assimilated to the resident climate, tone, and environment that existed, which was not only predicated on a traditional, pedagogical, military model of training, but in many respects did not place a priority on the process of learning. Also worth noting was the lack of an effective orientation towards policing generally. This lack of an orientation appeared to be out-of-step with the needs, interests, demands, and expectations of society; particularly considering the emphasis that continues to be placed on the philosophy of community-oriented policing which espouses building friendly, collaborative partnerships with the community.

Self-concept and self-directedness

While the nature of basic police training and the demands of its curriculum precluded recruits from enjoying total and unrestricted autonomy, there were, however, opportunities within the training program to appeal to the recruits' sense of self-concept and to engage in self-directed activities. While such initiatives were observed at both academies, they were much more evident at the *experimental group academy* than at the *control group academy*. At the *experimental group academy*, the importance of recognizing the self-directing needs of the adult learner was best exemplified by the mutual respect and understanding that existed between the faculty and recruits. While both recognized and acknowledged their respective roles in the training process, the relationship between them was engaging, collaborative, and respectful. Not only were the recruits encouraged to participate in a host of activities, but the instructors continuously engaged the recruits so that they became active participants in their training activities. Many times when questions were posed by the recruits and discussions would prompt the need for further research on a particular subject, the instructors would either request or assign students to follow-up on such matters and report back to the class. Many times the instructors would facilitate breakout or focus groups to brainstorm solutions to difficult or controversial problems typically encountered by the police; many such dialogues were characterized by combinations of uninhibited humor, laughter, and/or highly charged debates – all of which enhanced a recruit's sense of self. Similarly, the recruits were encouraged to participate in the planning and development of experiential learning activities.

225

This not only engaged them as active participants in their own learning experience, but allowed them to co-facilitate the entire training process.

Other initiatives involved the recruits in a host of extra-curricular training activities, many of which took them off-campus and into the community; these included volunteering in charitable fund-raising, community involvement such as coaching, and the development community service projects. Two such programs were entitled *Careful Crossings* and the *Community-Oriented Policing Capstone Project*. In the *Careful Crossings* program, recruits were assigned to different schools to monitor school children crossing busy intersections. During such times, the recruits kept a journal of their observations and conversations, not only with the children, but with parents, teachers, local residents, and other people that frequented the area. On a weekly basis, the recruits would share their findings with one another expressing amazement at the friendships and relationships that they developed and the wide range of information that they acquired about the community – from what baseball cards were being traded, which teachers were popular, parental concerns, to local gossip in the neighborhood. The second program involved the *Community-Oriented Policing Capstone Project* in which recruits worked with different community groups in identifying local problems and solutions. Not only did such initiatives underscore the conceptual and operational significance of a community-oriented policing philosophy, but served to engage and empower recruits, thus appealing for their sense of autonomy and self-concept.

In contrast, given the traditional, pedagogical, and military model orientation of the *control group academy*, whose faculty and staff principally controlled and regulated all aspects of the training process, its recruits were afforded limited input into the training process. While its recruits reflected a high degree of energy, enthusiasm, and initiative, and while on many occasions they attempted to engage its faculty and staff, their opportunities for self-directedness was generally stifled, in great part, due to the perceived loss of control on the part of the faculty and staff. Ironically, there were some occasions when the recruits coalesced as a group and took the initiative in a number of self-directed activities, however,

226

such actions appeared to be more out of frustration with the autocratic stance of the lead instructors. While the recruits may have realized some sense of autonomy and/or intrinsic satisfaction from these exercises, the spirit and motivation which inspired them was diminished because of the lack of collaborative support it received from the core group of lead instructors. While the instructors suggested that such a response represented their design for building comradery and developing teamwork (undoubtedly an important component of basic training), based on the feedback received from the recruits and the tenor of their responses, any such development of teamwork or comradery was more in spite of the actions of the instructors rather than based on their encouragement.

Integration and facilitation of curriculum

As pointed out, although both academies were required by State law to adhere to the curriculum established by the *New Jersey Police Training Commission*, the manner and process through which the curriculum was 'delivered' was principally left to the discretion of the respective academies; hence, while the *Commission* prescribed *what* was to be 'taught', it provided no direction or mandate in terms of *how* it should be 'taught'. Similarly, despite the curriculum's comprehensiveness in terms of content areas, each academy was left to develop its own form of testing and assessment. Accordingly, the *control group academy* fundamentally followed the sequence and structure set forth by the *Police Training Commission* with little, if any, deviation. Its curriculum, therefore, was presented in a linear and sequential manner with no effort or design to connect, relate, or integrate any of the other parts of the curriculum, with the exception, however, that when certain experiential learning activities were used, which is discussed hereafter.

Another issue of concern dealt with the matter of assessments, i.e., measuring and evaluating whether the recruits successfully achieved the intended learning outcomes. Beyond what was identified in the more than 1000 performance objectives, no standardized testing existed for any of the units within the curriculum; rather, the responsible for testing was left to the discretion of the instructor who 'taught' the various subjects and blocks of

instruction. Accordingly, most of the assessments involved some form of written objective testing, such as multiple choice and true and false questions. With the exception of experiential learning activities and psychomotor activities such as firearms proficiency and self-defense, there were few times when assessment in the academic content areas involved written essays, discussions, or the case method. Given the interrelated and interconnected relationship between many, if not all of the components of the curriculum, and considering the affective, cognitive, and psychomotor dimensions that permeate the learning process, it was surprising that no concerted effort was made to coordinate and integrate the curricular elements. While certain topics such as criminal investigation was taught by a team of instructors who were able to coordinate their instruction, when that particular subject was completed, their was no mechanisms that served to bridge or transition one such discipline to another, either by way of lesson plans or communication between instructors. Further underscoring the simplicity of the *control group academy's* methodological approach was the independence with which each of the curricular units was presented; rather than integrating the various conceptual and disciplinary topics in terms of the common contexts that they might share, they were presented as separate and independent constructs. Interestingly, during the course of the observations, there were numerous times when recruits would pose questions relating to other components of the curriculum that spurred dialogue. While the instructors did their best to field the questions, most were unfamiliar with the other components of the curriculum and accordingly, explained that such subject matters would be discussed in greater detail at a later point. Another notable observation was the lack of continuity in the teaching style of various instructors; while some were indeed excellent teachers and excelled at engaging the class, most others were teacher-centered and subscribed to the method of direct lecturing, thus limiting dialogue between the instructors and the class at-large.

By contrast, it was evident that the faculty of the *experimental group academy*, notwithstanding idiosyncratic differences in their instructional techniques, shared a similar

subscription and an orientation to principles and practices of andragogy and community-oriented policing. This was attributable in great part to the director's recruitment and selection of instructors that shared similar student-centered and dialectic philosophies. Furthermore, as a consequence of the regular meetings and informal discussions that the director held with the faculty and staff, a rapport existed among all the faculty that served to enhance open dialogue and brainstorming opportunities on the content, continuity, and delivery of the curriculum. The practice of peer reviews that involved the collaborative critique of one another's lesson plans, teaching/facilitation techniques, grading rubrics, and regular assessments of student learning and performance was a regular practice. This was further enhanced by soliciting feedback from recruits twice during the course of the basic training using voluntary and anonymous questionnaires. While the *experimental group academy* did not adhere to a published curricular design, it was evident that the curriculum was the product of a carefully planned and orchestrated process for facilitating the training process. The curriculum was designed so that it proceeded chronologically through many interrelated topics in a logical fashion, so that the foundations for understanding the later topics were established in the coverage of the earlier subject matter. Effective communications skills, as an example, given its importance in all aspects of policing (whether verbal or written), was a topic that was introduced early in the curriculum and threaded through almost every aspect of the training process. Similarly, because an understanding of criminal law was essential to many other components of the curriculum, such as in criminal investigations and the laws of arrest, search, and seizure, its content and purpose was addressed early in the curriculum. This practice was further re-enforced by the faculty who not only explained the meaning and relationship between the different parts of the curriculum, but how each unit related to the role and responsibilities of being a police officer.

Stark and Lattuca (1997) who address the importance of academic planning, suggest that eight factors should be considered when planning a curriculum, namely: a program's *purpose, content, learners, sequence, instructional processes, instructional resources,*

229

evaluation, and *adjustment*. While no specific reference is made to these or others author's curricular planning models, it was apparent that these components were duly considered and incorporated as part of the *experimental group academy's* program. Indeed, beyond the logistical implications that such considerations had in ensuring the requisite integration and facilitation of the curriculum, its effect on learning was evident not only in terms of the flow and synergy that characterized the whole of the training process, but in the attitudes, receptiveness, and mutual respect that were shared among the recruits and faculty alike.

Use and integration of experiential learning

While the use of experiential learning activities was observed at both academies, their application, frequency, method of integration, and degree of sophistication were radically juxtaposed. At the *control group academy* the use of experiential learning, whether it involved the use of case scenarios, simulations, practical exercises, role playing, and other similar types of hands-on activities, were utilized sparingly and were principally limited to the models and recommendations provided by the *Police Training Commission*. While both the full-time and part-time instructional staff developed a variety of hands-on learning activities – as was the case with the unit that dealt with domestic violence which involved the use of outside actors – overall, the use of experiential learning activities were limited and were often conducted with little preparation. Just as there appeared to be a lack of any substantive academic plan providing for the deliberate integration and facilitation of the academy's overall curriculum, little, if any consideration was given to coordinating the scenarios with other learning units or learning processes. A minimal consideration of the nature of curriculum design tells us that there are times when certain forms of experiential learning activities better serve the interests of learning and training than others. In the case of the *control group academy* these logical and temporal relations were not taken into consideration as they were in the *experimental group academy*.

According to the *control group academy's* mission statement, experiential (hands-on) learning was identified as an integral component of its mission, so much so, that it was clearly

articulated as one of its means toward achieving its goals and objectives. As noted, during the course of the interviews with director, he explained that he developed what he called the *Integrated Problem Solving Model* (IPSM), which by design, served to integrate some form of an experiential learning activity into as many components of the learning/training process as possible. Depending on specific learning objective(s), the *Integrated Problem Solving Model* utilized case studies, brain-storming sessions, demonstrations, case scenarios, role-playing, simulations, abbreviated, mini' practical exercises, and what he described as 'full-blown, day-long hands-on practical exercises'. As part of the process for enhancing, measuring, and synthesizing the acquired knowledge, understanding, skills, attitudes, behaviors, and competencies, each scenario was designed to challenge and measure a recruit's critical thinking, problem-solving, and decision making abilities in situations that a police officer would typically encounter in the field. As in other observations made by this author at a wide range of police and military training academies, trainees when participating in well planned and orchestrated training scenarios experience all the stress, anxiety, fear, exhilaration, and sensations of a real experience. When observing the 'full-blown' scenarios at the *experimental group academy* they were exceptionally realistic. The scenarios appeared to require the recruits to synthesize all of the learning they had acquired during their training, thus requiring skills in the areas of critical thinking, problem solving, decision making, and effective communication skills. Following such exercises, the recruits and instructors would participate in constructive and collaborative critique and evaluation of their actions which often lead to developing follow-up scenarios. Based on the data acquired from the interviews, observations, and questionnaires, the use of experiential learning was considered the most important factor in training and was a crucial factor in consolidating those learnings into mature competencies.

Stress and discipline

While the inclusion of some degree of measured stress and discipline is generally accepted as an important dynamic within basic police training, the ways, means, and spirit

with which it was incorporated as part of the training process appeared to have had a critical impact on learning, as it did on the morale, attitude and overall disposition of the recruits at the two academies. Recognizing that the nature of police work will inevitably expose an officer to a wide array of physical and psychological challenges, the concept of *stress inoculation*, i.e., conditioning recruits for the physical and emotional stresses related to the real and potential threats and dangers endemic to police work, serves as an important component in basic police training (Abrams, Puglisi, and Balla, 1998: 334-340). Likewise, indoctrinating recruits to appreciate the importance of personal and professional discipline serves to prepare them not only for working within the quasi-militaristic environment of a police organization, but instills in them the self-discipline necessary to fulfill the duties and responsibilities of a police officer. While common forms of institutionalized discipline involved demands and expectations related to punctuality, preparedness, completion of homework and study assignments, adherence to dress codes, and maintaining proper physical conditioning, it was also the means by which stress and discipline were evoked by the two academies. It was also their mode of evoking that stress that uniquely distinguished them from one another.

Given the *control group academy*'s subscription to a traditional, pedagogical, military model of training, its identity and reputation, among many things, was one that was strict and discipline oriented; so much so, that its faculty and staff took pride in being considered a tough, discipline oriented, and no-nonsense academy. It bears repeating, however, that there very few times during the two years of observations that some form of loud and derogatory yelling and screaming on the part of the core group of lead instructors did not occur at the *control group academy*. While its intended purpose may not have been to be disrespectful, its effect was perceived as such.

Although on an individual level, the instructors were personable and exceptionally accommodating with regard to assisting in this study and presented themselves professionally, both in appearance and in terms of military discipline, the contrast between how they

232

interacted with the recruit class and others was striking. While it was clear that they were to

some degree role-playing, there were times where they appeared to relish some of its

dimensions. Based on the observations and the findings of the other data, the orientation and

mind set of the instructors was influenced by three factors: (1) the traditional and

institutionalized autocratic and discipline oriented practices of the academy, (2) the belief that

such practices would prepare and condition recruits for the dangers and challenges of police

work, and (3) the lack of empowerment on the part of the director to effect change and/or

exercise his managerial prerogatives. This last factor seems to have the effect of granting the

instructors unabated autocratic power over the recruits. As a consequence, during the course

of their training, the recruits appeared to be and expressed being uncomfortable, anxious,

agitated, fearful, angry, contemptuous, and resentful of their treatment; a major complaint

being that they were treated as children and without respect. Their major complaint was not

that they did not understand the purpose behind or the reasoning for incorporating some

degree of stress and discipline into the training process, rather that it was extreme,

imbalanced, relentless, and that it undermined its purported aim of stress inoculation. The

negative effects of the treatment were felt even as the class approached graduation; a time

when instructors and recruits typically bond, recognizing that they have both accomplished

their respective goals and share an even footing as police officers.

While the *experimental group academy* was not devoid of stress and discipline, it was

evident that its application was, overall, a measured component of the training process, even

though that there were times when the recruits were of the opinion that it was unreasonable

and overstated. Overall, what distinguished the two academies from one another was not just

the nature and intensity with which stress and discipline was imposed, but perhaps the

context, reasoning, and explanation for when and how it was imposed. While the

consequence for violating certain rules and regulations and other non-compliant behavior at

the *control group academy* was basic rudimentary negative discipline with the objective of

ensuring compliance, at the *experimental group academy* the consequence for undesired

233

behavior was a corrective action that typically answered a need for additional learning or training.

With regard to the concept of *stress inoculation*, i.e., conditioning recruits for the physical and emotional stress related to real and potential threats and dangers typical of police work, it was principally incorporated into the experiential learning activities. These activities were included in what the *experimental group academy* referred to as the as the *Integrated Problem Solving Model* (IPSM), which served to integrate practical hands-on simulations as an integral component of the training curriculum. Each scenario was skillfully designed to challenge and measure a recruit's critical thinking, problem-solving, and decision making, in situations that a police officer would typically encounter in the field. Despite awareness on the part of recruits that the training scenarios were staged, the simulations were so real and life-like, that they experienced all the physical and emotional stress and demands associated with such circumstances in the field, thus providing an ideal opportunity for developing and integrating the necessary critical thinking, problem solving, decision making, and effective communication skills. Following each of these training exercises, the recruits, instructors, and other participants would critique one another, thus providing for a constructive and collaborative evaluation of their actions.

To summarize, the stress and discipline that existed at the two academies were contrary to one another in both design and practice. While the *control group academy* perceived stress and discipline as a critical component for preparing recruits for the physical and emotional rigors of police work, the *experimental group academy* acknowledged its importance for developing tactical vigilance and awareness. At the same time, the *experimental group academy* recognized that if such training created an excessive concern over real or perceived threats, their ability to function within society would be severely inhibited.

And finally, as noted earlier, social research involves identifying, measuring, describing, explaining, and predicting social and behavioral phenomena. As noted at the

beginning of this chapter, Creswell (1998: 139), addressing social research, suggested that 'analyzing text and multiple forms of data present a formidable task' and that the researcher often 'engages in the process of moving in analytic circles rather than in a fixed linear approach'. Referencing Creswell, Barclay (2001:57) wrote that in 'the heuristic process, the researcher has a special perspective on the entire study that allows him or her to evolve the design as the study proceeds', explaining that 'data analysis is continuous and enables a researcher to work simultaneously with both the process and the product'. Based on the data acquired from the foregoing interviews, observations, and responses, an andragogical instructional methodology is a more effective means for preparing recruits than the traditional, pedagogical, military model of training common to many police academies.

Part II: Quantitative Analysis

Analysis of Demographic Data

This study included 324 participants from two police training academies located in northern New Jersey, USA. Of the 324 volunteer participants (police recruits), 187 were enrolled in the *control group* (*n* = 187, 57.7%) and 137 were enrolled in the *experimental group* (*n* = 137, 42.3%). Table 3-1 presents the demographic data for the overall sample, as well as the demographics aggregated by the two study groups. The majority of the overall sample was comprised of males (86.4%), between the ages of 23 and 27 (48.1%), with some college education (38%), most of whom had no military experience (82.7%). The demographic data reveals little variation between the *control* and *experimental groups*. Using a cross-tabulation with chi-square procedure to examine the demographic characteristics between the two groups, no statistically significant differences were observed among the demographic factors collected (see Table 3-13). Despite an inability to randomly assign participants, the study groups were well-matched on key demographic variables of interest.

Because the study participants within both the *control* and *experimental groups* were examined at different points in time during the course of the two year study, a cross-tabulation and chi-square procedure was again employed to determine sample equivalence among study participants recruited at different times during the study. In these analyses, participants from each of the four possible study periods were collapsed, i.e., the *control* and *experimental groups* were combined and were compared on collected demographic variables. The results reflected in Table 3-13, revealed no significant differences among the four groups when compared on gender ($X^2(3) = 3.82$, $p = 0.28$), age ($X^2(12) = 6.93$, $p = 0.86$), years of education ($X^2(12) = 12.4$, $p = 0.42$), or military experience ($X^2(3) = 0.81$, $p = 0.85$).

Table: 3-13

Sample Demographic Characteristics Aggregated by Study Groups (N = 324)					
Demographic	Total Sample (n = 324)	Experimental (n = 137)	Control (n = 187)	X^2	p
Gender				0.69	0.41
Male	280 (86.4)	122 (89.1)	158 (84.5)		
Female	27 (8.3)	14 (10.2)	13 (7.0)		
Age				5	0.29
18-22	53 (16.4)	28 (20.4)	25 (13.4)		
23-27	156 (48.1)	68 (49.6)	88 (47.1)		
28-32	64 (19.8)	23 (16.8)	41 (21.9)		
33-37	30 (9.3)	14 (10.2)	16 (8.6)		
38-45	4 (1.2)	3 (2.2)	1 (0.5)		
Education				7.71	0.1
HS	86 (26.5)	30 (21.9)	56 (29.9)		
HS & Vocational	11 (3.4)	7 (5.1)	4 (2.1)		
Associates	82 (25.3)	34 (24.8)	48 (25.7)		
Bachelors	123 (38.0)	63 (46.0)	60 (32.1)		
Masters	6 (1.9)	2 (1.5)	4 (2.1)		
Military Experience				0.1	0.75
Yes	41 (12.7)	19 (13.9)	22 (11.8)		
No	268 (82.7)	117 (85.4)	151 (80.7)		

Notes: HS = High School. Values are frequency (%). n = population; X2 = ; p = < 0.001

Analysis of Questionnaires

In examining the questionnaire responses, a repeated measure analysis of variance was used to compare the *control group* to the *experimental group* over time (pre to post-test) on the average of item responses for both the pre and post-study questionnaires. Descriptive statistics for this analysis are presented in Table 3-14. The results indicate that in both groups, average questionnaire responses decreased significantly (*experimental group*: -0.12; *control group*: -0.17) during the course of the study ($F(1, 276) = 14.81$, $p < 0.001$). Despite such decreases, there was no observable effect on training, as change in average questionnaire responses did not vary as a function of group ($F(1, 276) = 0.38$, $p = 0.54$).

Table: 3-14		
Descriptive Statistics: Pre and Post-Test Questionnaire Results Aggregated by Group		
	Experimental ($n = 121$)	Control ($n = 187$)	Total Sample ($n = 187$)
Assessment Period			
Pre-training	3.67 (0.23)	3.72 (0.21)	3.70 (0.22)
Post-training	3.55 (0.52)	3.55 (0.61)	3.55 (0.58)
Note: Values are means (SD)			

Analysis of Individual Item Responses

In the interest of determining whether any significant differences in pre or post training factors may have influenced the effect of the two training methodologies, specific item responses for the pre and post-study questionnaires were examined using multivariate analyses of variance (MANOVA). This application revealed significant group differences for the pre-training questionnaire ($F(30, 275) = 3.31$, $p < 0.001$). Inspection of between group effects for individual items using ANOVA indicated that the *control group* scored significantly higher (greater agreement) than the *experimental group* on items related to anxiety about hands-on training (#9), decision to enter police work based on compensation (#10), confidence in their problem-solving abilities (#27), and confidence in their police preparation (#28). The *experimental group* scored significantly higher than the *control group* on items related to the importance of academy classroom arrangement (#6), attitude toward learning (#15), and belief about level of discipline in basic training (#24). See 'Appendix E' for the *Police Recruit Pre-Training Questionnaire*

Examination of post-training questionnaire responses again revealed significant group differences ($F(30, 254) = 4.79$, $p < 0.001$). Individual ANOVAs indicated that the *control group* reported significantly higher values (greater agreement) than the *experimental group* on items related to the following beliefs: basic training could be improved (#7), it was difficult to understand the rationale behind training activities (#10), academy instructors were genuinely interested in cadet success (#11), and basic training was uncomfortable (#23). The *experimental group* indicated significantly greater belief on the following items: instructors

238

encouraged feedback (#8), academy is more about training than education (#14), and basic training helped to analyze information more critically (#30). See 'Appendix F' for *Police Recruit Pre-Training Questionnaire*.

Analysis of Training and Preparation Factors

At the completion of the post-training questionnaire, the respondents were asked to rate, on a scale from 1 (low) to 10 (high), the overall quality of their academy training and how prepared they were for police work. Means and standard deviations aggregated by group are presented in Table 3-15. ANOVA results indicate no significant differences between study groups for either the quality of training or job preparation items.

Table: 3-15			
Descriptive Statistics: Training and Preparation Questionnaire Items Aggregated by Group			
	Experimental ($n = 161$)	Control ($n = 121$)	Total Sample ($n = 282$)
Item			
Training Quality	8.5 (1.3)	8.3 (1.4)	8.4 (1.3)
Job Preparation	8.2 (1.4)	8.1 (1.5)	8.1 (1.5)
Note: Values are means (SD)			

Analysis of Problem-Based Learning Assessments

In order to examine for group (*control* vs. *experimental*) differences in responses to the problem-based learning assessment scenarios, scores from the two raters were averaged for each scenario. Descriptive statistics are presented in Table 3-16. One-way analyses of variance (ANOVA) were conducted to examine mean response ratings by study group. The results revealed that for each of the four problem-based learning assessment scenarios, the *experimental group* consistently rated significantly higher than the *control group* (Table 3-16). The significance of these findings is important considering that given these quantitative assessments strongly supported the comparative efficacy of an andragogical instructional

methodology in basic police training over that of a traditional, pedagogical, military model of training.

Table: 3-16				
Descriptive Statistics: Problem-Based Learning Assessment Results Aggregated by Group				
	Experimental ($n = 164$)	Control ($n = 119$)	Total Sample ($n = 283$)	$F^{\dagger}$
Questionnaire				
One	2.14 (0.77)	1.38 (0.87)	1.70 (0.91)	57.2[*]
Two	1.88 (0.65)	1.46 (0.64)	1.63 (0.68)	29.1[*]
Three	2.00 (0.70)	1.43 (0.85)	1.68 (0.84)	36.4[*]
Four	2.17 (0.76)	1.54 (0.92)	1.80 (0.91)	37.6[*]

Note: Values are means (SD). [†]Compares experimental and control groups using ANOVA. * Denotes statistical significance between study groups ($p < 0.001$).

Interpretation and Findings

Demographics

Based on the analysis of the demographic data solicited from the participants in the pre and post training questionnaires, the composition of the study's participants as a group were comparable in the categories measured. As reflected in Table 3-13, the data revealed no significant differences among the two groups when compared on gender, age, years of education, or military experience. While factors related to gender, years of education, and military experience may warrant further exploration, any potential relationship or inferences from such inquiries extends beyond the scope of this study; it is sufficient to know that no statistical difference exits between groups on any of the four variables measured.

With age, however, being an important factor in defining and distinguishing the characteristics of an adult learner from a child, it is important to point out that the literature suggests that increased chronological age serves to mark the divide between the two; hence, the older the adult learner, the greater degree of experience and maturity. Considering that the two largest age groups of participants fell into the 23-27 (48.1%) and 28-32 (19.8%) age groups, this mitigates potential questions or biases based solely on a recruit's chronological age or the absence of life experience.

Descriptive Analysis and Findings of Questionnaires

As noted, recruit participation and average responses to the pre and post study questionnaires indicate that in both groups, average questionnaire responses decreased significantly, i.e., a lesser average number of participants answered fewer questions in the post-training questionnaires than in the pre-training questionnaires. This, however, had no observable effect on training, as the change in average questionnaire responses did not vary as a function of a group ($F(1, 276) = 0.38$, $p = 0.54$). This decrease, typical of most recruit classes, can be attributable to an average attrition rate of 5% to 10% per class as a result of resignations, dismissals, or withdrawals due to injuries.

Pre-Training Questionnaire Descriptive Analysis

As the data reveals, no statistically significant difference was found in the mean scores of the pre-training questionnaire of either the *control* or *experimental groups* (Appendix K) suggesting that both groups shared similar orientations to learning in support of Research Question #1 which posits whether the andragogical assumptions that Knowles (1998: 64-69) makes about adult learners apply to police academy recruits. Upon further examination and analysis of each groups' individual responses, there were a number of interesting observations in support of Knowles assumptions, although this analysis is exploratory in nature and was not based on the priori study hypothesis.

Descriptive Statistics: Pre-Training Questionnaire Response Comparisons

Question #	Question	Experimental Group Itemized Responses					Control Group Itemized Responses					Experimental General Response		Control General Response		Coding Category
		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Agree	Disagree	Agree	Disagree	
1	I chose to become a police officer to help others.	64.2	35.8	0.0	0.0	0.0	73.6	25.3	0.6	0.6	0.0	100.0	0.0	98.9	0.6	7
2	I am not looking forward to my basic training experience.	2.9	15.3	13.9	54.0	13.9	4.0	9.8	5.7	61.5	19.0	18.2	67.9	13.8	80.5	6
3	How I feel about my training is important to me.	47.4	49.6	1.5	1.5	0.0	52.9	44.3	2.9	0.0	0.0	97.0	1.5	97.2	0.0	4
4	I learn better when I am under pressure.	3.6	19.0	31.4	40.1	5.8	4.0	29.3	24.1	36.8	5.7	22.6	45.9	33.3	42.5	2
5	Learning is no more important to me today than it was when I was younger.	8.0	8.0	0.7	43.8	39.4	11.5	7.5	1.7	45.4	33.9	16.0	83.2	19.0	79.3	5
6	The arrangement of the academy's classrooms are important to me.	16.1	53.3	21.2	6.6	2.9	11.5	47.1	16.7	23.6	1.1	69.4	9.5	58.6	24.7	2
7	Control over my training should be left with the academy's staff.	16.1	52.6	14.6	14.6	2.2	20.8	54.3	11.0	11.6	2.3	68.7	16.8	75.1	13.9	2
8	Practical training exercises are important to me.	65.7	32.1	1.5	0.0	0.7	59.8	40.2	0.0	0.0	0.0	97.8	0.7	100.0	0.0	3
9	"Hands-on" training exercises make me nervous.	0.7	13.9	6.6	56.2	22.6	1.1	4.0	2.3	54.0	38.5	14.6	78.8	5.1	92.5	3
10	I entered police work for the pay.	12.4	48.9	3.6	32.1	2.9	30.6	52.0	1.7	15.0	0.6	61.3	35.0	82.6	15.6	6
11	An instructor's attitude toward me is not important.	2.9	15.3	10.2	56.9	14.6	5.8	15.0	5.8	52.0	21.4	18.2	71.5	20.8	73.4	2
12	I enjoy learning.	11.7	10.9	0.0	38.0	39.4	12.1	13.9	0.6	38.2	35.3	22.6	77.4	26.0	73.5	5
13	The police academy is more about training than education.	8.8	47.4	16.1	26.3	1.5	4.6	50.3	12.1	28.9	4.0	56.2	27.8	54.9	32.9	
14	Basic training will build my confidence in my abilities to serve as a police officer.	57.7	38.7	2.2	1.5	0.0	60.7	36.4	1.2	1.2	0.6	96.4	1.5	97.1	1.8	1
15	It doesn't matter how I feel about learning, as long as I learn.	0.7	20.4	10.9	52.6	15.3	2.9	28.9	5.8	54.3	8.1	21.1	67.9	31.8	62.4	4
16	I do not enjoy being challenged intellectually.	3.6	5.8	2.2	56.9	31.4	2.3	4.6	2.9	60.7	29.5	9.4	88.3	6.9	90.2	6
17	I understand the academy's training philosophy.	16.8	61.3	14.6	6.6	0.7	24.3	57.8	11.0	5.2	1.7	78.1	7.3	82.1	6.9	1
18	It is irreleveant whether the academy's instructor's have my best interests in mind.	1.5	11.8	9.6	42.6	34.6	2.9	6.4	4.6	53.2	32.9	13.3	77.2	9.3	86.1	2
19	Basic training is too long a period of time.	8.0	21.2	28.5	37.2	5.1	5.2	15.6	28.3	45.7	5.2	29.2	42.3	20.8	50.9	1
20	The importance of how I progress through my training should be left up to the academy staff.	5.8	30.7	19.7	38.7	5.1	4.6	37.0	11.0	36.4	11.0	36.5	43.8	41.6	47.4	2
21	My prior experiences will help me during my academy training.	35.8	55.5	5.1	3.6	0.0	35.8	55.5	1.7	6.4	0.6	91.3	3.6	91.3	7.0	3
22	I want my training to be structured.	21.9	54.0	2.9	16.1	5.1	21.8	50.0	1.7	16.1	10.3	75.9	21.2	71.8	26.4	2
23	If given the choice, I would prefer to have some input into my training.	13.2	59.6	16.9	9.6	0.7	11.6	57.2	12.7	17.3	1.2	72.8	10.3	68.8	18.5	2
24	Basic training involves too much discipline.	5.8	16.8	18.2	49.6	9.5	1.7	11.5	8.0	60.9	17.8	22.6	59.1	13.2	78.7	2
25	I learn best through "hands-on" practical exercises.	49.6	44.5	5.1	0.7	0.0	44.3	47.7	5.7	1.7	0.6	94.1	0.7	92.0	2.3	3
26	How I personally learn should be irrelevant to the objectives of basic training.	2.2	12.4	20.4	54.7	10.2	4.0	19.0	9.2	57.5	10.3	14.6	64.9	23.0	67.8	5
27	I am confident about my problem-solving abilities.	28.5	64.2	6.6	0.7	0.0	37.4	60.9	1.1	0.6	0.0	92.7	0.7	98.3	0.6	3
28	I am confident that my training will prepare me for my duties and responsibilities.	47.4	50.4	1.5	0.7	0.0	60.3	38.5	1.1	0.0	0.0	97.8	0.7	98.8	0.0	4
29	The ability to communicate with people is very important to being a good police officer.	89.1	10.9	0.0	0.0	0.0	87.9	11.5	0.0	0.0	0.6	100.0	0.0	99.4	0.6	3
30	I learn better on my own rather than working in a group.	2.9	10.2	19.0	60.6	7.3	2.9	11.5	16.1	59.8	9.8	13.1	67.9	14.4	69.6	3
											Raw	716.6	790.9	703.8	817.8	
	Variable(s) Measured										Mean	89.575	71.9	87.98	74.35	
	Coding Category							Total =	80.9		Avg	80.738		81.1602		
1	Need to know															
2	Learner's self-concept	Experimental Group: Agree responses in support of research question = 89.58%														
3	Learner's experience	Experimental Group: Reversed coded responses in support of research question = 71.9%														
4	Readiness to learn	Experimental Group: Total responses in support of research question = 80.7%														
5	Orientation to learning	Control Group: Agree responses in support of research question = 87.98														
6	Motivation	Control Group: Reverse coded responses in support of research question = 74.35%														
7	Vocational Orientation	Control Group: Total responses in support of research question = 80.7%														
		Combined Group total responses in support of the research questions = 80.9%														

Indeed, there were multiple comparisons performed (30 per group), which subjects the outcome to a family-wise error rate problem. Family-wise error essentially increases the chance of Type I error by potentially finding significance when it does really exist. Certainly,

when one performs 60 comparisons, one can expect a few to be significant by chance alone. Nevertheless, an analysis of the responses by the two groups is noteworthy when considered in the context of the findings of the other instruments employed.

When considering the intended variables to be measured as detailed in the *Police Recruit Pre-Training Questionnaire Coding Chart* (Appendix I) and examining the summary of responses reflected in Table 3-17, it is noteworthy to point out that 81% of participants in both groups indicated support of Knowles assumptions. Specifically, when examining the responses of the *experimental group*, an average of 90% of the responses to positively worded statements (agree/strongly agree) in questions #3, #6, #8, #14, #21, #23, #25, and #28 supported Knowles assumptions, and 72% of the responses to reverse coded statements (disagree/strongly disagree) in questions #2, #4, #5, #9, #11, #12, #15, #16, #18, #26, and #30, likewise supported Knowles assumptions. In total, 81% of responses by recruits in the *experimental group* supported Research Question #1 in support of Knowles assumptions about adult learners. Similarly, when examining the *control group*, 88% of the responses to positively worded statements (agree/strongly agree) to questions 3, #6, #8, #14, #21, #23, #25, and #28 indicated support of Knowles assumptions, as did 74% of the negative (disagree/strongly disagree) responses to reverse coded questions #2, #4, #5, #9, #11, #12, #15, #16, #18, #26, and #30. Interestingly, 81% of responses by participants in both groups supported Research Question #1. In consideration of the data in the aggregate, both groups entered basic police training with similar orientations toward learning, which was not only consistent with Knowles six assumptions, but ensured that both groups shared similar characteristics.

While a pilot pre-test served to eliminate a number of questions in the pre-training questionnaire, a retrospective post study analysis of the questionnaire revealed that questions #7, #13, #19, #20, #22, and #24 failed to accurately measure the intended variables; this was principally attributable to the unintended use of terms that, as a result of this study, were subsequently recognized as being conceptually ambiguous and/or undefined, (e.g., training,

education, structured, discipline, etc.). Considering, however, the nature of the other questions and the high percentages of responses, the questionnaires served to affirm that recruits in both the *control* and *experimental groups* shared the same or similar attitudes toward learning, thus affirming Knowles assumptions about the recruits as adult learners.

Post Training Questionnaire Descriptive Analysis

While no statistically significant difference existed in the mean scores of the post-training questionnaires between the *control* and *experimental groups*, in examining the individual and comparative responses of both groups, there were a number of observations worthy of discussion. As with the pre-training questionnaire, it is important to note that this analysis is exploratory in nature and not based on a priori study hypotheses; therefore, because the comparisons involved 30 questions, it is subject to a family-wise error rate problem. It is also important to point out that as a consequence of the insight and understanding that was acquired as a result of this study, if this study were to be repeated, a number of the questions developed in the post-training questionnaire would need to be modified and/or eliminated, despite the fact that such changes had already occurred as a result of piloted pre-test. As with the pre-training questionnaire, a pilot pre-test served to eliminate a number of questions in the post-training questionnaire, although a retrospective post study analysis of the questionnaire revealed that questions #1, #5, #6, #14, #24, and #28 did not accurately measure the intended variables. This was once again attributable to the unintended use of terms, which as a result of this study were later recognized as being conceptually ambiguous and/or undefined, specifically, the terms stress and education.

		Experimental Group					**Control Group**					**Experimental**		**Control**		
		Itemized Responses (%)					Itemized Responses (%)					General Response		General Response		
Question #	**Question**	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	**Agree**	**Disagree**	**Agree**	**Disagree**	Coding Category
1	I realize the importance of basic training more now than when I began the process.	43.8	46.3	5.0	5.0	0.0	36.6	49.4	3.7	8.5	1.8	90.1	5.0	86.0	10.3	4
2	My problem-solving abilities are no better now than when I started basic training.	5.0	16.5	8.3	55.4	14.9	6.1	22.0	14.6	45.7	11.6	21.5	70.3	28.1	57.3	7
3	My self-confidence as a police officer is greater now than when I began basic training.	38.8	51.2	5.0	5.0	0.0	40.9	40.2	7.3	8.5	3.0	90.0	5.0	81.1	11.5	7
4	The environment of the Academy was not conducive to learning.	5.0	17.4	13.2	52.9	11.6	4.3	17.1	14.6	54.9	9.1	22.4	64.5	21.4	64.0	1
5	There was too much stress within basic training that could have been avoided.	12.4	35.5	17.4	32.2	2.5	14.6	34.1	7.9	42.1	1.2	47.9	34.7	48.7	43.3	6
6	I am more enthusiastic about police work as a result of my training.	31.4	50.4	10.7	5.8	1.7	31.1	53.0	5.5	9.1	1.2	81.8	7.5	84.1	10.3	7
7	Overall, basic training could have been improved.	10.7	52.1	16.5	19.8	0.8	15.9	29.9	20.1	28.7	5.5	62.8	20.6	45.8	34.2	7
8	The instructors encouraged feedback as a means for improving the basic training process.	20.7	51.2	6.6	18.2	3.3	10.4	40.9	8.5	26.2	14.0	71.9	21.5	51.3	40.2	1
9	The practical training exercises was an important factor in basic training.	52.9	38.8	6.6	1.7	0.0	53.7	42.1	1.8	1.2	1.2	91.7	1.7	95.8	2.4	3
10	I had difficulty understanding the reasons behind some of the activities in basic training.	14.9	45.5	5.0	31.4	3.3	9.1	22.0	7.3	57.9	3.7	60.4	34.7	31.1	61.6	4
11	As a whole, the Academy instructors were genuinely interested in my success.	12.4	47.9	21.5	14.9	3.3	28.7	46.3	14.0	9.8	1.2	60.3	18.2	75.0	11.0	1
12	As a result of basic training, I am well prepared for the duties and responsibilities of a police officer.	18.2	60.3	12.4	9.1	0.0	27.4	48.2	16.5	5.5	2.4	78.5	9.1	75.6	7.9	7
13	Too much time during basic training was wasted on non-essential activities.	21.5	40.5	13.2	20.7	4.1	25.0	29.3	11.6	29.9	4.3	62.0	24.8	54.3	34.2	2
14	Based on my experience the police acdemy is more about training than education.	5.8	19.0	14.9	53.7	6.6	6.1	32.9	20.7	38.4	1.8	24.8	60.3	39.0	40.2	4
15	The discipline associated with basic training impeded my ability to learn.	5.0	19.0	18.2	52.9	5.0	9.8	22.6	9.8	50.6	7.3	24.0	57.9	32.4	57.9	6
16	There was good balance between classroom lectures and "hands-on" practical exercises.	6.6	49.6	9.1	29.8	5.0	5.5	46.3	5.5	32.3	10.4	56.2	34.8	51.8	42.7	2
17	I am confident that my training has prepared me for my duties and responsibilities.	17.4	62.8	12.4	7.4	0.0	22.6	52.4	16.5	6.1	2.4	80.2	7.4	75.0	8.5	6
18	Now that basic training is completed, I better understand the academy's training philosophy.	14.0	62.8	7.4	14.9	0.8	15.9	50.0	12.8	18.3	3.0	76.8	15.7	65.9	21.3	4
19	My instructor's attitude toward me was very important.	27.3	43.8	13.2	12.4	3.3	22.6	54.3	4.3	14.6	4.3	71.1	15.7	76.9	18.9	1
20	Overall, I am disappointed with my experiences in basic training.	6.6	5.8	8.3	58.7	20.7	6.1	9.1	9.1	45.7	29.9	12.4	79.4	15.2	75.6	7
21	Overall, I felt good about the quality of my training.	20.7	67.8	4.1	7.4	0.0	23.2	59.1	10.4	6.7	0.6	88.5	7.4	82.3	7.3	7
22	I am less enthusastic toward police work than when I began basic training.	0.8	5.8	4.1	51.2	38.0	1.2	1.2	4.9	48.8	43.9	6.6	89.2	2.4	92.7	7
23	Basic training made me feel uncomfortable.	5.0	33.9	11.6	39.7	9.9	5.5	6.7	5.5	62.8	19.5	38.9	49.6	12.2	82.3	1
24	There was not enough emphasis on practical training exercises.	12.4	33.9	12.4	34.7	6.6	14.0	35.4	8.5	34.1	7.9	46.3	41.3	49.4	42.0	3
25	Basic training involved too much discipline.	6.6	20.7	14.0	54.5	4.1	7.3	18.3	10.4	53.7	10.4	27.3	58.6	25.6	64.1	6
26	My ability to make important decisions is no better now than when I began basic training.	2.5	21.5	3.3	55.4	17.4	1.2	24.4	7.9	54.9	11.6	24.0	72.8	25.6	66.5	7
27	I was not treated as an adult during basic training.	17.4	28.9	14.0	36.4	3.3	26.8	29.9	8.5	28.0	6.7	46.3	39.7	56.7	34.7	5
28	The "practical" training exercises within basic training were unrealistic.	1.7	5.0	14.0	66.1	13.2	2.4	6.1	7.9	71.3	12.2	6.7	79.3	8.5	83.5	3
29	I have become more confident of myself as a result of basic training.	25.6	62.8	3.3	7.4	0.8	23.8	53.7	9.8	11.6	1.2	88.4	8.2	77.5	12.8	7
30	Basic training has helped me to analyze information more critically.	18.2	72.7	3.3	5.8	0.0	17.1	63.4	6.7	12.2	0.6	90.9	5.8	80.5	12.8	7

Table: 3-18

Descriptive Statistics: Post-Training Questionnaire Response Comparisons

	Variable(s) Measured **Coding Category**
1	Climate, tone, and environment
2	Integration and facilitation of curriculum
3	Experiential learning
4	Educational philosophy
5	Self-directedness
6	Stress and discipline
7	Self-efficacy; overall quality

(See Appendix L – *Post-Training Questionnaire Coding Chart*). Notwithstanding that no

significant statistical difference in comparative mean scores existed, it is nevertheless

noteworthy to point out that the responses to a number of questions among both groups reflected strong support for Knowles' assumptions.

In all, there were eight questions that addressed a recruit's sense of efficacy in the training process, specifically those that addressed problem-solving, critical thinking, decision making, self-confidence, sense of preparation, and the overall quality of the program. In question #2, 70% of the participants in the *experimental group academy* indicated that their problem-solving abilities had improved compared to only 57% of the *control group*, suggesting that the former increased their problem-based skills in greater proportion than did the *control group*. This is noteworthy, insofar as that it is consistent with the significantly higher scores the *experimental group* received in the problem-based learning assessment scenarios. This also corresponds with the responses to question #30, which asks whether basic training has helped recruits to analyze information more critically; 91% of the *experimental group* indicated that it had, compared to 81% of the *control group*. Considering that the problem-based learning assessment scenarios also served to measure a recruit's decision making abilities, the *experimental group* again evidenced a slightly higher rating in question #26 with 73% compared to 67% with the *control group*. Similarly, when examining the responses to questions #3, #17 and #29, which measure a recruit's self-confidence as a result of their training, the *experimental group* consistently scored higher with 90%, 80% and 88%, respectively, compared to the *control group* which rated their experiences at 81%, 75% and 78%. Likewise, when examining the recruit's perceptions with regard to their sense of preparation in question #12, and their overall training experience called for in question #20, their respective ratings of 79% versus 76% to both questions were slightly higher than the *experimental group*. Similarly, in question #21 which asks recruits about how they felt about the quality of their training, 89% of the *experimental group* responded positively, compared to 82% of the *control group*.

With regard to question #7 which asked whether training could have been improved, 63% of the *experimental group* indicated that it could have been compared to 46% of the

control group. While the comparative responses suggest that the *control group* was more satisfied with their training than the *experimental group*, considering the philosophical orientation of andragogy, that encourages autonomous, self-directed, and critical and independent thinking, this result may suggest that the recruits in the *experimental group* were conditioned towards a greater degree of introspection and critical analysis, which in effect, may have prompted its recruits to provide uninhibited and constructive feedback. This contrasts with the *control group* which predisposes recruits to unquestioning obedience; where questioning authority is not only discouraged, but in which conformity to standard operating procedures was rewarded. This reasoning is consistent with the findings of the other data and is reinforced by responses to question #8, which queries recruits whether 'instructors encouraged feedback as a means for improving the basic training process'. Here, 72% of the *experimental group* agreed versus 51% of the *control group*. This supports the notion that recruits in the *experimental group* were encouraged to provide feedback. *Control group* recruits, however, were not only conditioned not to question authority, but received positive reinforcement when they did not, thereby signaling an unquestioning obedience and the ability to follow the chain-of-command. The same considerations are applicable to questions #10 and #13 when considering that 60% and 62%, respectively, of the recruits in the *experimental group academy* expressed that they 'had difficulty understanding the reasons behind some of the activities in basic training' and 'too much time was wasted on non-essential activities' versus 31% and 54% in the *control group*.

The responses that were, perhaps, the most supportive with Knowles' writings (1998: 65-66, et al), were the responses to question #9 which addressed the importance of experiential, practical, and hands-on training activities. Here, groups at 92% and 96% emphasized its importance. This was wholly consistent with the recruits' responses to the open-ended questions and their interviews. Question #28 served to affirm the importance of experiential learning to the extent that both groups considered the scenarios to be 'realistic' (80% and 83%), however, given the recruits' policing inexperience, the question could have

been phrased differently to better measure the significance of experiential learning. With regard to the recruits' opinion whether there existed a 'good balance between classroom lectures and 'hands-on' practical exercises as posited in question #16, the response was non-inferential with 56% of *experimental group* indicating that there was a good balance compared to the 52% of the *control group*. In question #4 which asked whether 'the environment of the academy was not conducive to learning', 64% of the responses in both groups disagreed, suggesting that the environment did not adversely affect learning. This was not only inconsistent with the *experimental group's* response in the pre-training training (question #6), but with Knowles' assumption that the environment (classroom setting) was an important factor in learning. While this particular question was not identified as problematic in the pilot study, had the term 'classroom setting' been used in place of the term 'environment', it may have provided greater clarity. It is important to point out that during the course of conversations with the recruits, while the attitude of instructors was important, as was the climate, concern over the classrooms or physical environment was negligible.

While it was also expected that the recruits' response to stress and discipline would have supported Knowles' notion that it impeded one's ability to learn, 58% in both groups, responding to question #15, indicated that it did not. The same response was evident in question #25, which also inquired whether 'basic training involved too much discipline'. This revealed that 59% of the *experimental group* and 64% of the *control group* disagreed. While discussions with recruits and their responses to the open-ended questions in the post-training questionnaire suggested that they distained harassment, disparaging, humiliating, and embarrassing forms of treatment commonly associated with negative discipline, they did indicate that they enjoyed the positive dynamics associated with the physical and intrinsic challenges of training which necessitated a high degree of self-discipline. While this can certainly be viewed as being consistent with all of Knowles six assumptions about adult learners, it suggests (as noted) that the use and meaning of the terms *stress* and *discipline* were either ambiguous or had different meanings among the recruits.

With regard to the recruit's overall attitude toward policing as a result of the training process (question #22), both groups indicated a high degree (89% and 93%) of enthusiasm. Another interesting observation which differed significantly from the responses to open-ended questions and anecdotal conversations held with recruits dealt with the recruits' response to question #27 which stated that 'I was not treated as an adult during basic training'. Here 46% of the *experimental group* agreed, in contrast to 58% of the *control group*. While it was expected that the *control group* would express a greater degree of dislike toward an autocratic environment and childlike treatment, which was higher than that of the *experimental group*, the fact that 46% of the *experimental group* expressed a similar sentiment was unexpected, although the fact that components of the *experimental group* employed military type training, including areas such as drill, military protocols, and discipline, may have contributed to such a response.

Lastly, it is also noteworthy that question #11, which was intended to measure a recruit's perception of their 'instructor's genuine interest' in their success, indicated that 75% of the *control group* responded more favorably than the *experimental group*, which reflected a rate of 60%. While any number of factors could explain such a response, the emphasis that the *control group* consistently placed on the importance of officer safety, i.e., 'an us against them' orientation, may have suggested a greater degree of concern on the part of the instructors for the recruits, as opposed to the *experimental group* which placed a strong emphasis on community policing and other community oriented social services. Similarly, when examining the responses to question #23, which states 'basic training made me feel uncomfortable', 82% in the *control group* disagreed compared to 50% of the *experimental group*. Certainly, while any number of explanations could be proffered to explain this response, it could be that the *control group* simply felt more comfortable, or perhaps that the regimentation at the academy provided a sense of stability and control. It is noteworthy, however, that this response was inconsistent with the data acquired during the course of informal interviews with the recruits of the *control group*, who expressed uneasiness, and at

times resentment, in how they were treated. Another factor for consideration, as discussed earlier, could be related to the prescriptive and autocratic nature of the traditional, pedagogical, military model of training, wherein recruits are conditioned not to question the nature of their training process, rather accept it at face value. Lastly, the strong emphasis on the 'us against them' mindset, wherein anyone can be considered the potential 'enemy' – thus necessitating recruits to be constantly vigilant against potential threats and dangers – could have instilled a sense of esprit de corps and comradery among recruits, consequently, providing them a degree of comfort and security knowing there is strength in numbers. While this exploratory descriptive analysis is just that, and is not offered simply to support the hypothesis, the observations are nevertheless worthy of consideration given the analysis and findings of the other instruments employed in this study.

<div align="center">Research Question Findings</div>

Research Question 1

Do the andragogical assumptions that Knowles (1998) makes about adult learners apply to police academy recruits? Based on this study's data and findings, the null hypothesis was rejected thus affirming the hypothesis reflected in research question #1, and the six sub-categories (research questions 1a through to 1f), that the six andragogical assumptions that Knowles (1998) makes about adult learners applies to police recruits .

Research Question 2

Does the use of an andragogical instructional methodology (IV) within the construct of basic police training result in an increase of measurable performance (DV) when compared to a traditional, pedagogical, military model of training? Based on this study's data and findings, the null hypothesis was rejected thus affirming the hypothesis reflected in research question # 2 which theorized that the use of an andragogical instructional methodology within basic police training provides for a greater degree of critical thinking, decision-making, and problem-solving skills than the use of a pedagogical instructional methodology.

Research Question 3

   Is the use of an andragogical instructional methodology (IV) a more effective process (DV) for training police recruits than a traditional, pedagogical, military model of training? Based on this study's data and findings, the null hypothesis was rejected thus affirming the hypothesis reflected in research question # 3 which theorized that the use of an andragogical instructional methodology within basic police training is overall a more effective means for training police recruits than a traditional, pedagogical, military model of training.

CHAPTER IV: DISCUSSION AND CONCLUSION

Introduction

As a preface to the following discussion, it is noteworthy to reiterate a number of conceptual issues that serve as a backdrop to this study, but serves to maintain a perspective on the role and growing importance of basic police training. As noted in the introduction, the mission of policing in maintaining social order and control has principally remained unchanged since its early beginnings. Even so, the means for doing so have evolved in step with the changing needs and demands of society (Peak, 2006: 1-36). As history reveals, police are a microcosm of society. Consequently, the myriad of social, cultural, legal, political, economic, and technological changes that influence today's fast-paced, ever changing society, have placed unprecedented demands on today's police. To meet these changing needs and demands, the police have responded, recognizing that one area of critical importance lies in the recruitment and training of new officers. Toward that end, andragogy has been hailed as a more effective method of training because it takes into consideration the needs of the adult leaner, thus yielding superior outcomes in terms of acquiring the skills and competencies sought from the training process. Such claims, while not without merit, have been based on intuition and anecdotal observations where such training methodologies have been introduced.

In response to the reputed theoretical advantages of andragogy, this research set out to measure the efficacy of andragogy in basic police training as compared to a traditional, predominately pedagogical, military style of basic training common to basic police training in New Jersey and the United States more generally (Holden, 1994: 286-287). This empirical study included qualitative and quantitative instruments, the latter of which consisted of problem-based learning assessments designed to measure the desired outcomes of basic police training. Each of these scenarios required skill sets and competencies in the areas of critical thinking, problem-solving, decision making, and effective communication skills. Consistently, the *experimental group* obtained results that were significantly better than those

of the *control group*. Similarly, with the exception of the post-training questionnaires, the qualitative instruments employed also supported the hypotheses. While no statistically significant difference was found for between group comparisons in responses to close-ended post-training questionnaire, descriptive statistics, across group responses to questions that measured Knowles' andragogical assumptions also supported his assumptions.

While many factors bear upon basic police training, the research served to identify six thematic and categorical areas that served as a reliable and valid means to evaluate the nature, quality, and efficacy of the two instructional methodologies under study. These six areas were selected because they took into consideration: (1) the generic characteristics and processes associated with basic police training, (2) the comparative effectiveness of the respective instructional methodologies (*processes*) employed at the two academies, (3) the six assumptions Knowles makes about learners which serve to distinguish pedagogy from andragogy, and (4) their capacity to explain the comparative outcomes in the quantitative analysis in the problem-based learning assessments. Accordingly, the following six contextual themes shall serve as discussion points to synthesize and discuss this study's findings.

1. Institutional and instructional philosophy

2. Affective variables: climate, tone, and environment

3. Integration and facilitation of curriculum

4. Use and integration of experiential learning

5. Self-concept and self-directedness

6. Stress and discipline

Thematic and Categorical Constructs

Institutional and instructional philosophy

Perhaps the most important component for identifying, understanding, and assessing a police academy's overall operations is its mission statement and/or educational philosophy, assuming that one exists. While the inferences and implications of a mission statement and/or

253

philosophy may be obvious, its mere existence, or absence, reflects the very essence of an academy's mission, and as such, provides a contextual frame for every component and dimension of the training process. While a mission statement typically represents a declaration of an organization's broad goals and justification for its existence (Stoner and Freeman, 1992), an educational philosophy reflects the nature, value, ideals, and its orientation toward learning, which in the case of the *experimental group academy*, was incorporated into its mission statement. As Sadker and Sadker (2005: 324-343) explain, there are profound differences in the way educators and institutions define 'the purpose of education, the role of the teacher, the nature of the curriculum and assessment, and the method of instruction', and while it is within each academy's purview and prerogative to subscribe to a particular institutional and instructional philosophy, in doing so, there is an implicit expectation that it will serve the best interests of its recruits, the police organizations, and society. In this regard, while both academies are to be credited with having established mission statements, the essence of their statements with regard to their goals, objectives, and educational philosophy were distinctively different, as was the ability of their respective directors to clearly explain and articulate the same. Setting aside the amiable and benevolent personalities of both academy directors, it was evident that, beyond a passive adherence to traditional paramilitary methodologies and procedures – representing their subscription to a traditional, pedagogical, military model of training – no forethought or effort was dedicated to developing an educational philosophy for the *control group academy*. Conversely, the *experimental group academy's* mission statement reflected a deliberate and well conceived philosophy that was based on andragogical principles from which its instructional methodologies flowed.

Educationalists often identify five basic educational philosophies. These can help us to understand the philosophies adopted by the two subject academies. Addressing the import of such philosophies, Sadker and Sadker (2005: 324-343) explain that they can be divided into two principle groups: *teacher-centered* and *student-centered*. *Essentialism* and *perennialism*,

are considered *teacher-centered* philosophies, that typically 'emphasize the importance of transferring knowledge, information, and skills from the older (presumably wiser) generation to a younger one'. In these approaches, 'the teacher's role is to instill respect for authority, perseverance, duty, consideration, and practicality'. These two philosophies not only advocate *teacher-centered* classrooms, but tolerate little flexibility in the curriculum, and may be seen to be unequivocally related to the traditional, pedagogical, militaristic style of the *control group academy* (330-331). *Progressivism, social reconstructionism*, and *existentialism* on the other hand, are described as *student-centered* philosophies, less authoritarian, and 'more focused on individual needs, contemporary relevance, and preparing students for a changing future'. These three philosophies typically 'place the learner at the center of the educational process [where] students and teachers work together on determining what should be learned and how best to learn it'. These are obviously aligned with the principles and philosophies of andragogy and were akin to the *experimental group academy* (Sadker and Sadker, 2005: 324-343).

Inherent in the andragogical philosophy, to which the *experimental group academy* subscribed, was the belief that recruits needed to be apprised of the academy's institutional and educational philosophy in order for them to understand not just *how* the training would proceed, but *why* those particular instructional methodologies and practices were being used. Indeed, when recruits at the *experimental group academy* on their first day of orientation were introduced to the nature, design, purpose, and reasoning behind the training process and its many activities, recruits appeared to acquire a better understanding and appreciation of what awaited them, despite the anticipatory challenges and anxiety typically associated with the first day of training. Knowles' (1998: 64-65) first principle that 'adults *need to know* why they need to learn something before undertaking to learn it', underscores not only the importance of explaining *how* and *why* the training process will proceed, serves as the foundation for Knowles other five tenets. As Knowles explains, 'one of the new aphorisms in adult-education is that the first task of the facilitator of learning is to help the learner become

aware of the *need to know*. At the very least, facilitators can make an intellectual case for the value of the learning in improving the effectiveness of the learners' performance or the quality of their lives'. Indeed, not only is it significant for recruits to be informed of, and understand the goals and objectives of basic police training, but it is equally important for them to understand the institutional and instructional philosophy of academy. This point underscores many of the concerns and sentiments that the recruits expressed regarding their need to understand the purpose and meaning of many of the activities associated with basic training process as indicated by their responses to the pre, post, and open-ended responses questions in the questionnaires. While recruits in both groups had taken umbrage with some of the components of the training process, the recruits in the *experimental group academy* had the benefit of being appraised of and understanding the reasons behind some of the training activities. This benefit persisted despite any disagreement they may have had with the rationale for the activity.

Conversely, because recruits in the *control group academy* were never informed of the nature, design, or purpose of basic training nor its instructional methodologies and practices, the absence of an explanation not only resulted in a certain degree of frustration (considering their *need to know*), but also inhibited their receptivity toward learning, and consequently impacted their overall training experience as suggested by the data. While the logic, rationale, and obvious benefits in explaining the *how* and *whys* of the training process may be plain to those who subscribe to an andragogical philosophy, ironically, those who subscribe to a traditional, pedagogical, military model of training may overlook or fail to appreciate the benefits of explaining the nature, design, purpose, and reasoning of the training process, and in so doing, negatively impact the process of learning. As Turner (2006: 10) points out, 'new hires within our law enforcement agencies are more educated, diverse, and willing to challenge authority'; in effect, not only are they accustomed to questioning presumptions, they have been encouraged to do so. Further to the point, Cleveland (2006: 29-37) argues that 'today's learners – generation X, generation Y, and millenials – look for learner-centered,

problem-based training', adding that 'these technology-savvy, multitasking individuals, with their repertoire of transferable skills, are highly independent' and consequently, are not prone or receptive to accepting edicts without explanations. Roberg, Kuykendall, and Novak (2002: 149), discussing training philosophies, acknowledge that while police training involves instructing recruits 'with specific facts and procedures', more importantly, it represents an educative process that involves acquiring 'knowledge on which decisions can be based as to why something is being done'. Continuing, they add that 'while traditional training programs are perhaps more training oriented, i.e., dealing with specific facts and procedures', andragogical oriented programs place a greater emphasis on education which 'is broader in scope and is concerned with theories, concepts, issues, and alternatives'. Many traditional police training programs, they explain, 'are heavily oriented toward teaching facts and procedures to the exclusion of theories, concepts, and analytical reasoning. A strict reliance on this approach is problematic, because so much of police work requires analysis and reasoning'. Given the needs, demands, and expectations that the public and police organizations have of new recruits, not the least of which include competencies in areas such critical thinking, problem solving, decision making, and communication skills, we must underscore the importance for police academies to identify and articulate their institutional and instructional philosophy.

In summary, the existence and essence of an educational or institutional philosophy, whether independently identified or incorporated as part of a mission statement, has a profound impact on the nature, design, direction, methodological practices, and outcomes of an academy's training program. When properly researched and institutionalized, a philosophy is the product of a deliberate and reflective process that represents the values, beliefs, ideologies, expectations, and desired outcomes of all the stakeholders impacted by an academy's training program. These include the recruits, the police organization, and the community at-large. Considering, therefore, questions raised by leading experts in police administration regarding the applicability and effectiveness of what may be an outlived

traditional, pedagogical, military based training philosophy, in contrast with the advantages of an andragogical training methodology, issues are raised as to whether the latter should be considered as a plausible replacement. An institutional and instructional philosophy, therefore, not only serves to provide direction and understanding for recruits, but for an academy's faculty and staff. Lastly, when true to its edict, a philosophy serves as a critical means for assessment and self-evaluation, providing a feedback loop that keeps the institution on the track of continual self-improvement.

Affective Orientation: climate, tone, and environment

Emphasizing the importance that affective factors have on learning, Knowles (1984: 14-15) argues that setting the right climate is critical to learning and is influenced by both the physical environment and psychological atmosphere. He explains that the right psychological climate creates a setting where mutual respect, collaboration, trustworthiness, support, openness and authenticity, humanness, and pleasure can flourish, emphasizing that 'people are open to learning when they feel respected' as opposed to 'being talked down to, ignored, or regarded as dumb, and that their experience is not valued' (Knowles, 1984: 15). While traditionally, little, if any, attention was given to the affective components within basic police training, the importance of these variables were expressed by recruits from both academies, (the reasons for which underscore changes in society, not the least of which include the mindsets of new generation recruits).

In the context of the foregoing discussion, it is important to acknowledge that an academy's philosophy underscores all dimensions of its operations, and as such, has a significant impact on its tone, climate, and environment. Indeed, research suggests that these variables directly affect one's attitude, mood, and emotions (Lieberman, 2004: 5-16). Robbins (2000: 381), addressing the influence of attitudes on behavior and performance, explains that attitudes are evaluative statements about how one feels about something, whether objects, people, or events. Conser and Russell (2000: 325-326), discussing these factors in context to police training, concur that the *affective* components of learning 'impacts

one's values, emotions, and/or attitudes' and is therefore central to 'keeping an open, acceptive mind to new knowledge'. Robbins explains that attitudes are comprised of three critical dimensions: *cognitive*, *affective*, and *behavioral*. 'The *cognitive* component of an attitude makes up the beliefs, opinions, knowledge, or information held by a person', which 'sets the stage for the more critical part of an attitude – the *affective* component'; a variable that Bloom (1963) identified as having a significant bearing upon how one learns. *Affect*, Robbins explains, 'is the emotional, or feeling segment of an attitude . . . which lead to *behavioral* outcomes', including the impact of affect on one's degree of satisfaction, involvement, commitment, and learning. While consideration to such factors may not have occurred in traditional programs, their importance was evident at the *experimental group academy*. As (Robbins, 2000: 386) notes, because a person's affective orientation, attitude, and emotions are intimately related and can positively or negatively influence one's performance, not to consider such factors would be irresponsible.

Goleman (2006: 17-19), discussing the impact of emotions, explains that while moods may 'differ from the grosser feelings of emotions' often due to 'the ineffability of their causes', research suggests that there are 'triggers' that subliminally influence one's mood. An example of this unconscious influence is when someone sees a picture of a happy face, it elicits a similar response. Similarly, an instructor's attitude, in the context of the overall tone and climate within an organization, can directly influence a recruit's disposition and their receptivity toward learning. Paul and Elder (2006: 3) point out in discussing the relationship between mind and emotions, that there exists 'an intimate, dynamic interrelation between thoughts, feelings, and desires'. 'Research has identified six universal emotions: anger, fear, sadness, happiness, disgust, and surprise'. While all of these emotions will inevitably be experienced during the course of basic training, it is the context and manner in which they are evoked that determines their impact 'performance-enhancing behaviors' (Robbins, 2000: 385-387). This is not to suggest that there need be a pre-occupation with a recruits' feelings, nevertheless, it is important to recognize that emotions play an instrumental role in the overall

training and learning process. While in the past such variables were stereotypically considered superfluous and/or irrelevant to police training, Holden (1994: 286-287) acknowledges that today, one of the most important tools for enhancing police training is to provide an environment that is conducive to learning, arguing that 'common sense suggests that officers will learn better in a comfortable setting' (Bennett and Hess, 2004: 230; Birzer and Roberson, 2007: 226).

As suggested by Knowles and as indicated by the recruits' responses to the pre and post training questionnaire, the right climate, tone, and environment, predisposes learners to feeling 'more respected, trusted, unthreatened, and cared about', consequently has a direct effect on their receptivity toward learning (1998: 70). While the logistics of facilitating a basic recruit class curriculum requires a pragmatic approach that may preclude the luxury of maintaining a regular 'one-on-one' contact between the instructor and recruit, it is nevertheless apparent that fostering a climate that is engaging, collaborative, and understanding of individual needs and learning styles, lends itself to an environment that is predisposed to learning. While the effect of incorporating a measured degree of stress and discipline has its purpose, to expose recruits to arbitrary and meaningless stress and discipline, is not only counter-productive, but runs counter to the principle of supporting the recruit's *need to know, self-concept, readiness, experience, orientation*, and *motivation*. The same applies when at one moment recruits are subject to derogatory and demeaning verbal attacks, and shortly thereafter are *told* to 'relax and open your books so that we can learn'; this is not only counterproductive from a learning perspective, but is contradictory in that it fails to nurture the kinds of behaviors desired of today's police (Brookfield, 1986: 9-11).

Given the implications of Bandura's theory of social learning and modeling, which Morgan (2002: 178-179) suggests accounts 'for a much greater amount of learned behavior in humans than do basic learning principles', an instructor's attitude and affective orientation play a critical role in basic training. This is true, not only from a cognitive perspective in terms of *what* is learned, but from a social learning perspective in terms of *how* it is presented

by the instructor and received by the recruit. Bloom also emphasizes this when discussing the implications of the affective dimension of learning, i.e., how one feels about learning. Thus, if recruits are constantly exposed to an autocratic, prescriptive, and discipline based environment, as was generally the case with the *control group academy*, such behaviors will inevitably be modeled; behaviors that by all measures are contrary to those required of police officers who will be engaged in community based policing (Bandura, 1997; Knowles, 1998; et al.).

Conversely, if an academy provides an environment that is engaging, challenging, empowering, and collaborative, as was generally the case with the *experimental group academy,* the behaviors modeled will not only serve to nurture and instill positive attitudes toward police work at-large, but will also serve to enhance the learning process and lead to the achievement of desired outcomes, as evidenced by the results of the problem-based learning assessments (Birzer and Tannehill, 2001, et al). While this is not to suggest that recruits should be pre-occupied with the tone, climate, and environment of an academy, their significance is nevertheless a factor. The importance of proper behavioral models becomes even more relevant when one considers the growing emphasis on the need for police officers to possess increasing levels of social and emotional intelligence, which among many things, calls for a heightened awareness and sensitivity to the affective dimensions associated with people's moods, feeling, and attitudes (Turner, 2006: 10; Goleman, 1997; 2006).

While an institution's philosophical orientation plays a significant role in setting the right tone and climate for learning, as do the attitudes of the faculty and staff, Knowles and other scholars also point to the influence of the physical surrounding. Speaking to the importance of the physical environment, Knowles explains that it is important to foster a learning environment that recognizes and supports the need for autonomy and self-directedness, a thematic concern expressed by recruits at both academies. Although both academies shared similar physical environments in terms of classrooms, 'lecture' halls, and gymnasiums, the *experimental group academy*, whenever possible, capitalized on its physical

facilities so as to provide a collaborative, user friendly, student centered environment. By creating an environment where recruits were afforded the opportunity to work in small, self-directed study groups that were conducive to collaboration, brainstorming, intellectual stimulation, free expression, and problem-solving, learning was facilitated and there was a lower incidence of negative feedback on the post-training open-ended questionnaires (Stark and Lattuca, 1997: 222-224). Also noteworthy, was the *experimental groups'* use of venues external to the academy, which brought recruits to college classrooms, elementary, middle, and high schools, corporate offices, and citizen's homes, all of which spurred learning in a variety of settings and situations. With the exception of non-academic activities related to physical fitness, self-defense, firearms training, and other psychomotor related activities, the *control group academy* limited its training activities to one primary auditorium type classroom, thus limiting any change in its learning environment. While not suggesting that recruits need to be coddled or overindulged, considering the affective influence that climate, tone, and environment play in contributing to the learning process and its potential effect on an officer's attitude and performance, every consideration should be given toward creating a comfortable, friendly, inviting, and collaborative environment for learning.

Self-concept and self-directedness

Knowles (1998: 65), addressing this second andragogical tenet, suggests that adults have a self-concept presupposing that they are responsible for their own lives and their own decisions, explaining that 'once they have arrived at that self-concept they develop a deep psychological need to be seen by others and treated by others as being capable of self-direction'. He emphasized, moreover, that adult learners 'resent and resist situations in which they feel others are imposing their wills on them'. Addressing the significance an adult learner's self-concept, Knowles (1998: 135) explains that 'there are two conceptions of self-directed learning prevalent in the literature. First, self-directed learning is seen as self-teaching, whereby learners are capable of taking control of the mechanics and techniques of teaching themselves in a particular subject'. The second concept deals with the importance of

262

fostering a student's sense of personal autonomy, which speaks to the importance of 'taking control of the goals and purposes of learning and assuming ownership of learning', which in turn, 'leads to an internal change of consciousness in which the learner sees knowledge as contextual and freely questions what is learned'. Notwithstanding the importance of recognizing and encouraging a learner's self-concept, Knowles is careful to point out that not 'all adults have the full capacity for self-teaching and personal autonomy in every learning situation', emphasizing that learning is situational. In the case of basic police training the context is constantly changing, not only in terms of transitioning from one topic and discipline to another, but in the process of doing so, requires learning in the cognitive, affective, and psychomotor domains (Bloom, 1969). Underscoring the situational nature of learning from the perspective of the learner and the curricular content, Brookfield (1986: 60) points out that the role of the facilitator in self-directed learning principally involves 'assisting adults to free themselves from externally imposed direction in their learning and with encouraging them to become provocative', underscoring the importance for a learner's need to be engaged in their learning pursuits.

While both of these concepts are important, it should also be acknowledged, given the prescriptive nature of the basic police training curriculum, that there are limitations in the extent to which recruits can enjoy total autonomy and be empowered in their own learning. On the contrary, there are many situations where the adult learner requires assistance and facilitation, particularly as it relates to the needs of police recruits. To this point, Brookfield (1986: 61) explains that self-directed learning does not necessarily suggest that total autonomy exists on the part of adult learners, explaining that 'the individual mode is in no sense superior to the learning that occurs in groups, or vice versa'. He points out that 'in most teaching-learning transactions we can see a mix of these modes, and such a mix is generally the most effective process for enhancing adult learning'. Similar processes were evident in the *experimental group academy*, as was observed in the development and critique of the experiential learning activities.

263

Considering the philosophical mindset necessary for advancing self-directed learning, it becomes apparent why any such initiative was absent from the *control group academy*, given its subscription to a traditional, pedagogical, military model of training, i.e., one where instructors assume full control of its recruits and the learning processes. Indeed, the notion of autonomous, self-directed learning was fundamentally antithetical to its principles and practices. Despite the autocratic orientations of the *control group academy*, and considering the independent nature of today's recruits, it is doubtful whether the attitudes and teaching strategies employed there could have an irreversible, deleterious effect. Nevertheless, because of the absence of any significant number of autonomous or self-directed learning activities within the *control group academy*, on the level of the individual class, as well as on the programmatic level, recruits may have felt disenfranchised. To this point Knowles (1998: 65; 135-139) argues, that when self-directed initiatives are non-existent or even worst, discouraged, it leads to an environment that produces tension, resistance, and resentment, which were consistently evident during the course of observations at the *control group academy*, and reflected their responses to the open-ended questions in the post-training questionnaire. By contrast, the recruits at the *experimental group academy* were not only extended a significant degree of autonomy, but were actively encouraged to participate in a host of self-initiated activities. These activities included: conducting independent research projects, participating in the daily reporting and critiquing of current events germane to policing, public policy, and the criminal justice system, participating in small breakout groups and brainstorming sessions, networking and collaborating with different community groups regarding to special assignments, encouraging volunteerism within schools and community groups, planning and developing problem-based learning simulations and case scenarios, and their involvement in the *Careful Crossing Program* and the *Community Policing Capstone Project*.

While Knowles (1998: 139) underscores the importance for recognizing and understanding the significance of self-concept and self-directed learning, including the

notions of self-teaching and 'increasing personal autonomy', he nevertheless reinforces the basic principle of andragogy, emphasizing that it speaks to the *process* and *facilitation* of adult learning, and toward that end, needs to flexible and pragmatic. In that regard, he writes that there are many learning situations in which self-concept and self-directed learning is applicable, however, one 'must also be careful to avoid imposing a set of goals and purposes on each learning event. While it can be argued that any learning has the effect of building autonomy in a person, there may be learning events in which there is not a core aim to build autonomy in a learner'. Given the nature of police training, this is an important consideration. Notwithstanding the prescriptive nature of the basic police training curriculum, ample opportunities exist to recognize a recruit's need for self-concept, autonomy, and self-directedness. Recognizing the importance of doing so, not only attends to the intrinsic need for acquiring personal autonomy and empowerment, fosters an environment that encourages collaboration and uninhibited learning. Considering the negative responses to the open-ended questions in the post-training questionnaire, in which recruits expressed their distain at being ridiculed, berated, and generally, 'being treated as a child instead of an adult', it was evident that recruits relished autonomy, self-directedness, empowerment, and perhaps most importantly, being treated as an adult and with respect. These factors, which in concert with the other thematic and categorical constructs already discussed, bear upon the effectiveness of the overall learning process.

Integration and facilitation of curriculum

Despite traditional perceptions and an oversimplification in definition, police training represents a complex process of learning that involves the attainment of discernable outcomes that are collectively represented in the form of knowledge, understanding, skills, attitudes, behaviors, and competencies. As suggested in earlier discussions, many variables factor into the training process, not the least of which takes into consideration: (1) understanding the needs of the recruit as an adult learner (Knowles), (2) how one learns (learning theories), (3) the curricular content (PTC), (4) the educational domains in which learning occurs (Bloom's

265

taxonomy), and (5) the processes (methodology) used to facilitate the curriculum. When examining the thirteen functional areas and the more than 1000 performance objectives identified by the *New Jersey Police Training Commission*, it is evident that facilitating a basic police training curriculum requires the coordination, integration, and facilitation of multi-faceted, multidimensional, and interrelated constructs, which when properly planned and executed, speak as much to the process as they do to the successful achievement of outcomes. Thus, not only does obtaining the desired competencies involve the various sequential and concurrent steps identified by Bloom in his three domains, but requires the planning of deliberate strategies for integrating, facilitating, and presenting the outcomes dictated by the curriculum.

As such, rather than presenting the curriculum as a set of independent disciplinary constructs in a simple and unreflecting linear and sequential manner, as was the predominant practice at the *control group academy,* the *experimental group academy* by contrast, facilitated the curriculum in a way that progressed through the curriculum with an eye towards the logical development of unifying concepts and themes. This holistic approach expressed a recognition that many of the topics were interrelated to the point that many served as conceptual foundations for later subject matter. Robbins (2000: 605) describes this process as a systems approach, i.e., one in which all its parts are arranged in a manner that produces a unified whole. For example, when addressing the importance of effective communications skills, whether in the form of verbal, non-verbal, or written transactions, it should be explained that communication lies at the heart of effective police work and includes report writing, electronic transmissions, building dialogue with the community, making public presentations, providing testimony, assuming a command voice, taking charge of criminal investigations, effecting arrests, etc. Accordingly, because effective communication skills are essential to all aspects of policing, it was integrated into all aspects of the curriculum, as opposed to addressing the topic mid-way through the curriculum as a stand-alone topic, as was the practice with the *control group academy*. This systems approach was applied

throughout the curriculum at the *experimental group academy*, thus underscoring its importance.

Given the importance of integrating the curriculum in a manner that takes into consideration: (1) the goals and objectives of basic training, (2) the andragogical needs and interests of the adult learner, and (3) the methodological considerations, it is important to examine the meaning and purpose of the curriculum from a perspective closely related to that employed at the *experimental group academy*. Stark and Lattuca (1997: 9-16) set forth a comprehensive model for developing academic plans which yields plans similar to those used by the *experimental group academy*. They suggest that a curriculum can best be understood as an *academic plan* in that it represents 'a deliberate planning process that focuses on important educational considerations'. They acknowledge that any number of internal, external, and organizational factors can influence the planning process. Given the dynamic nature of a curriculum, the authors suggest that a *curriculum* or *academic plan* should consider its: (1) purpose, (2) content, (3) sequence, (4) learners, (5) instructional processes, (6) instructional resources, (7) evaluation, and (8) adjustment. All these factors were evident at the *experimental group academy*, and most of them were conspicuously absent at the *control group academy*. These elements are important, not only because they set forth the institution's understanding of the purpose of the curriculum and the methodology, but because that it takes into consideration the needs and interests of the learner, an element that is central to andragogy. Stark and Lattuca explain that not only does their *academic plan* call 'attention to the necessity for a planning process', but that it 'helps to identify parts of the plan that are subject to specific influences and to identify intervention points for productive curriculum change' (1997: 10). These eight elements serve as the critical divide between efficient curricular implementations and those that are less effective as was evident in this study. The eight elements are summarized as follows:

1. *Purpose*: The general goals that guide the knowledge, understanding, skills, attitudes, behaviors, and competencies to be learned, i.e., it focuses on the intended learning outcomes.

2. *Content*: The subject matter or content within which the learning experiences are embedded; here the authors note that 'the separation of the first and second elements of the plan emphasizes that the purpose (or desired learning outcomes) and the subject matter are not synonymous'.

3. *Sequence*: The arrangement of the subject matter so that it leads to specific outcomes for the learners. Stark and Lattuca explain that it 'means the ways in which the subject matter is arranged to facilitate the learner's contact with it', i.e., 'is the material presented chronologically or thematically?'

4. *Learners*: This addresses information about the learners for whom the plan is derived, which speaks directly to Knowles' concerns and considerations.

5. *Instructional Processes*: The instructional activities used to facilitate the learning process. Learning processes, Stark and Lattuca explain, 'are often discussed separately from the curriculum, but, realistically, [the choice of] the teaching and learning mode . . . dictate the learning outcomes'.

6. *Instructional Resources*: Collectively encompasses materials and settings to be used in the learning process, including the use of experiential learning activities, the setting and environment, and other auxiliary support that affect climate and tone.

7. *Evaluation*: Strategies used to determine whether skills, knowledge, attitudes, and behavior change as a result of the learning process.

8. *Adjustment*: Making changes in the plan to increase learning, based on experience and evaluation. Stark suggests that based on the evaluative process, improvements are made to the academic plan and in effect, the planning process.

Stark and Lattuca, (1997: 9-16)

Given that basic police training represents an ever-changing learning and educative process, Stark and Lattuca's *academic plan* provides an operational and a pragmatic template that aligns with Knowles' recommended *principles of practice* in providing for a flexible and integrative process of curriculum design. It was apparent throughout the two-year study that the curriculum (*academic plan*) at the *experimental group academy* was carefully and deliberately planned and coordinated, and created a climate that encouraged critical and analytical thinking in its broadest form. Notwithstanding the limitations of this study and the inherent limitations of any educational institution, the design, integration, and facilitation of the *experimental group academy's* curriculum incorporated all the elements of Stark and Lattuca's academic plan. This enhanced the recruits' ability to understand, synthesize, and

apply what they learned as was demonstrated by their performance in the problem-based learning assessments.

By comparison and as conceded by the director of the *control group academy*, presenting the curriculum in a simple linear and prescriptive format, was easier to administer because it was not as labor intensive. The consequences of doing so were that recruits in the *control group academy* voiced a greater degree of concern and frustration than did the recruits in the *experimental group academy*. Their concerns related to the lack of challenge, motivation, mismanagement of time, participation in assignments and activities perceived as irrelevant, illogical arrangement of training activities, the lack of integration between topics, and perhaps of greatest concern, too few experiential learning activities, which serve to reinforce and integrate the competencies in critical thinking and related activities (Bloom, 1963; Brookfield, 1986; Knowles, 1998; Rogers, 2002; Merriam, 2001a).

Theoretical Orientations. Roberg, Kuykendall, and Novak (2002: 149), discussing recent shifts in the philosophical orientations of police academies, point out that academies that subscribe to a traditional, pedagogical, military model of training lean toward a behavioral school of learning, in which 'desired behavior, or the learning of knowledge and skills, is rewarded', and 'undesired behavior or the failure to learn, is punished or ignored'. By contrast, the *experimental group academy*, while not necessarily bound to a specific learning theory, revealed a natural orientation to the cognitive school of thought, which the authors characterize as purposive and goal directed, one that 'involves gaining or changing insights, points of view, or thought patterns'; one where 'emphasis is placed on the analytical processes of reasoning and problem solving'. Addressing the significance of these two approaches as it relates to police training, they explain that 'the two theories can be differentiated in that behaviorist teachers want to change the behaviors of students in a significant way', whereas cognitively-oriented teachers, however, 'want to help students change their understandings of significant problems and situations'. This cognitivist approach

aligns itself with changing needs, demands, and expectations of today's society (Roberg, Kuykendall, and Novak (2002: 149).

This is not to suggest that an academy's philosophical orientation mandates subscription to *a* particular theory of learning; it does, however, predispose it toward one school of thought rather than another as was discussed when addressing *essentialism* and *perennialism* (teacher-centered), versus *progressivism, social reconstructionism*, and *existentialism* (student-centered). Given the wide variety of theories that address human learning, subscribing to *a* single theory would be naïve and grossly oversimplified, not unlike relying on *a* single theory of criminality to explain criminal behavior. On the contrary, learning theories are neither antithetical to one another, nor mutually exclusive; rather, by applying the appropriate theory to a particular learning task is both pragmatic and a practice advocated by Knowles.

Learning Theories. As noted in the earlier review, it is important to point out that *principles of learning* differ from *theories of learning*; while the former attempt to explain '*what* factors are important for learning', the latter addresse *how* and *why* learning occurs (Ormrod, 1995: 6-7). Given the role and responsibility of an academy's instructional staff, recognizing these distinctions and the principles surrounding the two would undoubtedly prove invaluable. As Knowles (1998: 73) suggests when discussing the relationship of *theories of learning* to *theories of teaching*, although the two are clearly distinct, they are intricately interwoven and interdependent. Citing Gage (1972: 56), he explains that 'while *theories of learning* deal with the ways in which an organism learns, *theories of teaching* deal with the ways in which a person influences an organism to learn'. While generally, the cognitive, social process, and experiential schools of learning lend themselves to the needs, interests, and expectations of the adult learner, there are dimensions of behavioral learning that have application in basic training, as in the acquisition of psychomotor competencies that are learned through rote-repetition and drill.

Considering the foregoing and putting aside the individual style, traits, experience, and subject matter expertise on the part of the instructors at both academies (Bennett and Hess, 2004: 233), it was evident that the mission and organizational culture at the two academies bore upon the instructors' awareness and understanding of learning theory and instructional methodologies – topics regularly addressed at faculty meetings at the *experimental group academy*. While not suggesting that the instructional staff at the *control group academy* were not excellent instructors or were ignorant of learning theory, however, there appeared to be little, if any, systematic evidence to suggest any such insight as it related to their methods of instruction. Certainly, a familiarity with learning theories, i.e., knowing and understanding the various ways that humans learn, including adults, transcends all components of the training curriculum, and as such, is a factor worthy of consideration in preparing police.

Social learning and modeling. Recognizing that any number of learning theories can be applied to basic police training, before concluding such a discussion, it is important to briefly examine the impact of social learning theory on basic police training, with particular attention to the concept *modeling*. Bandura (1963) suggests that 'people acquire cognitive representations of behavior by observing models', and that 'the primary function of modeled behavior is to transmit information to the observer' (Hamilton and Ghatala, 994: 291-292). Labeling the system *social learning*, Bandura's research focuses on the importance of observing and modeling the behaviors, attitudes, and emotional reactions of others. Knowles (1998: 102-103), explains that 'in teaching by modeling, the teacher behaves in ways that he or she wants the learner to imitate'; as such, 'the teacher's basic technique is role modeling'. He explains that 'Bandura and Walters (1963) identified three kinds of effects from exposing the learner to a model: (1) a *modeling effect*, whereby the learner acquires new kinds of response patterns; (2) an *inhibitory* or *disinhibitory effect*, whereby the learner decreases or increases the frequency, latency, or intensity of previously acquired responses; and (3) an *eliciting effect*, whereby the learner merely receives from the model a cue for releasing a response that is neither new or inhibited'. Providing examples of these three models, he

writes that the *modeling effect* 'occurs when the teacher shows [students] how to listen empathically to one another by listening empathically to them himself'. 'The *inhibitory* or *disinhibitory effect* occurs when the teacher lets the learners know, through modeling, that it is or is not approved behavior to express their feelings openly'. And lastly, with regard to the *eliciting effect*, which occurs when the instructor 'teaches the art of giving and receiving feedback by inviting the learners to constructively criticize his/her own performance'.

The significance of social learning, imitation, and modeling, is of critical importance in basic police training. Regardless of whether the modeling behaviors exhibited by an academy's instructional staff are by design or default, they have a remarkable influence on the tone and cultural climate within the academy and on a recruit's future attitude and behavior toward their colleagues, instructors, the policing profession, and the community at-large. Hence, if a recruit is exposed to six months of an autocratic, dictatorial, punitive, and militaristic environment, one is left to question what types of attitude and behavior will be exhibited when s/he graduates. Conversely, if a recruit has been exposed to a congenial, collaborative, flexible, open-minded, and challenging environment that encourages creativity, critical thinking, responsibility, and self-initiative, one can hope that such conditioning would lend itself to serving the needs, challenges, and expectations of today's society.

In summary, the holistic integration of an academy's curriculum necessitates a comprehensive academic plan that takes into consideration all the components of Stark and Lattuca's academic plan (1997). It recognizes the importance and advantages of a systems approach where all the components of the curriculum (academic plan) are interrelated and interdependent, in which the whole is more than the sum of its parts. In the case of basic police training, this leads to the successful acquisition of the desired learning (training) outcomes. Despite the statement by the director of the *control group academy* that 'the curriculum runs itself', basic police training represents a complex process that encompasses many factors, including the needs of the recruit and the successful integration of the constructs of andragogical learning and curriculum planning, as discussed.

Use and integration of experiential learning

As discussed in the review of the literature, adults enter into a learning activity with a great volume and variety of experiences, which Knowles (1996: 139-144) explains not only enhances the value and meaning of learning, but the importance of a learner's self-concept (Brookfield, 1986: 40). Knowles explains that the implications of an adult's experience are threefold: (1) 'adults have more to contribute to the learning of others; (2) adults have a richer foundation of experience to which to relate new experiences (and new learnings tend to take on meaning as we are able to relate them to our past experiences), and (3) adults have acquired a larger number of fixed habits and patterns of thought', for which new learning techniques can be introduced. Given these considerations, Knowles suggests that when adults engage in experiential learning activities, there exists a greater degree of heterogeneity in terms of their 'background, learning style, motivation, needs, interests, and goals' (1998: 66). In light of this, Knowles and his colleagues emphasize the importance of experiential learning techniques, 'techniques that tap into the experience of the learners, such as group discussion, simulation exercises, problem-solving activities, case method, and laboratory methods instead of transmittal techniques'. Further research on the use of multi-sensory experiential learning involving visual, auditory, verbal, and kinesthetic functions suggests that it is an advanced learning process involving multiple experiential, perceptual, cognitive, and behavioral dimensions (Kolb, 1984: 20-38).

While the literature on adult learning is replete with references to the advantages of experiential learning, the limitations of this study preclude any in-depth discussion of the same, however, its importance to the andragogical perspective warrants the following consideration. D.A. Kolb (1984: 20-38), renowned for his theory on experiential learning, suggests that his theory offers 'some very different prescriptions for the conduct of education, the proper relationships among learning, work, and other life activities, and the creation of knowledge itself'. Inspired by the work of Dewey, Piaget, and Lewin, Kolb suggests that 'learning, change, and growth are seen to be facilitated best by an integrated process' (Kolb,

1984: 160). Kolb represents learning as a four stage cycle based on the notion that learning is rooted in a set of procedures that modify and integrate one's experiences with situational and environmental variables. His four stage cycle begins with: (1) an immediate or *concrete experience,* which serves as the basis for (2) *observation and reflection*, which are then (3) assimilated into a 'theory', or the *formation of abstract concepts* or *conceptualization*, from which (4) '*new implications for action can be deduced*' (Kolb, 1984: 160 in Jarvis, 2003).

Figure: 4-1
Kolb's Experiential Learning Model

Source: Kolb, D.A. (1984) Experiential Learning: Experience as the Source of Leraning and Development. London: Prentice Hall. Pp. 20-38 in Jarvis and Griffin, 2003: Vol. IV, 159-179
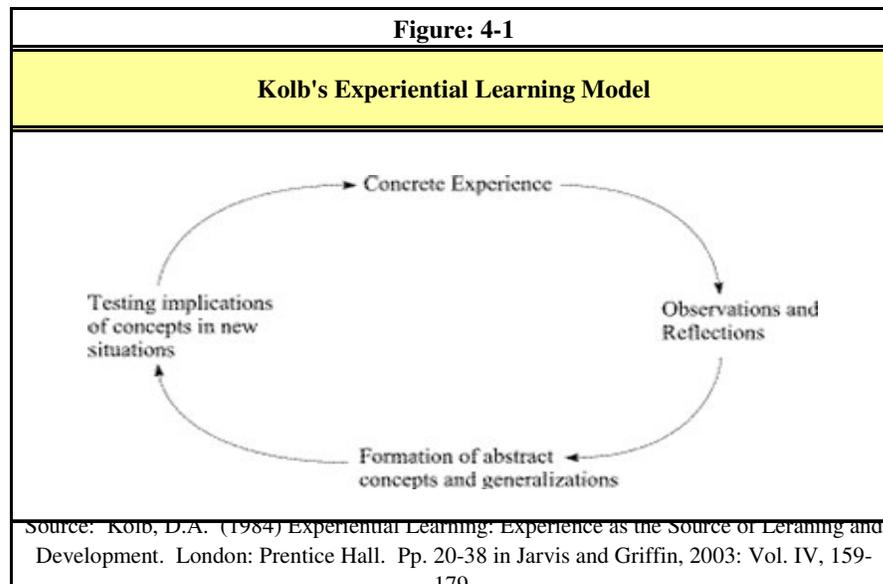
Fundamentally, each stage of this cyclical process is contingent upon the preceding stage, which in turn influences the successive stage; thus it represents a cyclical process of learning that continues to build and grow.

While much has been written on the implications of experiential learning and Kolb's model, its focal point has been contextualized to adult learning, and represents 'a key element in contemporary discussions of lifelong learning' (Rogers, 2002: 94). Knowles (1998: 147-148) explains that 'Kolb's model made a major contribution to the experiential literature by . . . providing a theoretical basis for experiential learning research', and for 'providing a practical model for experiential learning practice', which encompasses a wide range of activities such as group discussions, brainstorming, demonstrations, field trips, case studies, laboratory experiences, simulations, practical training exercises, and similar activities.

Relating the importance of experiential learning to constructivism, Knowles suggests there are parallels between the two. Sadker and Sadker (2005: 345-346), explain that constructivism, similar to existentialism, places the learner at the center of the educative process; asserting that knowledge cannot be handed from one person to the other (from teacher to learner), but must be constructed by each learner through interpreting and reinterpreting a constant flow of information'; this is consistent with Kolb's assertions. Its utility and application dovetail in that it underscores the importance of curricular integration whereby (1) 'students study a topic from multiple perspectives'; (2) 'learners become actively involved with content through manipulation of materials and social interaction'; (3) 'teachers from different disciplines plan the curriculum together'; and (4) learners are empowered to be self-regulated and take an active role in their learning by setting goals and monitoring and evaluating their progress (Schunk, 2004: 287-288).

Beyond the importance of acquiring the experience related to the various disciplinary areas and developing the associated competencies, another significant dimension of experiential learning is that it serves to reinforce a recruit's self-concept and self-efficacy, i.e., not only do they feel that they have some degree of control and empowerment over their own learning, but in the course of acquiring these competencies, they develop an increased belief in their own capabilities, personal judgments, ability to succeed in reaching a specific goal, or sense of control (Bandura,1997: 3; Goleman, 1998: 89; 194; Morgan, 2002: 185). Furthermore, the mere fact that they are actively participating in experiential learning activities that are problem-centered is of critical importance in preparing recruits for real-world situations (Roberg, Kuykendall, and Novak, 2002: 150). Whisenand (2002: 158), addressing the conceptual importance of participation in experiential learning activities, argues that it allows 'others to have an opportunity to express their ideas, needs, and hopes about an issue or a pending decision that affects them' by sharing knowledge, information, and experience. Not only are recruits empowered, but it provides a modeling behavior that he argues is critical to the police organization. He explains that 'police supervisors must strive

for the antithesis of blind obedience. They need people who have the self-confidence to express opposing views, get all the facts on the table, and respect differing opinions. It's a preferred mode of learning; it's how we form balanced judgments'.

While experiential learning entails a host of activities, its design and purpose provides recruits the opportunity to synthesize all that they have learned into discernable competencies, most notably, critical thinking, problem solving, decision making, good judgment and discretion, and effective communication skills. Robbins (2000: 284) argues that such activities serve to 'sharpen [one's] logic, reasoning, and problem-defining skills, as well as [one's] abilities to assess causation, develop alternatives, analyze alternatives, and select solutions'. In summary, problem-based learning represents an approach to learning that builds a curriculum around authentic, intriguing, real-life problems and asks students to work cooperatively to develop and demonstrate their solutions'. Its strengths revolve around building student cooperation and collaboration, higher-order thinking, cross-disciplinary work, utilizing artifacts and exhibits, and that it represents authentic, real-life learning (Sadker and Sadker, 2005: 99-101).

Nature of experiential learning activities. Given the theoretical and pragmatic implications of experiential learning, it is no wonder that the overwhelming concern and interest expressed among *all* recruits interviewed within this study dealt with the importance of hands-on, practical training exercises. Overwhelmingly, the extent to which experiential learning activities were used, was rated as the most favorable and effective means for learning, notwithstanding that their use was significantly greater at the *experimental group academy* than at the *control group academy*. Underscoring the importance of experiential learning, Hughes, Ginnett, and Curphy (1996: 53) explain that such activities not only serve to provide the requisite training opportunities, but provide for a process of constant monitoring, feedback, and evaluation. Bennett and Hess (2004: 236), point to the increased rate of retention when learners are afforded the opportunity to use as many of their senses as possible, citing Confucius' edict, 'what I hear, I forget; what I see, I remember; what I do, I

276

understand'. Centuries latter, Aristotle explained to his adult students, 'what we have to learn to do, we learn by doing'. Bennett and Hess (2004: 236-237) explain that experiential learning within police training can take the form of any number of activities and instructional techniques, some of which include: group discussions, brainstorming, demonstrations, role playing, case studies, simulations, practical hands-on exercises, and combinations thereof. All of these were evident at the *experimental group academy*, and, in significantly limited degrees, at the *control group academy*.

Given the importance placed on experiential learning by the director of the *experimental group academy*, he developed the *Integrated Problem Solving Model* (IPSM), which as previously discussed, served to integrate practical, hands-on simulations as an integral component of the training curriculum. Recognizing its importance for synthesizing the requisite learning outcomes of basic police training, each scenario was skillfully designed to challenge and evaluate critical thinking, problem-solving, and decision making abilities, in contexts similar to those that a police officer would encounter in the field. Notwithstanding, Bennett and Hess (2004: 230) acknowledge that from a planning and logistical perspective experiential learning is more labor intensive, consumes valuable resources, 'and requires a greater degree of teaching skill, creativity, and a greater depth of instructor knowledge' than other styles of instruction. These sentiments were acknowledged by the director of the *control group academy*. Despite, however, the challenges associated with institutionalizing such activities as an integral component of the training process, the director of the *experimental group academy* shared the positions of Bennett and Hess, emphasizing that 'people learn by doing', and that common sense suggests 'that the more practice officers get with a given task, the more proficient they will become'.

Considering (1) the research that supports the value of experiential learning, (2) the interest and importance that recruits placed on practical, hands-on training, (3) the extent to which the *experimental group academy* developed, integrated, and employed experiential learning activities in all aspects of basic training, and (4) the findings of this study's

277

qualitative and quantitative data, it is evident that the integrated use of experiential learning

activities, as part of the other thematic and categorical constructs discussed herein, contributes

measurably to the efficacy of an andragogical instructional methodology.

Stress and discipline

The nature of policing requires structure, control, and discipline on an organizational

and an individual level (Roberg, Kuykendall, and Novak, 2002: 17-19). Notwithstanding the

systemic organizational changes associated with embracing a community-oriented policing

philosophy, which according to Roberg, Novak, and Cordner, (2005: 115), 'requires a less

bureaucratic approach', there exists, nevertheless, a consensus among police administrators

that the efficient and effective operation of a police department cannot proceed in the absence

of a clear hierarchal structure. Such a structure provides for a clear chain of command, thus

ensuring the requisite layers of accountability (Roberg, Novak, and Cordner, 2005: 115).

While the ability to work within a quasi-military environment is presupposed in a culture of

structure, control, and discipline, such qualities are equally important on an individual level.

This is especially so given an officer's wide range of duties and responsibilities, including

ensuring for one's own safety and well being, as well as the safety and well being of whom

they are sworn to protect and serve. Unarguably, given its unpredictable and volatile nature,

policing can range from mundane routine, through to hostile, dangerous, and extremely

stressful situations, factors that warrant serious consideration as part of training and preparing

police officers for a safe and successful career.

Stress and policing. By all accounts, stress is a dimension within police work that

represents a latent threat given its unpredictable nature, one's lack of control over it, and the

pressure it causes (Birzer and Roberson, 2007: 348-356). Schmalleger (2007: 302)

characterizing stress as an extremely debilitating phenomenon, argues that it is 'the most

insidious and least visible of all threats facing law enforcement personnel'. Hans Selye

(1974: 60), considered the 'father of stress research', originally defined stress as 'a

nonspecific response of a body to demands placed on it'; more recently, it is understood as

'the whole process by which we appraise and respond to events that challenge or threaten us'
(Hughes, Ginnett, and Curphy, 1996: 266). Addressing the devastating effects that stress can
play in the life of a police officer, Peak (2006: 373-377) suggests that stress comes from five
principle sources: (1) stressors internal to the police organization, (2) stressors external to the
organization, (3) stressors related to the nature of police work itself, (4) stressors particular to
the individual officer, and (5) the effects of critical incidents. Depending on the source and
circumstances, stress can take the form of acute stress, traumatic stress, and chronic stress or
cumulative stress (Bennett and Hess, 2004: 403-404). Notwithstanding 'stressors internal to
the police organization' itself, which in its own right can be the source of great consternation,
the focus of stress within basic police training has been on *conditioning* recruits for the
physical and emotional stress related to real and potential threats endemic to police work, a
concept that has been referred to as *stress inoculation* (Abrams, Puglisi, and Balla, 1998: 334-
340). While the importance of *conditioning* recruits to the prospective dangers associated
with police work is critically important, it is equally important that such concerns do not
undermine or overshadow an officer's ability to perform effectively. Unarguably, the
paradoxical nature of policing is such that officers will bear witness to the best and worst of
human nature; the ultimate dichotomy being when they bear witness to, or are instrumental in
life's beginning and its end; the latter, sometimes under the most tragic of circumstances.

   Training for stress. While the importance of understanding the dichotomy that exists
within policing does not necessarily escape the police recruit, the extent to which the academy
emphasizes these juxtaposed roles and responsibilities has a great impact on a recruit's
professional career. Perhaps the most important stabilizing influence is the need for recruits
to understand their role as an integral part of the police organization and its overall mission.
That is, they need to understand and appreciate where they fit into the 'bigger picture'
(Conser and Russell, 2000: 324-325). Birzer and Roberson (2007: 226) addressing the need
for recruits to understand the breadth of their roles and responsibilities, argue that police
academies 'should increasingly deviate from the mechanical, militaristic, and behavorial

aspects of training to programs that inform police recruits how to identify, respond to, and solve problems', emphasizing that 'it is essential that training be conducted in such a way as to be as meaningful as possible to adult participants', not one where 'there is a disconnect between the mission, the organization, and training'.

Considering the unpredictable nature of police work, it is important to recognize that while anyone can pose a threat, the majority of citizens are law-abiding and respect the role and responsibility of the police, despite the unpopularity of their many law enforcement related activities. In light of this, an effective police training program, as exemplified by the *experimental group academy*, presents a balanced and pragmatic approach; one which emphasizes the importance of an officer's role and responsibilities in the community (orientation to learning), while training him or her to be cognizant of prospective dangers, thus attuning recruits to the importance of maintaining a high degree of situational awareness and tactical vigilance.

By contrast, while not suggesting that their faculty and staff were any less responsible with regard to emphasizing the importance of a recruit's role and responsibilities, at the *control group academy*, there seemed to be pre-occupation with potential threats and dangers. While a cavalier or complacent attitude on the part of a police officer can undeniably result in tragic consequences, assuming a posture where everyone is regarded as the prospective 'enemy' can not only compromise an officer's overall attitude, behavior, and effectiveness, but can ironically lead to the many ill effects associated with chronic and debilitating stress.

Recognizing the importance for stress inoculation and inculcating recruits with the structure, discipline, and stress inherently related to the nature of police work, Roberg, Crank, and Kuykendall (2005: 463) write that 'one of the most important issues in police training is whether the orientation should be stressful or nonstressful'. Stressful training, they contend 'is like a military boot camp or basic training', while 'nonstressful training has a more academic environment'. They explain that 'many recruit programs continue to have a stressful orientation, expecting recruits to be obedient and subjecting them to both intellectual

and physical demands in a highly structured environment'. Surprisingly, the authors contend, 'discipline and even harassment have been an integral part of many of these programs' despite the fact that 'no evidence exists that this approach is a valid way to train recruits, or that it is any more or less effective than a nonstressful approach'. Probably the most comprehensive study in this area indicated that nonstressful training produces officers who receive higher performance evaluations, enjoy their work more, and get along better with the public (Earle, 1973). Similarly, Birzer and Roberson (2007: 218) report that 'some contemporary scholarship has reported a disturbing growth of military tactics and ideology within U.S. law enforcement agencies' and consequently, 'when police organizations train officers to act and think like soldiers, these organizations alienate them from communities of which they are supposed to be a part'.

Military academy. Discussing the conceptual importance of *stress inoculation*, Abrams, Puglisi, and Balla (1998: 334-340) acknowledge that the rationale behind such a strategy is not only to condition recruits for a wide range of stressful, physical, and emotional situations, but it also serves as an indicator predicting how one will react under stress. For example, a response to a physical confrontation can result in an over response – using an excessive amount of force that can inspire complaints of police brutality, or conversely, in an under-reaction – freezing or failing to act under stress, which could lead to in injury or death. 'Although many organizations, particularly in the military, rely heavily on stress training', Abrams, Puglisi, and Balla (1988: 334), contend 'there are several arguments against such training. First, research into cognitive processes has shown that under conditions of high stress, learning is hampered. If new skills are introduced under high stress conditions, the cognitive interference of stress reduces the chances of learning. The more complex the behavior, the less likely the individual will learn the behavior'. Similarly, Goleman (2006: 268) explains 'the greater the anxiety we feel, the more impaired is the brain's cognitive efficiency. In this zone of mental misery, distracting thoughts hijack our attention and squeeze our cognitive resources. Because high anxiety shrinks the space available to our

281

attention, it undermines our very capacity to take in new information, let alone generate fresh ideas'. The more intense the pressure, the more our performance and thinking will suffer'. He contends that 'the ascendant amygdala[17] handicaps our abilities for learning, for holding information in working memory, for reacting flexibly and creatively, for focusing attention at will, and for planning and organizing effectively'. Consequently, 'we plunge into what neuroscientists call *cognitive dysfunction*'.

The second point that Abrams, Puglisi, and Balla make in arguing against the use of excessive stress and discipline, is that 'if an environment is set where failure due to stress is obviously inevitable, the fear of failure itself may create an additional decrement in individual performance'. The third point they make is that the use of 'indiscriminate stress during training may not resemble the stress of the actual event'. That is to say, that 'it is difficult to equate the practice of *name-calling* with actual stress in the field', however, 'the more closely the situation which requires a particular response resembles the training environment, the greater the probability of the successful transfer of skills'. Earle (1972) who examined the effects of stress at two contrasting style police academies (boot camp style versus 'job-related performance'), discovered that 'graduates of the training program which was not run like boot camp performed significantly better, reported greater job satisfaction and were rated higher in terms of living up to organizational expectations' (Abrams, Puglisi, and Balla, 1988: 334).

Consistent with these findings, Holden (1994: 287), addressing the changing landscape in police training, writes that 'even the military has altered its approach to training over the past 20 years', explaining that 'the purpose of the academy is to provide knowledge and skills necessary for the recruit to perform competently in an independent manner. It cannot be stressed strongly enough' he argues, 'that academies stressing high discipline crush the initiative and creativity out of recruits', adding that 'police work is an occupation

---

[17] The amygdale is an almond-shaped neuro structure located deep within the temporal lobes involved in producing and responding to nonverbal signs of anger, avoidance, defensiveness, and fear.

requiring motivation, imagination, and initiative' . . . traits 'not found in organizations obsessed with military like discipline'. While acknowledging that 'boot camp training does a good job of teaching chain of command, saluting, and personal appearance', when such behaviors preoccupy officers, it can unwittingly result in recruits not questioning incompetence or blindly following orders they know may be wrong. Consequently, Holden contends that 'the boot camp approach to police training literally pushes the recruit into the arms of the subculture. It does this by stressing group loyalty over duty, form over substance, and adherence to command over respect for constitutional values'. He continues, 'much of what is wrong in law enforcement starts with academy systems that are dysfunctional' (Holden, 1994: 287).

Police academies, therefore, that are predicated on the boot camp mentality of 'breaking them down and building them back up', are out of step with the changing needs and interests of society. Birzer and Roberson (2007: 218) agree, contending that the militaristic model of training is not only counter-productive when it comes to learning, but that 'the paramilitary model of policing has created a myriad of problems not only in the training environment, but also in the general culture of the [police] organization'. While not to suggest that indoctrinating recruits to observe discipline and resist stress does not have its place, it is the means by which these factors are introduced that determine whether its effects are desirable. Indeed, there are times when the police must assume an autocratic posture, take charge and command, and respond with physical force, however, when such a disposition is the norm, it undermines not only public trust and confidence, but in effect, the efficiency and effectiveness of the police mission (Conser and Russell, 2000: 324-325).

In summary, because the nature of police work is so challenging, diverse, and volatile, it is important to recognize that stress and discipline are integral to the mission of policing on both the organizational and individual levels. From the perspective of the police recruit, there is a dichotomy in the nature of the profession, where one minute you may be engaged in a benevolent debate with teenagers over the results of a football game and the next minute you

may be responding to a fight or robbery in progress. Given the unpredictable nature of such stressful scenarios which require split-second, critical decisions, the importance of preparing for such eventualities are of paramount importance. Recognizing the importance for training, while at the same time not falling victim to the debilitating effects of a chronic preoccupation with such threats, underscores the importance for a balanced and pragmatic approach to training, which the *experimental group academy* described as *engineered stress*, involving the planned and deliberate integration of stress and discipline within all aspects of the curriculum. While the opportunities for *engineered stress* were specific to the practical case scenarios, there were also ample opportunities for introducing positive stress (eustress) and discipline throughout the curriculum. Such activities were achieved through establishing meaningful expectations in areas such completing homework and research assignments, punctuality, fulfilling delegated duties, etc., all of which considered Knowles (1998) concern for recruits' need to know, self-concept, readiness, experience, orientation, and motivation toward learning. While the response to failures to meet certain training needs or expectations at the *control group academy* would result in verbal admonishments, ridicule, and a demeaning response, at the *experimental group academy*, recruits were motivated by the mere recognition that they had not fulfilled their responsibilities. In circumstances where progressive discipline and/or remediation were ineffective, recruits were aware that such unacceptable behavior would result in receiving demerits, probation, or dismissal from the academy. Not only did this approach serve to underscore the importance of fulfilling one's responsibilities in the training/learning process, but it also served as an appropriate model of behavior for dealing with the public.

In summary, the nature and unpredictability of police work imposes a high degree of stress on officers, which requires a high degree of self-control and discipline. When carefully designed, planned, and integrated into a basic police training program, stress and discipline can serve to inform and prepare recruits for the challenges and rewards of a professional career in law enforcement. Conversely, poorly planned experiential learning activities lacking

engineered stress, coupled with negative imposed discipline, not only affects the receptivity of recruits toward learning, but serves to condition them in a way that conflicts with the needs and interests of a sophisticated constituency.

Summary and Conclusions

The mission of policing in the United States, as in most democratic societies, is to maintain social order and control. As society has grown, matured, and evolved, so too has the complexity of fulfilling that mission. Because today's fast-paced, ever-changing society continues to experience unprecedented social, cultural, legal, political, economic, and technological change – the expectations of its police have grown exponentially. Next to recruitment, the training of new police officers has become a high priority issue as have the methods employed for preparing them for a professional police career. While a traditional, pedagogical, military model of training may have at one time served the needs and interests of society and the police organization, its applicability and efficacy have come under question. In response to such concerns, anecdotal data suggest that an andragogical instructional methodology may be a more effective means for training police recruits. Andragogy, predicated on the belief that adults learn differently than children (pedagogy), bases its practices on the predisposed needs, interests, readiness, orientation, experience, and motivation of the adult learner. In consideration of these factors, andragogy subscribes to a holistic, integrative, and collaborative approach to learning, which, when compared to a traditional, pedagogical, military model of training, proved more effective.

Based on the qualitative and quantitative results of this two-year study which consisted of a quasi-experimental design involving two regional police academies that employed the two instructional methodologies under study, the empirical evidence rejected the null hypotheses and affirmed that (1) the assumptions made about adult learners apply to police recruits, and (2) that an andragogical instructional methodology serves as a more effective means for training police recruits. These findings were consistent with the criteria established by Kirkpatrick (1975) for evaluating training programs.

While not to suggest that basic police training is the panacea for the innumerable challenges that face today's police, it nevertheless plays a significant role in the formative years of a police officer's career. In many respects, basic police training leaves an indelible

imprint that influences an officer's values, attitudes, understanding, and abilities (Bandura, 1977, 1995, 1997). Considering the short and long term impacts of basic police training, this study's findings indicate that an andragogical instructional methodology serves as a pragmatic, effective, and responsive approach to training. In applying this philosophy, recruits are immersed in the program by means of a detailed and insightful explanation of the program's purpose, processes, and rationale. This philosophy can represent, for the trainee, a belief and value system that serves as a compass and barometer throughout the training process. Further, the approach creates a physical and psychological climate that takes into consideration the affective needs of the recruit, thus providing for a healthy, engaging, challenging, and collaborative atmosphere in which recruits may develop a clear understanding and perspective of their role within the greater context of society. Underscoring the significance of these factors, the training program represents a well-planned and skillfully orchestrated process that holistically integrates all aspects of the curriculum. Infused throughout the curriculum is the comprehensive use of multi-sensory, experiential, hands-on learning activities that allow recruits to apply what they have learned. This experiential component represents a synthesis of the cognitive, psychomotor, and affective components of the curriculum (Bloom, 1961). Lastly, given the physical and psychological challenges associated with all aspects of police training, stressful experiences and the need for discipline are skillfully integrated throughout all components of the curriculum as a means for assessing, preparing, and conditioning a recruit's tolerance for stress and their capacity for appropriate response. Further, while stress is also infused into self-directed activities that require self-discipline and control, the focus in these activities is on developing a positive attitude toward and accepting the responsibilities that accompany the specific activities and their real-life analogues. Stress and discipline, while demanding in their own right, are not perceived as punitively oriented or used in a derogatory context, but rather as an important and necessary element in the process toward reaching a clear and well defined goal.

In summary, this study's findings indicated that an andragogical instructional methodology is an effective means for training police officers in that it serves the mutual needs and interests of the police recruit, the police organization, and society at-large. It is a methodology in which recruits are equipped with the skill sets and competencies needed to meet the changing needs of a sophisticated, fast-paced, and ever-changing constituency. While this study was limited to two regional police academies located in northern New Jersey, its findings have greater implications considering that most police departments throughout the United States subscribe to a traditional, pedagogical, military model of training (Birzer and Roberson, 2007: 99). O'Keefe (2004: 250) addressing the future of police education and training writes that 'what still remains to be developed . . . is an integrated, sustained commitment to the philosophical, intellectual, and spiritual education and training of the human resources involved in law enforcement'; the use of an andragogical instructional methodology in basic police training may be one of many avenues toward that realization.

APPENDIX A: TERMS AND DEFINITIONS

Adult learning – a process whereby persons whose major social roles are characteristic of adult status undertake systematic and sustained learning activities for the purpose of bringing about changes in knowledge, attitudes, values, or skills'. Also referred to as: adult education, continuing education, recurrent education, non-formal education, transformational learning, lifelong learning, the learning age, further learning and education, and perhaps most popularly, andragogy.

Affective learning – demonstrated by behaviors indicating attitudes of awareness, interest, attention, concern, and responsibility, ability to listen and respond in interactions with others, and ability to demonstrate those attitudinal characteristics or values which are appropriate to the test situation and the field of study. This domain relates to emotions, attitudes, appreciations, and values, such as enjoying, conserving, respecting, and supporting. Verbs applicable to the affective domain include accepts, attempts, challenges, defends, disputes, joins, judges, praises, questions, shares, supports, and volunteers.

Andragogy – an approach to adult learning based on the assumptions of Malcolm Knowles. In contrast to pedagogy (the art of teaching children), andragogy is based on six assumptions regarding an adult learner's: (1) need to know; (2) self-concept; (3) experience; (4) readiness; (5) orientation; and (6) motivation.

Andragogical instructional methodology – the system of principles, practices, and procedures that reflect the philosophy, assumptions, and theories of andragogy as espoused by Malcolm Knowles.

Basic Police Training – the initial training of recruits conducted through a police training academy where the program is determined by a state standards organization. Also referred to as police recruit training, or recruit training.

Bloom's Taxonomy – A classification system developed by Benjamin Bloom (1961) that provides 'a common terminology for describing and referring to the human behavioral characteristics' of the educative process. The taxonomy consists of three domains of learning: the cognitive, affective, and psychomotor. Within each of the three domains, a hierarchical structure exists of various learning activities in which learning at a higher level is dependent on having attained prerequisite knowledge and skills at lower level.

Bureaucracy – the middle of an organization representing the largest portion of the hierarchy; the portion of an organization dedicated to information analysis and communications, including orders' (Conser and Russell, 2000: 238).

CALEA - Commission on Accreditation for Law Enforcement Agencies, Inc.

Case Study – a research investigation involving a one-time assessment of behavior, usually with a single individual, a group, or an organization (Riggio, 2000: 500); an instructional technique based on real-life examples (Birzer and Roberson (2007: 226).

Children – School children – in context to learning, children or school children who inherent to their age attend primary or secondary school

Cognitive learning – demonstrated by knowledge recall and the intellectual skills: comprehending information, organizing ideas, analyzing and synthesizing data, applying knowledge, choosing among alternatives in problem-solving, and evaluating ideas or actions. This domain on the acquisition and use of knowledge is predominant in the majority of courses. Bloom identified six levels within the cognitive domain, from the simple recall or recognition of facts, as the lowest level, through increasingly more complex and abstract mental levels, to the highest order which is classified as evaluation. Verb examples that represent intellectual activity on each level are listed here.

Cognitive process – refers to any internal mental event and includes such phenomena as perceiving, paying attention, interpreting, understanding, and remembering (Ormrod, 1995: 187)

Community-oriented policing – a philosophy as well as a management approach that promotes community, government, and police partnerships and that uses proactive problem solving to address the causes of crime, fear of crime, and other community issues (Birzer and Roberson (2007: 78).

Critical thinking – a general instructional approach intended to help students evaluate the worth of ideas, opinions, or evidence before making a decision or judgment (Ryan and Cooper, 1998: 489)

Discretion – the authority to make decisions without reference to specific rules or facts, using instead one's own judgment (Cole and Smith, 2008: 410); the process of making a choice among appropriate courses of action (Conser and Russell, 2000: 20)

Discipline - training expected to produce a specific character or pattern of behavior, especially training that produces moral or mental improvement; controlled behavior resulting from disciplinary training; self-control (American Heritage Dictionary, 2006); training to act in accordance with rules; drill: *military discipline*; activity, exercise, or a regimen that develops or improves a skill; training; punishment inflicted by way of correction and training; the rigor or training effect of experience, adversity, etc.; behavior in accord with rules of conduct; behavior and order maintained by training and control; a set or system of rules and regulations; to bring to a state of order and obedience by training and control; to punish or penalize in order to train and control; correct; chastise (Random House, 2006).

Drill – a training process involving formal marching or other precise military maneuvers; a strict, methodical, repetitive, or mechanical training, instruction, or exercise designed to instill structure, discipline and teamwork.

Education – is concerned with the development of the mind (of the intellect). In context to police training and education, Birzer and Roberson (2007: 237), write that 'education is a more personal activity in that its main purpose is the enhancement of an individual's ability to use his or her mind for personal pleasure or gain; training means developing skills that will be used more for social and economic reasons than for personal purposes'.

Educational need . . . is something people ought to learn for their own good, for the good of an organization, or for the good of society. It is the gap between their present level of competencies and a higher level required for effective performance as defined by themselves, their organization, or society' (Knowles, 1980: 88).

Efficacy – being effective; power to produce the correct result.

Empirical – relying upon or derived from observation; an experiment. Guided by practical experience and not theory. The empirical approach simply emphasizes the importance of observation as the basis of the research process. Empirical research involves collecting observations and drawing conclusions on the basis of these inferences (Leicester, p. 1-10). The empirical approach simply emphasizes the importance of observation as the basis of the research process. Empirical research involves collecting observations and drawing conclusions on the basis of these inferences.

Empirical Data – scores or measurements based on observation and sensory experience.

Empowerment – the process by which organizational members can increase their sense of power and personal control in the work setting (Riggio, 2000: 387).

Facilitator – 'a person who guides and stimulates the interaction among members of a group; keeps the group focused' (Conser and Russell, 2000: 20).

Federalism – a form of representative democracy establishing a dual system of government made up of federal and state systems.

Hierarchy – 'a vertical structure of jobs in the workplace where each person reports to only one other person with one person at the top of the pyramid; a form of organizational structure that includes a division of labor, clear lines of authority between superior and subordinate, a single unifying authority at the top of the hierarchy' (Conser and Russell, 2000: 179; 239).

Instruct – to furnish with knowledge; teach; educate.

Instruction – the act, practice, or profession of instructing; education; imparted knowledge

Law enforcement – the police function of controlling crime by intervening in situations in which the law has clearly been violated and the police need to identify and apprehend the guilty person'; (Cole and Smith, 2008: 411); 'a society's formal attempt to obtain compliance with the established rules, regulations, and laws of that society' (Conser and Russell, 2000: 20).

Learn (learning; learner) – to gain knowledge, comprehension, or mastery through experience or study; to acquire through experience or study. A relatively permanent change in behavior, behavior potential, or cognitive structures that occurs as a result of experience (Riggio, 2000: 506); 'a process that changes a person's behavior or attitude' (Conser and Russell, 2000: 351).

Learner – see learn (above).

Learning domains – various levels of learning that include the cognitive, psychomotor, and affective domains (Bloom, 1986). See Bloom's taxonomy.

Longitudinal Study – describing changes in individuals over time.

Military model – essentially a hierarchy that employs symbols of military origin to enforce organizational control - including uniforms, ranks and orders - coupled with disciplining to enforce it (Conser and Russell, 2000: 180).

Motivation – a broad field of study that focuses on what makes people want to work (Conser and Russell, 2000: 239).

New Jersey Police Training Commission (PTC) – the organization that establishes, regulates, and certifies police officers in the State of New Jersey.

Operant conditioning – a learning process whereby behaviors are followed by reinforcement or punishment to obtain desired outcomes (Riggio, 2000: 507).

Organizational culture – 'the basic philosophy and beliefs within the agency, which is passed on to new members when they join' (Conser and Russell, 2000: 180).

Outcomes – this represents 'the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience' (Suskie (2004: 75).

Paramilitary model – a formal pattern where the police are organized along military lines, with an emphasis on a legalistic approach, i.e., an approach to police work that makes standards of law enforcement and departmental policy for decision making; one that emphasizes crime control (Roberg, Kuykendall, and Novak, 2005: 590; 593).

Peace Officer Standards and Training (POST) – a general phrase that refers to the state commission, council, board, or agency that is legislatively authorized to regulate law enforcement training throughout a state; the equivalent to the New Jersey Police Training Commission (Conser and Russell, 2000: 352).

Performance Objectives – specific knowledge, skills, and/or competencies in a wide range of content areas specific to fulfilling the duties and responsibilities of a police officer.

Police academy recruit – an individual who has successfully met the requisite criteria for being a police officer pursuant to New Jersey law and has been accepted to undergo basic police training at a state certified police academy pursuant to the requirements and criteria of the New Jersey Police Training Commission.

Police recruit training – see basic police training.

Policing – 'the process of regulating the general health, safety, welfare and morals of society' (Conser and Russell, 2000: 20).

Proactive – 'a response that anticipates the direction of problems and tries to prevent the worst consequences from happening' (Conser and Russell, 2000: 20).

Problem-oriented policing – an approach to policing in which officers routinely seek to identify, analyze, and respond to the circumstances underlying the incidents that prompt citizens to call on the police (Cole and Smith, 2008: 413).

Problem-solving case study – a management training technique that presents a description of a real or hypothetical organizational problem that trainees attempt to solve (Riggio, 2000: 508).

Problem-solving policing – 'a policing philosophy that requires police to identify potential criminal activity and develop strategies to prevent or respond to that activity (Gaines and Miller, 2007); also referred to as problem-oriented policing – 'a strategy based on the assumption that crime is successfully controlled by discovering the underlying reasons or causes for offenses which include frustrating relationships and a disorderly environment' (Conser and Russell, 2000: 287).

Psychomotor learning is demonstrated by physical skills; coordination, dexterity, manipulation, grace, strength, speed; actions which demonstrate the fine motor skills such as use of precision instruments or tools, or actions which evidence gross motor skills such as the use of the body in dance or athletic performance. Verbs applicable to the psychomotor domain include bend, grasp, handle, operate, reach, relax, shorten, stretch, write, differentiate (by touch), express (facially), perform (skillfully).

Recruit – Trainee; see Police Academy Recruit.

Recruit training – see basic police training.

Role – 'a multidimensional concept consisting of expected behaviors performed by a person in a given situation or position for the purpose of achieving certain objectives or goals' (Conser and Russell, 2000: 209).

Search and seizure – the legal term, contained in the Furth Amendment to the U.S. Constitution, that refers to the searching for and carrying away evidence by police during a criminal investigation (Senna and Siegal, 2002: 613).

Self-Efficacy – the belief that a person has the abilities and energy to accomplish a particular task or goal (Riggio, 2000: 509). An individual's beliefs in his or her abilities to engage in courses of action that will lead to desired outcomes (Bandura, 1997 in Riggio); self-efficacy is related to one's sense of competence and effectiveness. Perceived self-efficacy 'refers to beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations. Efficacy beliefs influence how people think, feel, motivate themselves, and act. A central question in any theory of cognitive regulation of motivation, affect, and action concerns the issues of causality. Do efficacy beliefs operate as causal factors in human functioning? The findings of diverse causal tests, in which efficacy beliefs are systematically varied, are consistent in showing that such beliefs contribute significantly to human motivation and attainments' (Bandura, 1995: 2-3).

Simulation – training that replicates job conditions without placing the trainee in the actual work setting (Riggio, 2000: 510).

Situational exercises – assessment tools that require the performance of tasks that approximate actual work tasks (Riggio, 2000: 510).

Social control – 'a theory that holds that family and other similar groups teach people internal controls (self-control) and exercise direct control over their behavior, thereby preventing antisocial actions' (Conser and Russell, 2000: 145).

Strategic policing – refers to an attempt to expand the professional crime-fighting strategy through more sophisticated, analytical, and targeted crime control applications (Conser and Russell, 2000: 286).

Stress – broadly defined as the body's non-specific response to any demand placed on it (Selye, 1994).

Taxonomy – a scientific classification.

Training – the process of learning specific skills (Birzer and Roberson (2007: 237).

Basic Police Training Curriculum

New Jersey Department of Law and Public Safety

Division of Criminal Justice Police Training Commission

Basic Course for Police Officers

http://www.state.nj.us/lps/dcj/njptc/home.htm

http://www.state.nj.us/lps/dcj/njptc/pdf/trainee_manual/bcpo-trainee-cover-012006.pdf

March 8, 2003

Director's Name
Director of Public Safety
Law and Public Safety Institute
County Name
Address
City, New Jersey 07430

Dear Director:

As a follow-up to last week's meeting, enclosed herewith please find a letter of introduction from Dr. Mike Rowe of the Scarman Centre at the University of Leicester, with whom I have been coordinating research toward my Ph.D. The Scarman Centre is the United Kingdom's largest research center in the area of criminal justice and public order and is renowned for its international partnerships, many of which include premier law enforcement agencies and universities within the United States.

As we discussed, my research is focusing on learning theories and instructional methodologies within the area of basic police training and education, specifically, measuring the influence and utility of andragogy and affective learning. Andragogy, an adult-based learning methodology espoused by Malcolm Knowles, is being introduced within some police academies within the United States, following the lead of the Royal Canadian Mounted Police, with whom I conducted research while consulting to the New Jersey State Police.

While some anecdotal information exits that addresses the pros and cons of andragogy within basic police training and education, little, if any, empirical data exists to support its influence and/or effectiveness. Hence, the objective of my study involves exploring the nature, applicability, and influence of andragogy within the construct of basic police training.

The methodology employed in my study, as it will apply to you and the academy, will involve a triangulation of observations, interviews, and the administration of two 10-15 survey questionnaires to be conducted at the beginning and the end of a recruit's basic training. The observations and interviews, which will involve a limited, yet representative number of your staff and recruits, will be informal in nature and unimposing in time. Be assured that my presence will be discreet, unobtrusive, and coordinated with you and your staff.

In addition to your Institute, my study will also involve the Somerset County Police Academy, under the direction of Dr. Richard Celeste, who has enthusiastically committed to this project. The reason for conducting my proposed research at Bergen and Somerset, is inherent to the exceptional reputation both enjoy as premier regional training academies, both of whom I have been personally and professionally involved.

Similar to many such University research projects, I anticipate many positive outcomes. In conducting this research, be assured that:

1. This study is strictly voluntarily and confidential, for which an informed consent will be provided to all participants, consistent with the federally prescribed *Elements of a Detailed Protocol* for conducting research involving human subjects

2. Any findings will not identify the names of any agencies or its participants, but rather their attitudes and experiences

3. The results of this study are for research purposes only, and only summary results, if any, will be made public

4. No one, except this researcher, will have access to these records

5. At request, all summary results, findings, conclusions, and recommendations of this study will be shared with you, your staff, and its participants

6. This research project has been approved by the Scarman Centre at the University of Leicester, and will comply with any and all applicable federal ethical guidelines and procedures, institutional review boards, and the *Elements of a Detailed Protocol,* as so noted above.

I anticipate this study to take the course of two years (four basic training recruit classes), commencing with the next class (Fall, 2003). Given a conspicuous absence of research in this area, I am hopeful that it will lead to a significant contribution to the field of police training and education, an area as you know, is of critical importance in today's society.

Should you have any questions or concerns regarding this research, please do not hesitate to contact me. My e-mail address is: rvodde@fdu.edu. Thanking you in advance for your time and consideration in this matter, I remain,

Sincerely yours,

Robert F. Vodde, *Chief of Police, Ret.*
Director – School of Criminal Justice
Fairleigh Dickinson University

c: Michael Rowe, Ph.D.
        Scarman Centre – University of Leicester

FAIRLEIGH DICKINSON UNIVERSITY

August 20, 2004

Dear Colleague:

Your success as a police recruit in basic training is critically important to many people. The objective of the training process is to prepare you for the complex duties and responsibilities of a police officer. An integral part of your training involves the process of learning, which as you can appreciate, is individually unique to all people.

As part of a study being conducted through the Scarman Centre at the University of Leicester, United Kingdom, I am examining a variety of learning strategies and methodologies within the construct of basic police training, which Director Del Vecchio and the academy staff have graciously agreed to participate.

In conducting this study, I respectfully request your assistance in completing three questionnaires which are designed to measure your personal orientation to learning, your learning experience, and the potential impact that your training will have on your future performance. Each questionnaire should take approximately 15 – 20 minutes to complete. The first one begins today, and the final two will be administered near the end of your basic training.

It is important to emphasize that this study has been designed to be non-intrusive, anonymous, and strictly voluntary. The questionnaires have not been coded to identify you personally; rather any identifiers utilized are to identify your class, academy, and comparisons between your pre and post test responses. Similar surveys are being administered to other police recruits within New Jersey. Please note that the results of this study are for research purposes, and will only be translated as aggregate level data.

It is anticipated that this study's findings will lead to meaningful findings and recommendations toward enhancing the basic training of police officers in the United States, as well as abroad. Once completed, you will be notified of its findings. I want to thank you in advance for your assistance, and wish you the best for a safe and rewarding career.

Sincerely yours,

Robert F. Vodde, Director
Chief of Police, Ret.
School of Criminal Justice

Academy Observation Recording Form

Date: _____   Time:_____

Academy: _____   Class: _____

Subject: _____

Activity: _____

Rating Scale: 10 = Highest   1 = Lowest

1. Overall Class Activity and Disposition

Comfortable – Relaxed	Uncomfortable – Tense	Rating _____
Uninhibited – Autonomous	Inhibited	Rating _____
Stimulating	Boring	Rating _____
Active - Engaging	Disengaging – Boring	Rating _____
Respectful	Disrespectful	Rating _____

Comments: _____

_____

_____

2. Overall Mood – Climate – Tone

Comfortable - Relaxed	Uncomfortable – Tense	Rating _____
Uninhibited	Inhibited	Rating _____
Stimulating	Boring	Rating _____
Active - Engaging	Disengaging – Boring	Rating _____
Respectful	Disrespectful	Rating _____

Comments: _____

_____

_____

1

3. <u>Dialogue and Rapport among Recruits</u>

Comfortable - Relaxed   Uncomfortable - Tense

Uninhibited   Inhibited

Stimulating   Boring

Active - Engaging   Disengaging - Boring

Respectful   Disrespectful

Comments: _____

_____

_____

4. <u>Dialogue and Rapport between Recruits and Instructor</u>

Comfortable - Relaxed   Uncomfortable - Tense

Uninhibited   Inhibited

Stimulating   Boring

Active - Engaging   Disengaging - Boring

Respectful   Disrespectful

Comments: _____

_____

_____

2

<u>Instructor's Disposition to Class</u>

     Comfortable - Relaxed   Uncomfortable - Tense

     Uninhibited   Inhibited

     Stimulating   Boring

     Active - Engaging   Disengaging - Boring

     Respectful   Disrespectful

     Comments: _____

     _____

     _____

6. <u>Instructor's Knowledge and Dissemination of Learning Constructs</u>

     Comfortable - Relaxed   Uncomfortable - Tense

     Uninhibited   Inhibited

     Stimulating   Boring

     Active - Engaging   Disengaging - Boring

     Respectful   Disrespectful

     Comments: _____

     _____

     _____

3

Basic Training – Recruit Interview Recording Form

Date: _____   Time: _____

Academy: _____   Class: _____

Subject: _____

Interview Questions

How is the training coming along?

_____

_____

_____

_____

What is your general opinion about training? – Is it everything you expected it would be?

_____

_____

_____

_____

How are your instructors?

_____

_____

_____

_____

1

Do they appear to be working in sync with one another, i.e., in terms of instructional style, academy philosophy, discipline, and orientation to recruits?

_____

_____

_____

_____

Is the Academy conducive to learning, i.e., do you feel comfortable?

_____

_____

_____

_____

Is there too much/too little of an emphasis on academics?

_____

_____

_____

_____

Do you enjoy the practical exercises? Should there more or less of these scenarios?

_____

_____

_____

_____

2

Was there too much or too little discipline? Was the discipline important to you – why?

_____

_____

_____

_____

Was there continuity throughout basic training, i.e., in terms of classroom learning, training (e.g., firearms, self-defense), practical exercises, physical training, and discipline?

_____

_____

_____

_____

How would you characterize the morale within the class?

_____

_____

_____

_____

How do you feel about your overall training experience?

_____

_____

_____

What has been the best thing(s) about your training experience?

_____

3

303

_____

_____

What has been your worst thing(s) about your training experience?

_____

_____

_____

_____

What changes, if any would you make/recommend?

_____

_____

_____

_____

Do you feel that Academy prepared well for your duties and responsibilities – why?

_____

_____

_____

_____

Do you any other comments?

_____

_____

_____

_____

4

Police Recruit Pre-Training Questionnaire

Questionnaire ID: _____
(Last 4 digits of social security)

This questionnaire is designed to measure your personal orientation toward learning and how it may affect your training and performance as a police officer. Please bear in mind that since everyone learns differently, there are no right or wrong answers to these questions. Please circle the response that best describes your opinion. Please note that your last four digits of your social security number is strictly used for pre and post test comparisons only. Unless personal information is volunteered, this questionnaire is designed to be completely anonymous and is used exclusively for this study only.

1   I chose to become a police officer to help others.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

2   I am not looking forward to my basic training experience.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

3   How I feel about my training is important to me.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

4   I learn better when I am under pressure.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

5   Learning is no more important to me today than it was when I was younger.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

6   The arrangement of the academy's classrooms are important to me.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

7   Control over my training should be left with the academy's staff.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

8   Practical training exercises are important to me.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

9   "Hands-on" training exercises make me nervous.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

10   I entered police work for the pay.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Bergen: Group 4. 03/02/05   1

11   An instructor's attitude toward me is not important.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

12   I enjoy learning.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

13   The police academy is more about training than education.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

14   Basic training will build my confidence in my abilities to serve as a police officer.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

15   It doesn't matter how I feel about learning, as long as I learn.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

16   I do not enjoy being challenged intellectually.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

17   I understand the academy's training philosophy.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

18   It is irreleveant whether the academy's instructor's have my best interests in mind.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

19   Basic training is too long a period of time.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

20   The importance of how I progress through my training should be left up to the academy staff.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

21   My prior experiences will help me during my academy training.

      Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

22   I want my training to be structured.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

23   If given the choice, I would prefer to have some input into my training.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

24   Baisc training involves too much discipline.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

25   I learn best through "hands-on" practical exercises.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

26   How I personally learn should be irrelevant to the objectives of basic training.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

27   I am confident about my problem-solving abilities.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

28   I am confident that my training will prepare me for my duties and responsibilities.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

29   The ability to communicate with people is very important to being a good police officer.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

30   I learn better on my own rather than working in a group.

    Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Age: 18 - 22 ____   23 - 27 ____   28 - 32 ____   33 - 37 ____   38 - 45 ____

Gender: Male ____   Female ____

Years of Education: (Please place an X next to each level that you completed)

High School ____   Vocational School ____
College: Associate or 2 years ____   Bachelor Degree ____   Master Degree ____

Number of years since you were last in school or college: ____

Military Experience: Yes ____   No ____

Prior work experience: Number of years ____   Where (optional) _____

Optional: What are your greatest concerns regarding basic training?
_____

_____

Optional: How would you describe yourself as a student?
_____

_____

Optional: Name _____

Optional: Department _____

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree Agree Undecided Disagree Strongly Disagree
1	I chose to become a police officer to help others.	This question serves to measure and contrast an officer's intrinsic and extrinsic motivation, as well as affective orientation, for entering the police service. When compared to Question # 10, it will provide a scale of measure relative to the importance that a police officer places for entering the police service, as well as a measure of comparison and association to the affective qualities associated with learning per Bloom's Taxonomy of Education (1969).						X	X	1, 10	Strongly Agree Value = 5
2	I am not looking forward to my basic training experience	This question serves to measure Knowles' fourth, fifth, and sixth assumptions relative to: (1) a recruit's readiness to learn; (2) a recruit's orientation to learning (anticipating the acquisition of new knowledge, values, skills, and competencies); and (3) a learner's motivation to learn, i.e., the need for intrinsic satisfaction that will be achieved inherent to the challenges associated with basic training. A Strongly Disagree statement supports Knowles' fourth, fifth, and sixth assumptions regarding an adult's readiness level and receptiveness toward learning.				X	X	X		2,3,8,9,14,15,	Strongly Disagree Value = 5

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree Agree Undecided Disagree Strongly Disagree
3	How I feel about my training is important to me.	This question serves to measure Knowles fourth assumption: *Readiness to learn* . An adult learners' time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly, their orientation toward learning shifts from one of subject-centeredness to one of performance centeredness; adults become ready to learn those things they need to know. (Knowles, 1998: 67). A Strongly agree statement supports Knowles' fourth assumption regarding the readiness level toward learning, as well as a recruit's general attitude and affective orientation toward the learning and training experience.				X					Strongly Agree Value = 5
4	I learn better when I am under pressure	Knowles' second assumption: *Learner's self-concept* contends that an adult moves from being dependent to self-directed, which calls for an environment and climate that puts an adult at ease; not one that that may cause resistance or resentment. This question serves to establish a recruit's anticipation and apprehension toward beginning basic training, which is a natural process for recruits as well as adults entering a learning situation, as well as to measure the anticipation of stress and regulated discipline as a component of basic training, to the extent of how the discipline may serve to inhibit (or enhance) a recruit's learning. This question will be compared to question # in the post-training questionnaire.		X							Strongly Disagree Value = 5

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question – This reflects each question verbatim as presented within the Pre-Training Questionnaire.	Objective and Explanation of Question – This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure – Questions that measure similar variables and constructs	Response and Likert Value – Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
5	Learning is no more important to me today than it was when I was younger.	This question serves to measure Knowles' first and fifth assumptions, i.e., an adult's *need to know* and *orientation to learning*. In anticipation for the duties and responsibilities of a police officer, recruits *need to know* why, and for what they are being trained, thus providing for the requisite *orientation* toward the learning/training experience. A Strongly Disagree response indicates that learning has more meaning and purpose for the recruit than that experienced as a child.	X				X				Strongly Disagree Value = 5
6	The arrangement of academy's classrooms are important to me.	This question addresses Knowles's second assumption: *The learner's self-concept* which includes an adult's interest in being self-directed and independent. The implications for this includes creating a learning environment that is conducive toward learning. A Strongly Agree response speaks to the importance of this variable for a recruit, i.e., do Academy's classrooms create a climate that is conducive to learning, e.g., small discussion groups, dialogue, brainstorming, etc.		X							Strongly Agree Value = 5
7	Control over my training should be left with the academy's staff.	This questions measures Knowles second assumption: *The learner's self concept*. Adult learners need to have a *self-concept* of being responsible for their own decisions and thus responsible for their learning. A Strongly Disagree response suggests that A recruit is of the opinion that the academy should allow for some empowerment for the recruit for taking responsibility for one's own progress.		X							Strongly Disagree Value = 5

Police Recruit Pre-Training Questionnaire Coding Chart

Question Number	Question – This reflects each question verbatim as presented within the Pre-Training Questionnaire.	Objective and Explanation of Question – This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure – Questions that measure similar variables and constructs	Response and Likert Value – Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
8	Practical training exercises are important to me.	This question addresses the role and importance of practical, "hands-on", case-scenarios as an integral component of the learning process. The significance of experiential learning is addressed throughout all of Knowles' first five assumptions. A Strongly Agree response underscores the importance of practical, "hands-on", case-scenarios as an integral part of the learning/training process.			X						Strongly Agree Value = 5
9	"Hands-on" training exercises make me nervous.	In context to question #8, this question provides a scale of measure relative to the role and importance of practical, "hands-on" case scenarios as an integral component of the learning process. The significance of experiential learning is addressed throughout all of Knowles' first five assumptions. A Strongly Disagree response not only underscores the importance of practical, "hands-on", case-scenarios as an integral part of the learning/training process, but reflects a recruit's receptiveness to such training exercises.			X						Strongly Disagree Value = 5

310

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
10	I entered police work for the pay.	This question serves to measure and contrast an officer's orientation and motivation for entering the police service, i.e., whether one places more of an emphasis on intrinsic or extrinsic factors. This question is designed to measure the motivation for entering police work. When compared to Question # 1, it will provide a scale of measure of the affective qualities of a police officer. A Strongly Disagree response indicates more of an emphasis on intrinsic needs for entering the police service, which also aligns with Knowles' sixth assumption for learning.						X	X	1, 10	Strongly Disagree Value = 5
11	An instructor's attitude toward me is not important.	This questions serves to measure Knowles's second assumption: *The learner's self-concept*. The behavior of the teacher probably influences the character of the learning climate more than any other single factor" (Knowles, 1980: 47). This question addresses the importance of an instructor's attitude toward the recruit, as it will provide for a comparison to the post-training questionnaire within and between groups. A Strongly Disagree response reflects the importance of an instructor's attitude to the recruits, as well as to the mission of the academy.		X							Strongly Disagree Value = 5

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
12	I enjoy learning.	This question serves to address Knowles' fifth assumption: a recruit's Orientation to Learning. 'In contrast to children's and youths' subject-centered orientation to learning (at least in school), adults are life-centered (or task-centered or problem-centered) in their orientation to learning. A Strongly Disagree response, in content to the open-ended questions, will indicate a recruit's orientation to learning based on their formative years' experiences of schooling.					X				Strongly Disagree Value = 5
13	The police academy is more about training than education.	This question is intended to assess a recruit's understanding and perceived value of basic training which should be explained at the beginning of basic training, reflecting the degree to which an academy's shares and explains its mission and philosophy. This question serves to measure Knowles' first and fifth assumptions, i.e., an adult's need to know and orientation to learning. In anticipation for the duties and responsibilities of a police officer, recruits need to know why, and for what they are being trained, thus providing for the requisite orientation toward the learning/training experience. A Strongly Agree response suggests a recruit's lack of understanding that training represents an educative process.	X				X			13,19, 24	Strongly Agree Value = 5

311

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
14	Basic training will build my confidence in my abilities to serve as a police officer.	Confidence and self-efficacy is a variable that transcends all of Knowles' assumptions. This question serves to establish a recruit's anticipation of the training process and one's own potential which will be compared to Question # ? in the Post-Training Questionnaire. A Strongly Agree response will serve to affirm a recruit's recognition and importance of the learning/training process.	X				X				Strongly Agree Value = 5
15	It doesn't matter how I feel about learning, as long as I learn.	This question addresses Knowles' fourth and sixth assumptions: The learner's Readiness to learn and Motivation. The readiness to learn among adults encompass their affective orientation to the learning environment, as well as their motivation to learn, i.e., they want to enjoy the process of learning for its applicability and for its intrinsic rewards. A Strongly Disagree response speaks to the importance of not just what a recruit learns, but how they learn, i.e., how they feel about the learning process. The response of this question will be compared to Question # # in the Post-Training Questionnaire.					X	X			Strongly Disagree Value = 5

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
16	I do not enjoy being challenged intellectually.	This question addresses Knowles's sixth assumption: The learner's motivation. Adult learners enjoy the challenge of learning, not only for the applicability of what they learn, but for the intrinsic rewards, i.e., the satisfaction, self-esteem, and sense of accomplishment. A Strongly Disagree response indicates the importance that recruits place on learning and their motivation.						X			Strongly Disagree Value = 5
17	I understand the academy's training philosophy.	This question addresses Knowles' first assumption regarding the Need to Know. One of first tasks as a facilitator of learning is to help learners become aware of the "need to know," i.e., why they are undertaking the training exercise. When compared to the post-training questionnaire, this question will address whether the Academy has shared and explained its mission and instructional philosophy. A Strongly Agree response will reflect that the Academy shared their training philosophy, and conversely, a Strongly Disagree response will indicate that the Academy's philosophy was not shared with the recruit.	X								Strongly Agree Value = 5 --------- Questions provides for pre and post, and between group comparisons

312

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question — This reflects each question verbatim as presented within the Pre-Training Questionnaire.	Objective and Explanation of Question — This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure — Questions that measure similar variables and constructs	Response and Likert Value — Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
18	It is irrelevant whether the academy's instructor's have my best interests in mind.	This question addresses Knowles's second assumption: *The learner's self-concept*. The behavior of the teacher probably influences the character of the learning climate more than any other single factor" (Knowles, 1980: 47). This question addresses the importance of an instructor's attitude and will provide for a comparison to the post-training questionnaire within and between groups. A Strongly Disagree response will indicate the importance of an instructor's attitude to the mission of the academy, as well as to the police recruit.		X							Strongly Disagree Value = 5
19	Basic training is too long a period of time.	This question addresses Knowles' first assumption: *The need to know*. Adult learners need to know why they need to learn something before undertaking it. It is important that recruits are explained the training process, its purpose, objectives, and the learner's role an extensive period of time and responsibility in the process. A Strongly Disagree response indicates an understanding and the importance of the training process despite what may be perceived as an extensive period of time.	X								Strongly Disagree Value = 5 -------- Questions provides for pre and post, and between group comparisons

Question Number	Question — This reflects each question verbatim as presented within the Pre-Training Questionnaire.	Objective and Explanation of Question — This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure — Questions that measure similar variables and constructs	Response and Likert Value — Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
20	The importance of how I progress through my training should be left up to the academy staff.	This question addresses Knowles's second assumption: *The learner's self-concept*. Adult learners have a need to be self-directed and responsible for their own decisions and thus responsible for the progress of their training. An Academy that transitionally empowers a recruit responsibility for one's own progress understands the importance of this variable. A Strongly Disagree response therefore indicates an understanding of this assumption.		X						7, 20, 22	Strongly Disagree Value = 5
21	My prior experiences will help me during my academy training.	This question addresses Knowles' third assumption: The Role of the learner's experience. "Adults come into an educational activity with both a greater volume and a different quality of experience from youths which enhance their attitude and receptiveness toward learning. A Strongly Agree response will confirm this recognition.			X						Strongly Agree Value = 5

313

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	Variables Being Measured — Knowles' Andragogical Assumptions							Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
22	I want my training to be structured.	This question addresses Knowles' first and second assumptions: the learner's *need to know* and the learner's *self-concept*. "Even in learning situations in which the learning content is prescribed, sharing control over learning strategies is believed to make learning more effective. Engaging adults as collaborative partners for learning satisfies their "need to know" as well as appeals to their self-concept as independent learners" (Knowles, 1998: 133). That adults can and do engage in self-directed learning (SDL) is now a foregone conclusion in adult learning research" (Knowles, 1998: 135). While recruits may want some structure to their training, a Strongly Disagree response will indicate that a recruit wants some autonomy and empowerment in the training process. An undecided response acknowledges a recruit's dual interests: structure and autonomy.		X						7, 20, 22	Strongly Disagree Value = 5
23	If given the choice, I would prefer to have some input into my training.	This question addresses Knowles's second assumption: The learner's self-concept which contends that adult learners should be involved in the diagnosis, planning, selection, and evaluation of their learning. This question serves to affirm Knowles assumption (Knowles, 1980: 26-27). A Strongly Agree response will affirm Knowles' assumption that adult learners should be involved in the diagnosis, planning, selection, and evaluation of their learning. This question serves to affirm Knowles assumption (Knowles, 1980: 26-27).		X							Strongly Agree Value = 5

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	Variables Being Measured — Knowles' Andragogical Assumptions							Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
24	Basic training involves too much discipline.	While this question principally addresses Knowles's second assumption: the *learner's self-concept*, which contends that adult learners need to have a self-concept of being self-directed and responsible for their own decisions, it will also serves to provide a comparison of a recruit's attitude before and after training. While the nature of police work necessitates some degree of discipline within basic training, the extent of the imposed discipline and understanding of the same is paramount to the recruit and the philosophy of the training shared by the Academy. Generally, a Strongly Agree response will affirm Knowles' second assumption regarding an adult learner's self-concept, and need for being self-directed and autonomy.		X						13, 19, 24	Strongly Agree Value = 5
25	I learn best through 'hands-on' practical exercises.	This question addresses Knowles' first, third, and fifth assumptions, all of which place a strong emphasis "on experiential techniques – techniques that tap into the experience of the learners, such as group discussion, simulation exercises, problem-solving activities, case method, and laboratory methods instead of transmittal techniques" (Knowles, 1998: 65-66). A Strongly Agree response confirms the emphasis Knowles places on experiential learning.	X	X	X						Strongly Agree Value = 5

314

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
26	How I personally learn should be irrelevant to the objectives of basic training.	This question addresses Knowles's second and fourth assumptions: The *learner's self-concept* and *readiness to learn*. Knowles explains that self-directed learning is situational and that the 'teacher's' job is to match styles with the student. A person may have a high degree of personal autonomy, but choose to learn in a highly teacher-directed instructional setting because of convenience, speed, or learning style" (Knowles, 1998: 136). How one *feels about learning* has a direct impact on how one learns, and thus an important factor. A Strongly Disagree response speaks to the importance of not just what a recruit learns, but how they learn, i.e., how they feel about the learning process.		X	X						Strongly Disagree Value = 5

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
27	I am confident about my problem-solving abilities.	While this question relates to Knowles' first, third, and fifth assumptions, all of which place a strong emphasis on experiential techniques in context to problem-solving activities, this question is designed to provide a comparative measure between this response with that in the Post-Training Questionnaire relative to changes and improvements in a recruit's level of self-confidence and self-efficacy as it relates to problem-solving. While a Strongly Agree response may indicate a high level of self-confidence (a trait sought of police recruits) changes in the Post-Training Questionnaire hold the potential for comparing differences within and between groups.			X						Strongly Agree Value = 5 -------- Questions provides for pre and post comparisons
28	I am confident that my training will prepare me for my duties and responsibilities.	This question is designed to measure a recruit's attitude, confidence, and readiness in the basic training process as well as provide a comparative measure between this response with that in the Post-Training Questionnaire relative to a recruit's level of confidence. What impact has basic training had on a recruit's overall level of self-confidence relative to carrying out the duties and responsibilities of a police officer.								Pre and Post Comparisons	Strongly Agree Value = 5 -------- Questions provides for pre and post comparisons

Police Recruit Pre-Training Questionnaire Coding Chart

Objective: The objective of this questionnaire is to measure the applicability of Knowles' andragogical assumptions among police recruits, and a recruit's affective and vocational orientation toward police work. Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized to avoid a patterned response by the participants. Values of 5 to 1 are assigned to each response with a value of 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	1. Need to Know	2. Self-Concept (Self-directed)	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	7. Vocational Orientation	Scale of Measure	Response and Likert Value
	This reflects each question verbatim as presented within the Pre-Training Questionnaire.	This section explains the objective and nature of the question. Although Knowles' six assumptions are invariably interrelated and inter-dependent, only one variable has been identified for measurement.								Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
29	The ability to communicate with people is very important to being a good police officer.	This question is designed to provide a comparative measure between this response with that in the Post-Training Questionnaire relative to the understanding the importance of effective communication. What impact has basic training had on a recruit's appreciation and understanding of possessing and utilizing effective communication skills. A Strongly Agree response represents a recognition on the part of the recruit as to the value of good communication skills.								Pre and Post Comparisons	Strongly Agree Value = 5 ------ Questions provides for pre and post comparisons
30	I learn better on my own rather than working in a group.	This question addresses Knowles' third assumption: the role of the learner's experience. Notwithstanding an adult learner's need for self-directedness and autonomy, inherent to their life experience and maturity, emphasis is placed on collaboration and peer-helping activities, characteristic of experiential learning and group exercises (Knowles, 1998: 65-66). A Strongly Disagree response indicates the value that a recruit places on group activities and Knowles' third assumption.			X						Strongly Disagree Value = 5

316

Police Recruit Post-Training Questionnaire

Questionnaire ID: _____
(Last 4 digits of social security)

This is a follow-up to the questionnaire that you completed at the beginning of basic training which is designed to measure and assess your learning experience during basic training. As noted when the first questionnaire was administered, this study is by design intended to be non-intrusive, anonymous, and strictly voluntary. Please circle the response that best describes your opinion based on your personal experience bearing in mind that there are no right or wrong answers. Please note that your last four digits of your social security number is strictly used for pre and post test comparisons only. Unless personal information is volunteered, this questionnaire is designed to be completely anonymous and is used exclusively for this study only. Your participation is appreciated.

1   I realize the importance of basic training more now than when I began the process.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

2   My problem-solving abilities are no better now than when I started basic training.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

3   My self-confidence as a police officer is greater now than when I began basic training.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

4   The environment of the Academy was not conducive to learning.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

5   There was too much stress within basic training that could have been avoided.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

6   I am more enthusiastic about police work as a result of my training.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

7   Overall, basic training could have been improved.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

8   The instructors encouraged feedback as a means for improving the basic training process.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

9   The practical training exercises was an important factor in basic training.

   Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree
   Over ⟶

Police Recruit Post-Training Questionnaire

10   I had difficulty understanding the reasons behind some of the activities in basic training.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

11   As a whole, the Academy instructors were genuinely interested in my success.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

12   As a result of basic training, I am well prepared for the duties and responsibilities of a police officer.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

13   Too much time during basic training was wasted on non-essential activities.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

14   Based on my experience, the police acdemy is more about training than education.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

15   The discipline associated with basic training impeded my ability to learn.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

16   There was good balance between classroom lectures and "hands-on" practical exercises.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

17   I am confident that my training has prepared me for my duties and responsibilities.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

18   Now that basic training is completed, I better understand the academy's training philosophy.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

19   My instructors attitude toward me was very important.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

20   Overall, I am disappointed with my experiences in basic training.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree
                                                                          Over ———⟶

post questionnaire – S 06-06-05

318

Police Recruit Post-Training Questionnaire

21   Overall, I felt good about the quality of my training.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

22   I am less enthusastic toward police work than when I began basic training.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

23   Basic training made me feel uncomfortable.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

24   There was not enough emphasis on practical training exercises.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

25   Basic training involved too much discipline.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

26   My ability to make important decisions is no better now than when I began basic training.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

27   I was not treated as an adult during basic training.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

28   The "practical" training exercises within basic training were unrealistic.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

29   I have become more confident of myself as a result of basic training.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

30   Basic training has helped me to analyze information more critically.

Strongly Agree   Agree   Undecided   Disagree   Strongly Disagree

Over ⟶

319

Some Final Questions

Gender: Male _____   Female _____

Age Group: 18 - 22 _____   23 - 27 _____   28 - 32 _____   33 - 37 _____   38 - 42 _____   43 - 47 _____

Years of Education: Please place an "X" next to each level that you completed.

   High School _____   Vocational _____   A.A. _____   B.A./B.S. _____   Graduate _____

Number of years since you were last in school or college: _____

Military Experience: No _____   Yes _____   Branch: _____   Years: _____

Prior work experience: Number of years _____   Where (optional) _____

What thing(s) did you like best about basic training?

   _____
   _____
   _____
   _____
   _____
   _____

What thing(s) did you least like about basic training?

   _____
   _____
   _____
   _____
   _____
   _____

What changes and/or recommendations would you make to improve basic training?

   _____
   _____
   _____
   _____
   _____

On a scale of 1 to 10, with 10 being the highest, how would you rate the overall quality of your training?

10   9.5   9   8.5   8   7.5   7   6.5   6   5.5   5   4.5   4   3.5   3   2.5   2   1.5   1

On a scale of 1 to 10, with 10 being the highest, how well has the Academy prepared you?

10   9.5   9   8.5   8   7.5   7   6.5   6   5.5   5   4.5   4   3.5   3   2.5   2   1.5   1

Thank You. Be Safe and Best of Luck!

APPENDIX J: POST-TRAINING QUESTIONNAIRE CODING CHART

Police Recruit Post-Training Questionnaire (vertical sidebar label)

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics.

Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational					Scale of Measure Question	Response and Likert Value
			1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instruction/Sat	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree Agree Undecided Disagree Strongly Disagree
1	I realize the importance of basic training more now than when I began the process.	This question serves to measure a recruit's overall understanding, perception, and the significance of the basic training experience. A Strongly Agree response reflects a recruit's overall understanding of the training process, a characteristic that Knowles' addresses in his fifth assumption: a learner's *orientation to learning*, i.e., knowing that learning will help them to better perform their tasks and deal with problems that they confront in real life situations" (Knowles, 1998: 67).					X						X		Strongly Agree Value = 5
2	My problem-solving abilities are no better now than when I started basic training.	This question serves to measure a recruit's sense of utility and confidence. Utility addresses a recruit's sense of the benefit, quality, and capability to use and apply what they learned in basic police training, including a recruit's sense of preparedness and readiness to perform the duties and responsibilities of a police officer, while confidence deals with a recruit's sense of trust, feeling of assurance in one's powers, abilities, and certainty of oneself as a result of the basic police training experience. A Strongly Disagree response suggests a high sense of utility and confidence relative to a recruit's problem-solving...									X				Strongly Disagree Value = 5
3	My self-confidence as a police officer is greater now than when I began basic training.	This question serves to measure a recruit's overall level of self-confidence as a result of the basic training experience, i.e., confidence in oneself and in one's powers and abilities, a sense of trust, feeling of assurance, and certainty in oneself as a result of the basic police training experience. A Strongly Agree response indicates a high level of confidence.									X				Strongly Agree Value = 5

Police Recruit Post-Training Questionnaire (vertical sidebar label)

Police Recruit Post-Training Questionnaire Coding Chart

Question Number	Question	Objective and Explanation of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational					Scale of Measure Question	Response and Likert Value
			1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instruction/Sat	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree Agree Undecided Disagree Strongly Disagree
4	The environment of the Academy was not conducive to learning.	This question serves to measure a recruit's sense of ease, comfort, and convenience, i.e., was the learning process unencumbered and free difficulties or obstacles; did a recruit have a sense of autonomy. It also serves to measure Knowles second assumption: The learner's self-concept, which contends that an adult moves from being dependent to self-directed, which calls for an environment and climate that puts an adult at ease; not one that that may cause resistance or resentment. While "innoculation to stress" may be one of the objectives of basic training, it may also serve to inhibit a recruit's learning. This question is being compared to question # in the pre-training questionnaire. A Strongly agree statement supports Knowles' second assumption regarding a learner's self-concept and the need to for a "classroom" environment to be conducive toward learning.		X					X						Strongly Disagree Value = 5

Police Recruit Post-Training Questionnaire

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics. **Measurement**: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explantion of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational					Scale of Measure Question	Response and Likert Value
			1. Need to know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instruction/Sat	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
5	There was too much stress within basic training that could have been avoided.	This question serves to measure a recruit's attitude, satisfaction, and the facilitation of the curriculum. Knowles second assumption: The *learner's self-concept*, contends that an as adult moves from being dependent to self-directed, it calls for an environment and climate that puts an adult at ease; not one that that may cause resistance or resentment. While "innoculation to stress" may be one of the objectives of basic training, it may also serve to inhibit a recruit's learning. This question is being compared to question # in the pre-training questionnaire. A Strongly Disagree response supports Knowles' second assumption regarding a learner's self-concept and the need to comfortable in the learning environment, which impacts attitude and the facilitation of the training process, hence a Strongly Disagree response reflects that the recruit felt at ease within basic training.		X					X						Strongly Disagree Value = 5
6	I am more enthusiastic about police work as a result of my training.	This question serves to measure a recruit's satisfaction and attitude toward police work as a result of the basic training experience, i.e., it reflects a recruit's general state of mind, emotions, and feeling toward the basic police training experience. It also serves to Knowles' sixth assumption: motivation, i.e., intrinsic factors serve to motivate an adult learner. A Strongly Agree response reflects a positive attitude and experience.						X	X						Strongly Agree Value = 5

Question Number	Question	Objective and Explantion of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational					Scale of Measure Question	Response and Likert Value
			1. Need to know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instruction/Sat	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary varible is identified.												Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
7	Overall, basic training could have been improved.	This question serves to measure a recruit's attitude and degree of satisfaction with the overall training experience, i.e., a recruit's attitude and sense of fulfillment or gratification in basic training experience. A Strongly Disagree response reflects a satisfactory experience with the training experience to include a recruit's state of mind, emotions, and feeling toward the basic police training experience.										X			Strongly Disagree Value = 5
8	The instructors encouraged feedback as a means for improving the basic training process.	This question serves to measure a recruit's sense of ease, comfort, and convenience, i.e., was the learning process unencumbered and free difficulties or obstacles; did a recruit have a sense of autonomy. It also serves to measure Knowles second assumption: The learner's self-concept, which contends that an adult moves from being dependent to self-directed, which calls for an environment and climate that puts an adult at ease; not one that that may cause resistance or resentment. This question serves as a scale of measure with Questions 5, as well as with Question # ___ in the pre-training questionnaire. This question also serves to measure Knowles' second assumption: *The learner's self concept*. Adult learners need to have a self-concept of being responsible for their own decisions and thus responsible for their learning. A Strongly Agree response reflects that the academy encouraged recruit input as an integral part of the training process.		X								X			Strongly Agree Value = 5

322

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics.
Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational)					Scale of Measure Question	Response and Likert Value
			1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instruction/Est	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
9	The practical training exercises was an important factor in basic training.	This question addresses the role and importance of practical, "hands-on", case scenarios as an integral component of the learning process. The significance of experiential learning is addressed throughout all of Knowles' first five assumptions, in particular his third, fifth, and sixth. This question also serves to measure a recruit's self-efficacy, along with a sense of the benefit, quality, and capability to use and apply what they learned in basic police training, to include a sense of preparedness, readiness, and motivation to perform the duties and responsibilities of a police officer. A Strongly Agree response underscores the importance that the recruit places on practical, "hands-on" training exercises as an integral part of the training process, as well as to the importance of its utility. This question, along with Questions #16 and #28, serves as a scale of measure relative to the significance of the experiential learning as an integral component of andragogy.			X							X			Strongly Agree Value = 5
10	I had difficulty understanding the reasons behind some of the activities in basic training.	This question serves to assess a recruit's perception, comprehension, purpose, and significance of basic police training. Understanding is defined as "a mental grasp; comprehension; the power of comprehending; especially, the capacity to apprehend general relations of particulars; the power to make experience intelligible by applying concepts and categories" (Merrian-Webster, 2003). The importance of understanding relates to Knowles' first assumption: the learner's need to know, i.e., adults need to know why they need to learn something before undertaking to learn it, and thus, they should be collaboratively engaged, to some extent, in process of their learning. A Strongly disagree response indicates a recruit's comprehensive understanding of all the activities associated with basic training.	X										X		Strongly Disagree Value = 5

Police Recruit Post-Training Questionnaire Coding Chart

Question Number	Question	Objective and Explanation of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational)					Scale of Measure Question	Response and Likert Value
			1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instruction/Est	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
11	As a whole, the Academy instructors were genuinely interested in my success.	This questions serves to measure the tenets of Knowles' second assumption: The learner's self-concept, as it relates to the orientation of the instructors toward the recruits. The behavior of the teacher probably influences the character of the learning climate more than any other single factor" (Knowles, 1980: 47). This question addresses the importance of an instructor's attitude toward the recruit, which also addresses the importance of facilitation of basic training, i.e., a recruit's sense of ease, comfort, and convenience. A Strongly Agree response reflects the importance of an instructor's attitude toward a recruit and the mission of the academy, which impacts a recruit's attitude and confidence in basic training process.		X								X			Strongly Agree Value = 5
12	As a result of basic training, I am well prepared for the duties and responsibilities of a police officer.	This question serves to measure a recruit's sense of the benefit, quality, and capability to use and apply what they learned in basic police training, including a recruit's sense of preparedness and readiness to perform the duties and responsibilities of a police officer. It also serves to measure a recruit's self-confidence and self-efficacy, the latter of which involves an individual's belief in his or her abilities to engage in courses of action that will lead to desired outcomes. A Strongly Agree response reflects a recruit's self-confidence and sense of utility and self-efficacy as a result of basic training.									X				Strongly Agree Value = 5

323

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics. **Measurement:** A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explantion of Question	Knowles' Andragogical Assumptions — 1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	Effectiveness of Andragogy (Operational) — 1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Curriculum Delivery/Instruction/Content	5. Understanding	Scale of Measure Question	Response and Likert Value
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
13	Too much time during basic training was wasted on non-essential activities.	This question serves to measure a recruit's attitude, satisfaction, and opinion relative to the faciliation of basic basic training. A Strongly Disagree response indicates a recruit's satisfaction relative to the organization, coordination, and good use of time through basic training, which also impacts a recruit's attitude and level of satisfaction.										X			Strongly Disagree Value = 5
14	Based on my experience the police academy is more about training than education.	This question is intended to assess a recruit's attitude and understanding of basic training, i.e., recognizing the cognitive (educational) components of basic training, and recognizing the perceived value of basic training. This question when compared to Question # ___ in the Pre-Training Questionnaire will serve to measure differences in these variables before and after basic training. A Strongly Disagree response indicates a recruit's understanding of the dynamics, comprehensiveness, and philsophy of basic training. It also addresses Knowles' first assumption: a learner's need to know which addresses the importance of a learner's need to understand "how learning will be conducted, what learning will occur, and why learning is important" (Knowles, 1998: 133).	X									X			Strongly Disagree Value = 5

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics. **Measurement:** A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explantion of Question	Knowles' Andragogical Assumptions — 1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	Effectiveness of Andragogy (Operational) — 1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Curriculum Delivery/Instruction/Content	5. Understanding	Scale of Measure Question	Response and Likert Value
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary varible is identified.												Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
15	The discipline associated with basic training impeded my ability to learn.	This question is designed to measure a recruit's understanding of basic training as it relates to the purpose of discipline and how it serves to prepare a recruit for the stress related to police work (stress innoculation), which also relates to Knowles' first assumption: a learner's need to know. A Strongly Disagree response indicates an understanding of discipline and how it is incorporated (facilitated) as an integral part of the learning process. While strict discipline can impede learning, the explanation and understanding of its purpose as an integral part of the academy's methodology and philosophy can preclude learning inhibitions or obstacles.	X									X			Strongly Disagree Value = 5
16	There was good balance between classroom lectures and "hands-on" practical exercises.	This question addresses Knowles' first, third, and fifth assumptions, all of which place a strong emphasis "on experiential techniques – techniques that tap into the experience of the learners, such as group discussion, simulation exercises, problem-solving activities, case method, and laboratory methods instead of transmittal techniques" (Knowles, 1998: 65-66). A Strongly Agree response confirms the emphasis Knowles places on experiential learning. This question, along with Questions #9 and #28, serves as a scale of measure relative to the significance of the experiential learning as an integral component of andragogy.			X							X			Strongly Agree Value = 5

324

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics. **Measurement:** A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational)					Scale of Measure Question	Response and Likert Value
			1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instructional Set	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree Agree Undecided Disagree Strongly Disagree
17	I am confident that my training has prepared me for my duties and responsibilities.	This question serves to measure a recruit's self-confidence and sense of utility. A Strongly agree response reflects a recruit's sense of trust, feeling of assurance, abilities, and certainty of oneself as a result of the basic police training experience. It also reflects a recruit's sense of utility related to the benefit, quality, and capability to use and apply what they learned in basic police training, including a recruit's sense of preparedness and readiness to perform the duties and responsibilities of a police officer, which also relates to Knowles' fourth, fifth, and sixth assumptions. This question will also serve as a comparative measure to Question # ___ in the Pre-Training Questionnaire which measures a recruit's level of confidence before basic						X			X				Strongly Agree Value = 5
18	Now that basic training is completed, I better understand the academy's training philosophy.	This question measures za recruit's philosophical understanding of basic training which also addresses Knowles' first assumption regarding a learner's *need to know*. One of first tasks a facilitator of learning undertakes is to help learners become aware of the "need to know," i.e., why they are undertaking the training exercise. When compared to the Pre-Training questionnaire, this question will address whether the Academy has shared and explained its mission and overall training (methodological) philosophy. A Strongly Agree response reflects that the Academy shared their training philosophy, and implies an understanding, i.e., a recruit's perception, comprehension, purpose, and significance of basic police training. This question, along with Question #30, serves as a scale of measure relative to recruit's understanding of the training										X			Strongly Agree Value = 5

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics. **Measurement:** A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational)					Scale of Measure Question	Response and Likert Value
			1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instructional Set	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree Agree Undecided Disagree Strongly Disagree
19	My instructor's attitude toward me was very important.	This question serves to measure the variable of facilitation, satisfaction, and Knowles' second assumption: *The learner's self-concept*. Given that the behavior of the teacher probably influences the character of the learning climate more than any other single factor" (Knowles, 1980: 47), a Strongly Agree response reflects a recruit's experience and perception of the academy's instructors.		X								X			Strongly Agree Value = 5
20	Overall, I am disappointed with my experiences in basic training.	This question serves to measure a recruit's attitude and satisfaction with basic training. Attitude deals with a recruit's state of mind, emotions, and feeling toward the basic police training experience, while satisfaction measures a recruit's general sense of fulfillment or gratification. A Strongly Disagree response reflects a high level of satisfaction and a positive attitude, which relates to Knowles first and fourth assumptions: a *Learner's need to know* and *Readiness to Learn*.									X				Strongly Disagree Value = 5
21	Overall, I felt good about the quality of my training.	This question addresses a recruit's overall disposition as a result of basic training, including attitude, satisfaction, utility, which take into account Knowles' fifth and sixth assumptions: *orientation to learning* and *motivation*. A Strongly Agree response indicates an overall positive experience to include components of these variables.						X	X						Strongly Agree Value = 5

325

Police Recruit Post-Training Questionnaire

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics. **Measurement**: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explanation of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational)					Scale of Measure Question	Response and Likert Value
			1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criticism Delivery/Instruction/Eat	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary variable is identified.												Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
22	I am less enthusastic toward police work than when I began basic training.	This question addresses a recruit's attitude and motivation as a result of basic training. A Strongly Agree response indicates that a recruit's motivation, i.e., his/her sense of stimulation, inducement, and incentive has improved since beginning basic training, with relates to Knowles' sixth assumption relative to motivation. Similarly, the same response reflects a positive attitude on the part of the recruit, i.e., his/her state of mind, emotions, and feeling toward the basic police training experience.						X		X					Strongly Disagree Value = 5
23	Basic training made me feel uncomfortable.	This question serves to measure a recruit's sense of ease and comfort with basic training, i.e., was the learning process unencumbered and free difficulties or obstacles, which effects one's degree of satisfaction. It also serves to measure Knowles second assumption: The *learner's self-concept*, which contends that an adult moves from being dependent to self-directed, which calls for an environment and climate that puts an adult at ease; not one that that may cause resistance or resentment. A Strongly Agree response reflects a positive experience as it relates to a recruit's sense of ease and comfort with basic training.		X						X					Strongly Disagree Value = 5

Police Recruit Post-Training Questionnaire

Question Number	Question	Objective and Explanation of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational)					Scale of Measure Question	Response and Likert Value
			1. Need to Know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criticism Delivery/Instruction/Eat	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary varible is identified.												Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
24	There was not enough emphasis on practical training exercises.	This question addresses the role and importance of practical, "hands-on", case scenarios as an integral component of the learning process. The significance of experiential learning is addressed throughout all of Knowles' first five assumptions, in particlar his third, fifth, and sixth. This question also serves to measure a recruit's sense of the benefit, quality, and capability to use and apply what they learned in basic police training, including a recruit's sense of preparedness, readiness, and motivation to perform the duties and responsibilities of a police officer. Self-Efficacy involves an individual's belief in his or her abilities to engage in courses of action that will lead to desired outcomes (Bandua, 1997 in Riggio, 2000); self-efficacy is related to one's sense of competence and effectiveness (Riggio, 2000: 257). "Developing a competency of any kind strengthens the sense of self-efficacy" (Goleman, 1997: 89). A Strongly Agree response underscores the importance that the recruit places on practical, "hands-on" training exercises as an integral part of the training process, as well as to th		X							X				Strongly Disagree Value = 5

326

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics. **Measurement:** A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explantion of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational)					Scale of Measure Question	Response and Likert Value
			1. Need to know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instruction/Exit	5. Understanding	Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary varible is identified.													
25	Basic training involved too much discipline.	While this question principally addresses Knowles' second assumption: the *learner's self-concept*, which contends that adult learners need to have a self-concept of being self-directed and responsible for their own decisions, it will also serves to provide a comparison of a recruit's attitude before and after training. While the nature of police work necessitates some degree of discipline within basic training, the extent of the imposed discipline and *understanding* of the same is paramount to the recruit and the philosophy of the training shared by the Academy. A Strongly Disagree response supports Knowles' second assumption regarding a learner's self-concept and the need to comfortable in the learning environment, which impacts attitude and the facilitation of the training process, hence a Strongly Disagree response reflects that the recruit felt at ease within basic training, notwithstanding a recruit's appreciation and understanding for discipline as part of		X									X		Strongly Disagree Value = 5
26	My ability to make important decisions is no better now than when I began basic training.	This question serves to measure a recruit's sense of utility and confidence as it relates to a recruit's decision making-abilities. Utility addresses a recruit's sense of the benefit, quality, and capability to use and apply what they learned in basic police training, including a recruit's sense of preparedness and readiness to perform the duties and responsibilities of a police officer, while confidence deals with a recruit's sense of trust, feeling of assurance in one's powers, abilities, and certainty of oneself as a result of the basic police training experience. A Strongly Agree response suggests a high sense of utility and confidence relative to a recruit's decision-making abilities, an integral component of andragogy and basic training.									X				Strongly Disagree Value = 5

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics. **Measurement:** A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explantion of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational)					Scale of Measure Question	Response and Likert Value
			1. Need to know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criterion Delivery/Instruction/Exit	5. Understanding	Questions that measure similar variables and constructs	Strongly Agree / Agree / Undecided / Disagree / Strongly Disagree
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary varible is identified.													
27	I was not treated as adult during basic training.	This question addresses the variables of satisfaction and understanding, and all of Knowles' assumptions, although in particular, his second assumption: the *learner's self concept*. A Strongly Disagree response indicates that a recruit was of the opinion that s/he was *treated* as an adult which speaks to the importance of not just what a recruit learns, but how they learn, i.e., how they *feel* about the learning process. It also reflects a lack of understanding of the Academy's training philosophy which incorporates "stress innoculation" as an integral component of basic training.		X					X						Strongly Disagree Value = 5
28	The "practical" training exercises within basic training were unrealistic.	This question addresses the role and importance of practical, "hands-on", case scenarios as an integral component of the learning process. The significance of experiential learning is addressed throughout all of Knowles' first five assumptions, in particular his third, fifth, and sixth. This question also serves to measure a recruit's sense of the benefit, quality, and capability to use and apply what they learned in basic police training, including a recruit's sense of preparedness, readiness, and motivation to perform the duties and responsibilities of a police officer. Self-Efficacy involves an individual's belief in his or her abilities to engage in courses of action that will lead to desired outcomes (Bandua, 1997 in Riggio, 2000); self-efficacy is related to one's sense of competence and effectiveness (Riggio, 2000: 257). "Developing a competency of any kind strengthens the sense of self-efficacy" (Goleman, 1997: 89). A Strongly Disagree response underscores the importance that the recruit places on practical, "hands-on" training exercises as an integral part of the training process, as well as to th			X						X				Strongly Disagree Value = 5

Police Recruit Post-Training Questionnaire Coding Chart

Objective: The post-training questionnaire is designed to: (1) measure the effectiveness of andragogy as defined by the five variables that comprise this study's operational definition, (2) measure the applicability of Knowles' six andragogical assumptions among police recruits who completed basic training, (3) measure differences in pre and post training questionnaire responses within and between groups, and (4) measure associations and relationships between responses and recruit demographics.
Measurement: A Likert Scale has been used to obtain ordinal data. The instrument is designed so that a respondent selects one of five categories that best describes an opinion toward the subject question. Five responses are available: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. Reverse wording of questions are utilized so as to alleviate a patterned response by the participants. Values of 5 to 1 are assigned to each response with 5 indicating a response that best describes an opinion toward the question.

Question Number	Question	Objective and Explantion of Question	Knowles' Andragogical Assumptions						Effectiveness of Andragogy (Operational					Scale of Measure Question	Response and Likert Value
			1. Need to know	2. Self-Concept	3. Experience	4. Readiness	5. Orientation to Learning	6. Motivation	1. Affective Orientation/Experiences	2. Attitude	3. Utility/Self-Efficacy/Self-Confidence	4. Criticism Delivery/Instruction/Eval	5. Understanding		
	This reflects each question verbatim as presented within the Post-Training Questionnaire.	This section explains the objective and nature of the question. While a response may reflect attitudes that encompass more than one of the variables designed to measure the efficacy, only one primary varible is identified.												Questions that measure similar variables and constructs	Strongly Agree Agree Undecided Disagree Strongly Disagree
29	I have become more confident of myself as a result of basic training.	This question serves to measure a recruit's self-confidence, the utility of basic training, and Knowles' second and sixth assumption: the *learner's self-concept* and *motivation*. A Strongly Agree response indicates a recruit's sense of trust, feeling of assurance in one's powers, abilities, and certainty of oneself as a result of the basic police training experience, as it does the variable of utility, which measures a recruit's sense of the benefit, quality, and capability to use and apply what they learned in basic police training, including a recruit's sense of preparedness and readiness to perform the duties and responsibilities of a police officer.						X			X				Strongly Agree Value = 5
30	Basic training has helped me to analyze information more critically.	This question serves to measure the utility of basic training as it relates to critical thinking, problem solving, and decision making, skill sets associated with, and advocated as an an integral component of community-policing. A Strongly Agree response reflects a recruit's confidence and ability to assess and analyze information and situation inherent to the duties and responsibilities of a police officer.									X				Strongly Agree Value = 5

Police Recruit
Post-Training Case Scenarios

Bergen

This is the third and final part of a study that is examining learning and instructional methodologies within the construct of basic police training. As noted when the first questionnaire was administed, this study is by design intended to be non-intrusive, anonymous, and strictly voluntary.

The questionnaires have not been coded to identify you personally, other than to identify today's date and this academy. Similar surveys are being administered to other police recruits within New Jersey. Please note that the results of this study are for research purposes, and will only be translated as aggregate level data.

Following herein are four (4) case scenarios that represent real-life situations that you as a police officer may encounter in the field. The cases are straight-forward, although require careful evaluation. Following each scenario are a number of questions.

Based on your training and the nature of the questions, please provide what you deem to be an appropriate response. For each scenario, you will have five (5) minutes to respond to the respective questions, therefore, your answers should be brief and concise.

Thank you

Please turn over to next page ⟶

S 12-10-03

1

Police Recruit
Post-Training Case Scenarios

First Case Scenario

Sgt. Thomas Jones lives in the town that you work in with his girlfriend of three years. He is a police officer in the town next to yours. While there have been rumors of "family trouble" and "domestic difficulties" at the Jones' house, the police have never been called there before.

Your Communications Center has just received a report from Jones' next door neighbor who told the dispatcher that her neighbors "were really going at it". You are the primary officer dispatched to the call. When you arrive, Sgt. Jones' girlfriend is standing on her driveway with a bloody nose.

Please respond to the questions on the next page ⟶

330

Police Recruit
Post-Training Case Scenarios

<u>First Case Scenario Questions</u>

1. As the responding officer, what actions would you take and why?

    _____

    _____

    _____

    _____

    _____

    _____

    _____

2. Does the fact that Jones is a police officer change the way you would handle the situation? Why or why not?

    _____

    _____

    _____

    _____

    _____

    _____

    _____

3. What is the most important purpose of New Jersey's Prevention of Domestic Violence Act?

    _____

    _____

    _____

    _____

    _____

331

Police Recruit
Post-Training Case Scenarios

<u>Second Case Scenario</u>

While on patrol, you are dispatched to a local tavern on a report of a disorderly patron. A senior officer who was also dispatched arrives at the same time. You both enter the crowded tavern and the bartender points to a patron who is standing in the back of the bar mumbling to himself.

Both officers approach the individual who is talking incoherently. You initiate a conversation with a friendly "How are you doing?" and the patron immediately backs up and starts to swing his arms in a wild manner. In the commotion, he knocks over a table which had been holding several glasses. The individual appears to be very agitated and is flailing his arms about. At that time the senior officer with you tells you to "cuff him".

Police Recruit
Post-Training Case Scenarios

Second Case Scenario Questions

1. List any issues that are of immediate concern to you.

_____

_____

_____

_____

_____

_____

2. What action will you take and why?

_____

_____

_____

_____

_____

_____

3. If you are going to use force, what level of force will you employ to restrain this individual?

_____

_____

_____

_____

4. What, if any criminal charges will you place against this individual and why?

_____

_____

_____

_____

_____

__Third Case Scenario__

While on patrol on a portion of highway leading out of New York City (a known drug trafficking route) you spot a silver Lexus sport utility vehicle occupied by a black male driver and a white male passenger. The vehicle is displaying license plates from Washington DC and appears to be weighed down in the back – as if it is carrying a heavy load. The two rear windows are tinted and the right taillight is out. A computer check reveals that the vehicle is registered to an Alice Jones with a Washington DC address.

334

Police Recruit
Post-Training Case Scenarios

<u>Third Case Scenario Questions</u>

1. What offenses and/or crimes are potentially being committed here? (Justify your answer)

    _____

    _____

    _____

    _____

    _____

2. What actions will you take and why?

    _____

    _____

    _____

    _____

    _____

3. What factors would contribute to a legal search of the vehicle?

    _____

    _____

    _____

    _____

4. Is a motor vehicle afforded the same protection under the 4th amendment as a home?

    _____

    _____

    _____

    _____

    _____

Police Recruit
Post-Training Case Scenarios

Fourth Case Scenario

You are a police officer assigned to the patrol division of your agency. You have been assigned a field-training officer (F.T.O.) and he begins to show you how the job is really done. After working a month with this officer, you began to understand the style of policing your department utilizes and some of the activities that take place during your tour of duty. Here is an overview of one incident on your shift.

You are on patrol and observe a motor vehicle traveling at a high rate of speed down your business district at 4:30 p.m. You activate your emergency warning lights and siren and stop the vehicle. The vehicle is occupied by two males known to your F.T.O. as local nuisances. Both of them have been arrested before for "possession and under the influence of a controlled dangerous substance". You approach the driver and ask for his paperwork. He apologizes for speeding and he exhibits all of the documents requested. The interior of the vehicle is orderly.

You go back to your patrol vehicle and converse with your training officer. He tells you that knowing their background he wants you to conduct an investigation and initiate a search of their persons and vehicle for contraband? In doing so, you discover a knapsack located in the rear seat of the vehicle. In checking the contents of the knapsack you find a large zip lock baggie containing approximately fifty vials of crack cocaine. You ask the driver whose knapsack it is and he replies that it is his, however, he did not give consent to search the knapsack. You place him under arrest, handcuff him, and proceed to walk him to your patrol vehicle when the F.T.O. intervenes and says he will place him in the patrol car. As you watch the F.T.O. walking with the defendant, you notice that he starts to curse at him and makes the handcuffs extremely tight.

After the scene is secured, you transport the defendant to Headquarters for processing. He is processed, arraigned, and released on bail. It is now time to do your investigative report and you realize that there may be some concerns. Your F.T.O. walks you through the process. As you are in headquarters other officers hear about the arrest and pass-by congratulating and giving you the high fives. Your sergeant and lieutenant are thrilled that you made your first collar.

Police Recruit
Post-Training Case Scenarios

<u>Fourth Case Scenario Questions</u>

1. Indicate what problems, if any, exist in this scenario.

   _____
   _____
   _____
   _____
   _____
   _____
   _____

2. If you indicate any problems, what course of action will you take to respond to alleviate the problem?

   _____
   _____
   _____
   _____
   _____
   _____
   _____

3. What ethical concerns are present in this scenario and what should or will you do based on the training you received?

   _____
   _____
   _____
   _____
   _____
   _____
   _____
   _____

PreTest

pre_1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	.3	.3	.3
	Undecided	1	.3	.3	.6
	Agree	93	28.7	29.9	30.5
	Strongly Agree	216	66.7	69.5	100.0
	Total	311	96.0	100.0	
Missing	System	13	4.0		
Total		324	100.0		

pre_2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	11	3.4	3.5	3.5
	Agree	38	11.7	12.2	15.8
	Undecided	29	9.0	9.3	25.1
	Disagree	181	55.9	58.2	83.3
	Strongly Disagree	52	16.0	16.7	100.0
	Total	311	96.0	100.0	
Missing	System	13	4.0		
Total		324	100.0		

pre_3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	.6	.6	.6
	Undecided	7	2.2	2.3	2.9
	Agree	145	44.8	46.6	49.5
	Strongly Agree	157	48.5	50.5	100.0
	Total	311	96.0	100.0	
Missing	System	13	4.0		
Total		324	100.0		

pre_4		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	12	3.7	3.9	3.9
	Agree	77	23.8	24.8	28.6
	Undecided	85	26.2	27.3	55.9
	Disagree	119	36.7	38.3	94.2
	Strongly Disagree	18	5.6	5.8	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_5		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	31	9.6	10.0	10.0
	Agree	24	7.4	7.7	17.7
	Undecided	4	1.2	1.3	19.0
	Disagree	139	42.9	44.7	63.7
	Strongly Disagree	113	34.9	36.3	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_6		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	6	1.9	1.9	1.9
	Disagree	50	15.4	16.1	18.0
	Undecided	58	17.9	18.6	36.7
	Agree	155	47.8	49.8	86.5
	Strongly Agree	42	13.0	13.5	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_7		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	58	17.9	18.7	18.7
	Agree	166	51.2	53.5	72.3
	Undecided	39	12.0	12.6	84.8
	Disagree	40	12.3	12.9	97.7
	Strongly Disagree	7	2.2	2.3	100.0
	Total	310	95.7	100.0	
Missing	**System**	14	4.3		
Total		324	100.0		

pre_8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	1	.3	.3	.3
	Undecided	2	.6	.6	1.0
	Agree	114	35.2	36.7	37.6
	Strongly Agree	194	59.9	62.4	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_9

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	3	.9	1.0	1.0
	Agree	26	8.0	8.4	9.3
	Undecided	13	4.0	4.2	13.5
	Disagree	171	52.8	55.0	68.5
	Strongly Disagree	98	30.2	31.5	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_10

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	5	1.5	1.6	1.6
	Disagree	70	21.6	22.6	24.2
	Undecided	8	2.5	2.6	26.8
	Agree	157	48.5	50.6	77.4
	Strongly Agree	70	21.6	22.6	100.0
	Total	310	95.7	100.0	
Missing	**System**	14	4.3		
Total		324	100.0		

pre_11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	14	4.3	4.5	4.5
	Agree	47	14.5	15.2	19.7
	Undecided	24	7.4	7.7	27.4
	Disagree	168	51.9	54.2	81.6
	Strongly Disagree	57	17.6	18.4	100.0
	Total	310	95.7	100.0	
Missing	**System**	14	4.3		
Total		324	100.0		

pre_12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	115	35.5	37.1	37.1
	Disagree	118	36.4	38.1	75.2
	Undecided	1	.3	.3	75.5
	Agree	39	12.0	12.6	88.1
	Strongly Agree	37	11.4	11.9	100.0
	Total	310	95.7	100.0	
Missing	**System**	14	4.3		
Total		324	100.0		

pre_13

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	20	6.2	6.5	6.5
	Agree	152	46.9	49.0	55.5
	Undecided	43	13.3	13.9	69.4
	Disagree	86	26.5	27.7	97.1
	Strongly Disagree	9	2.8	2.9	100.0
	Total	310	95.7	100.0	
Missing	**System**	14	4.3		
Total		324	100.0		

pre_14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	1	.3	.3	.3
	Disagree	4	1.2	1.3	1.6
	Undecided	5	1.5	1.6	3.2
	Agree	116	35.8	37.4	40.6
	Strongly Agree	184	56.8	59.4	100.0
	Total	310	95.7	100.0	
Missing	**System**	14	4.3		
Total		324	100.0		

pre_15

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	6	1.9	1.9	1.9
	Agree	78	24.1	25.2	27.1
	Undecided	25	7.7	8.1	35.2
	Disagree	166	51.2	53.5	88.7
	Strongly Disagree	35	10.8	11.3	100.0
	Total	310	95.7	100.0	
Missing	**System**	14	4.3		
Total		324	100.0		

pre_16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	9	2.8	2.9	2.9
	Agree	16	4.9	5.2	8.1
	Undecided	8	2.5	2.6	10.6
	Disagree	183	56.5	59.0	69.7
	Strongly Disagree	94	29.0	30.3	100.0
	Total	310	95.7	100.0	
Missing	System	14	4.3		
Total		324	100.0		

pre_17

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	4	1.2	1.3	1.3
	Disagree	18	5.6	5.8	7.1
	Undecided	39	12.0	12.6	19.7
	Agree	184	56.8	59.4	79.0
	Strongly Agree	65	20.1	21.0	100.0
	Total	310	95.7	100.0	
Missing	System	14	4.3		
Total		324	100.0		

pre_18

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	2.2	2.3	2.3
	Agree	27	8.3	8.7	11.0
	Undecided	21	6.5	6.8	17.8
	Disagree	150	46.3	48.5	66.3
	Strongly Disagree	104	32.1	33.7	100.0
	Total	309	95.4	100.0	
Missing	System	15	4.6		
Total		324	100.0		

pre_19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	6.2	6.5	6.5
	Agree	56	17.3	18.1	24.5
	Undecided	88	27.2	28.4	52.9
	Disagree	130	40.1	41.9	94.8
	Strongly Disagree	16	4.9	5.2	100.0
	Total	310	95.7	100.0	
Missing	System	14	4.3		
Total		324	100.0		

pre_20

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	4.9	5.2	5.2
	Agree	106	32.7	34.2	39.4
	Undecided	46	14.2	14.8	54.2
	Disagree	116	35.8	37.4	91.6
	Strongly Disagree	26	8.0	8.4	100.0
	Total	310	95.7	100.0	
Missing	System	14	4.3		
Total		324	100.0		

pre_21

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.3	.3
	Disagree	16	4.9	5.2	5.5
	Undecided	10	3.1	3.2	8.7
	Agree	172	53.1	55.5	64.2
	Strongly Agree	111	34.3	35.8	100.0
	Total	310	95.7	100.0	
Missing	System	14	4.3		
Total		324	100.0		

pre_22

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	68	21.0	21.9	21.9
	Agree	161	49.7	51.8	73.6
	Undecided	7	2.2	2.3	75.9
	Disagree	50	15.4	16.1	92.0
	Strongly Disagree	25	7.7	8.0	100.0
	Total	311	96.0	100.0	
Missing	System	13	4.0		
Total		324	100.0		

pre_23

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	.9	1.0	1.0
	Disagree	43	13.3	13.9	14.9
	Undecided	45	13.9	14.6	29.4
	Agree	180	55.6	58.3	87.7
	Strongly Agree	38	11.7	12.3	100.0
	Total	309	95.4	100.0	
Missing	System	15	4.6		
Total		324	100.0		

pre_24		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	44	13.6	14.1	14.1
	Disagree	174	53.7	55.9	70.1
	Undecided	39	12.0	12.5	82.6
	Agree	43	13.3	13.8	96.5
	Strongly Agree	11	3.4	3.5	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_25		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	1	.3	.3	.3
	Disagree	4	1.2	1.3	1.6
	Undecided	17	5.2	5.5	7.1
	Agree	144	44.4	46.3	53.4
	Strongly Agree	145	44.8	46.6	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_26		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	10	3.1	3.2	3.2
	Agree	50	15.4	16.1	19.3
	Undecided	44	13.6	14.1	33.4
	Disagree	175	54.0	56.3	89.7
	Strongly Disagree	32	9.9	10.3	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_27		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Disagree**	2	.6	.6	.6
	Undecided	11	3.4	3.5	4.2
	Agree	194	59.9	62.4	66.6
	Strongly Agree	104	32.1	33.4	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

344

pre_28					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Disagree**	1	.3	.3	.3
	Undecided	4	1.2	1.3	1.6
	Agree	136	42.0	43.7	45.3
	Strongly Agree	170	52.5	54.7	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_29					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	1	.3	.3	.3
	Agree	35	10.8	11.3	11.6
	Strongly Agree	275	84.9	88.4	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

pre_30					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	9	2.8	2.9	2.9
	Agree	34	10.5	10.9	13.8
	Undecided	54	16.7	17.4	31.2
	Disagree	187	57.7	60.1	91.3
	Strongly Disagree	27	8.3	8.7	100.0
	Total	311	96.0	100.0	
Missing	**System**	13	4.0		
Total		324	100.0		

Notes		
Output Created		21-FEB-2007 19:42:43
Comments		
Input	**Data**	C:\Documents and Settings\Rob\Dell XPST450\My Documents\PAC\Rob Vodde\vodde.database.final.r.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	324
Missing Value Handling	**Definition of Missing**	User-defined missing values are treated as missing.
	Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax		NPAR TEST /CHISQUARE=pre_1 pre_2 pre_3 pre_4 pre_5 pre_6 pre_7 pre_8 pre_9 pre_10 pre_11 pre_12 pre_13 pre_14 pre_15 pre_16 pre_17 pre_18 pre_19 pre_20 pre_21 pre_22 pre_23 pre_24 pre_25 pre_26 pre_27 pre_28 pre_29 pre_30 /EXPECTED=EQUAL /MISSING ANALYSIS.
Resources	**Elapsed Time**	0:00:00.09
	Number of Cases Allowed(a)	15887
a Based on availability of workspace memory.		

Chi-Square Test

	pre_1	pre_2	pre_3	pre_4	pre_5	pre_6	pre_7	pre_8	pre_9	pre_10	pre_11	pre_12	pre_13	pre_14	pre_15	pre_16	pre_17	pre_18	pre_19	pre_20	pre_21	pre_22	pre_23	pre_24	pre_25	pre_26	pre_27	pre_28	pre_29	pre_30
Test Statistics																														
Chi-Square(a,b,c,d,e)	40.344	297.859	277.129	135.672	229.884	198.469	239.839	340.280	327.248	247.065	245.710	174.516	219.516	453.770	263.000	379.129	334.226	249.819	148.645	137.419	371.645	231.106	301.069	263.503	365.518	270.752	313.785	298.814	430.328	329.691
df	3	4	3	4	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	2	4
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 77.8.

b 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 62.2.

c 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 62.0.

d 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 61.8.

e 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 103.7.

Notes		
Output Created		21-FEB-2007 19:43:46
Comments		
Input	**Data**	C:\Documents and Settings\Rob\Dell XPST450\My Documents\PAC\Rob Vodde\vodde.database.final.r.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	324
Missing Value Handling	**Definition of Missing**	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=post_1 post_2 post_3 post_4 post_5 post_6 post_7 post_8 post_9 post_10 post_11 post_12 post_13 post_14 post_15 post_16 post_17 post_18 post_19 post_20 post_21 post_22 post_23 post_24 post_25 post_26 post_27 post_28 post_29 post_30 /ORDER= ANALYSIS .
Resources	**Elapsed Time**	0:00:00.28
	Total Values Allowed	149796

PostTest

post_1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	.9	1.1	1.1
	Disagree	20	6.2	7.0	8.1
	Undecided	12	3.7	4.2	12.3
	Agree	137	42.3	48.1	60.4
	Strongly Agree	113	34.9	39.6	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	4.9	5.6	5.6
	Agree	56	17.3	19.6	25.3
	Undecided	34	10.5	11.9	37.2
	Disagree	142	43.8	49.8	87.0
	Strongly Disagree	37	11.4	13.0	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	1.5	1.8	1.8
	Disagree	20	6.2	7.0	8.8
	Undecided	18	5.6	6.3	15.1
	Agree	128	39.5	44.9	60.0
	Strongly Agree	114	35.2	40.0	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_4		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	13	4.0	4.6	4.6
	Agree	49	15.1	17.2	21.8
	Undecided	40	12.3	14.0	35.8
	Disagree	154	47.5	54.0	89.8
	Strongly Disagree	29	9.0	10.2	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_5		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	39	12.0	13.7	13.7
	Agree	99	30.6	34.7	48.4
	Undecided	34	10.5	11.9	60.4
	Disagree	108	33.3	37.9	98.2
	Strongly Disagree	5	1.5	1.8	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_6		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	4	1.2	1.4	1.4
	Disagree	22	6.8	7.7	9.1
	Undecided	22	6.8	7.7	16.8
	Agree	148	45.7	51.9	68.8
	Strongly Agree	89	27.5	31.2	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_7		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	39	12.0	13.7	13.7
	Agree	112	34.6	39.3	53.0
	Undecided	53	16.4	18.6	71.6
	Disagree	71	21.9	24.9	96.5
	Strongly Disagree	10	3.1	3.5	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_8				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Strongly Disagree	27	8.3	9.5	9.5
	Disagree	65	20.1	22.8	32.3
	Undecided	22	6.8	7.7	40.0
	Agree	129	39.8	45.3	85.3
	Strongly Agree	42	13.0	14.7	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_9				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Strongly Disagree	2	.6	.7	.7
	Disagree	4	1.2	1.4	2.1
	Undecided	11	3.4	3.9	6.0
	Agree	116	35.8	40.7	46.7
	Strongly Agree	152	46.9	53.3	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_10				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Strongly Agree	33	10.2	11.6	11.6
	Agree	91	28.1	31.9	43.5
	Undecided	18	5.6	6.3	49.8
	Disagree	133	41.0	46.7	96.5
	Strongly Disagree	10	3.1	3.5	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_11				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Strongly Disagree	6	1.9	2.1	2.1
	Disagree	34	10.5	11.9	14.0
	Undecided	49	15.1	17.2	31.2
	Agree	134	41.4	47.0	78.2
	Strongly Agree	62	19.1	21.8	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_12				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Strongly Disagree**	4	1.2	1.4	1.4
	Disagree	20	6.2	7.0	8.4
	Undecided	42	13.0	14.7	23.2
	Agree	152	46.9	53.3	76.5
	Strongly Agree	67	20.7	23.5	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_13				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Strongly Agree**	67	20.7	23.5	23.5
	Agree	97	29.9	34.0	57.5
	Undecided	35	10.8	12.3	69.8
	Disagree	74	22.8	26.0	95.8
	Strongly Disagree	12	3.7	4.2	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_14				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Strongly Agree**	17	5.2	6.0	6.0
	Agree	77	23.8	27.0	33.0
	Undecided	52	16.0	18.2	51.2
	Disagree	128	39.5	44.9	96.1
	Strongly Disagree	11	3.4	3.9	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_15				
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	**Strongly Agree**	22	6.8	7.7	7.7
	Agree	60	18.5	21.1	28.8
	Undecided	38	11.7	13.3	42.1
	Disagree	147	45.4	51.6	93.7
	Strongly Disagree	18	5.6	6.3	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	23	7.1	8.1	8.1
	Disagree	89	27.5	31.2	39.3
	Undecided	20	6.2	7.0	46.3
	Agree	136	42.0	47.7	94.0
	Strongly Agree	17	5.2	6.0	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_17

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	4	1.2	1.4	1.4
	Disagree	19	5.9	6.7	8.1
	Undecided	42	13.0	14.7	22.8
	Agree	162	50.0	56.8	79.6
	Strongly Agree	58	17.9	20.4	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_18

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	6	1.9	2.1	2.1
	Disagree	48	14.8	16.8	18.9
	Undecided	30	9.3	10.5	29.5
	Agree	158	48.8	55.4	84.9
	Strongly Agree	43	13.3	15.1	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Disagree**	11	3.4	3.9	3.9
	Disagree	39	12.0	13.7	17.5
	Undecided	23	7.1	8.1	25.6
	Agree	142	43.8	49.8	75.4
	Strongly Agree	70	21.6	24.6	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_20

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	18	5.6	6.3	6.3
	Agree	22	6.8	7.7	14.0
	Undecided	25	7.7	8.8	22.8
	Disagree	146	45.1	51.2	74.0
	Strongly Disagree	74	22.8	26.0	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_21

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.4	.4
	Disagree	20	6.2	7.0	7.4
	Undecided	22	6.8	7.7	15.1
	Agree	179	55.2	62.8	77.9
	Strongly Agree	63	19.4	22.1	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_22

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	.9	1.1	1.1
	Agree	9	2.8	3.2	4.2
	Undecided	13	4.0	4.6	8.8
	Disagree	142	43.8	49.8	58.6
	Strongly Disagree	118	36.4	41.4	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_23

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	4.6	5.3	5.3
	Agree	52	16.0	18.2	23.5
	Undecided	23	7.1	8.1	31.6
	Disagree	151	46.6	53.0	84.6
	Strongly Disagree	44	13.6	15.4	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_24

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	38	11.7	13.3	13.3
	Agree	99	30.6	34.7	48.1
	Undecided	29	9.0	10.2	58.2
	Disagree	98	30.2	34.4	92.6
	Strongly Disagree	21	6.5	7.4	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_25

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	20	6.2	7.0	7.0
	Agree	55	17.0	19.3	26.3
	Undecided	34	10.5	11.9	38.2
	Disagree	154	47.5	54.0	92.3
	Strongly Disagree	22	6.8	7.7	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_26

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	5	1.5	1.8	1.8
	Agree	66	20.4	23.2	24.9
	Undecided	17	5.2	6.0	30.9
	Disagree	157	48.5	55.1	86.0
	Strongly Disagree	40	12.3	14.0	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_27

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Strongly Agree**	65	20.1	22.8	22.8
	Agree	84	25.9	29.5	52.3
	Undecided	31	9.6	10.9	63.2
	Disagree	90	27.8	31.6	94.7
	Strongly Disagree	15	4.6	5.3	100.0
	Total	285	88.0	100.0	
Missing	**System**	39	12.0		
Total		324	100.0		

post_28

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	6	1.9	2.1	2.1
	Agree	16	4.9	5.6	7.7
	Undecided	30	9.3	10.5	18.2
	Disagree	197	60.8	69.1	87.4
	Strongly Disagree	36	11.1	12.6	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_29

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	.9	1.1	1.1
	Disagree	28	8.6	9.8	10.9
	Undecided	20	6.2	7.0	17.9
	Agree	164	50.6	57.5	75.4
	Strongly Agree	70	21.6	24.6	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

post_30

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.3	.4	.4
	Disagree	27	8.3	9.5	9.8
	Undecided	15	4.6	5.3	15.1
	Agree	192	59.3	67.4	82.5
	Strongly Agree	50	15.4	17.5	100.0
	Total	285	88.0	100.0	
Missing	System	39	12.0		
Total		324	100.0		

Notes	
Output Created	21-FEB-2007 19:44:28
Comments	
Input — **Data**	C:\Documents and Settings\Rob\Dell XPST450\My Documents\PAC\Rob Vodde\vodde.database.final.r.sav
Filter	<none>
Weight	<none>
Split File	<none>
N of Rows in Working Data File	324
Missing Value Handling — **Definition of Missing**	User-defined missing values are treated as missing.
Cases Used	Statistics for each test are based on all cases with valid data for the variable(s) used in that test.
Syntax	NPAR TEST /CHISQUARE=post_1 post_2 post_3 post_4 post_5 post_6 post_7 post_8 post_9 post_10 post_11 post_12 post_13 post_14 post_15 post_16 post_17 post_18 post_19 post_20 post_21 post_22 post_23 post_24 post_25 post_26 post_27 post_28 post_29 post_30 /EXPECTED=EQUAL /MISSING ANALYSIS.
Resources — **Elapsed Time**	0:00:00.10
Number of Cases Allowed(a)	15887

a Based on availability of workspace memory.

Chi-Square Test

Test Statistics

	post_1	post_2	post_3	post_4	post_5	post_6	post_7	post_8	post_9	post_10	post_11	post_12	post_13	post_14	post_15	post_16	post_17	post_18	post_19	post_20	post_21	post_22	post_23	post_24	post_25	post_26	post_27	post_28	post_29	post_30
Chi-Square(a)	278.000	172.561	243.579	218.982	138.982	255.509	101.228	133.298	358.877	197.158	160.491	237.333	78.912	161.088	196.772	199.825	272.200	242.246	192.807	210.175	362.281	317.579	209.649	103.263	219.930	257.439	75.825	439.509	293.754	422.351
df	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

a 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 57.0.

APPENDIX N: PROBLEM BASED LEARNING ASSESSMENTS
FRENQUENCY TABLES – ANOVA

Questionnaires

Notes	
Output Created	14-AUG-2006 09:39:47
Comments	
Input	Data	C:\My Documents\PAC\Rob Vodde\vodde.database.final.r.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	324
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data.
Syntax		FREQUENCIES VARIABLES=q1_a q2_a q3_a q4_a /STATISTICS=STDDEV MEAN /ORDER= ANALYSIS .
Resources	Total Values Allowed	18724
	Elapsed Time	0:00:00.11

Statistics		Case Scenario #1: Average of Raters	Case Scenario #2: Average of Raters	Case Scenario #3: Average of Raters	Case Scenario #4: Average of Raters
N	Valid	284	284	283	283
	Missing	40	40	41	41
Mean		1.7025	1.6329	1.6758	1.8039
Std. Deviation		.9081	.6782	.8378	.9094

Frequency Table

Case Scenario #1: Average of Raters		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	31	9.6	10.9	10.9
	1.00	74	22.8	26.1	37.0
	1.25	11	3.4	3.9	40.8
	1.75	6	1.9	2.1	43.0
	2.00	80	24.7	28.2	71.1
	2.25	22	6.8	7.7	78.9
	2.75	17	5.2	6.0	84.9
	3.00	43	13.3	15.1	100.0
	Total	284	87.7	100.0	
Missing	System	40	12.3		
Total		324	100.0		

Case Scenario #2: Average of Raters					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	6	1.9	2.1	2.1
	.50	3	.9	1.1	3.2
	.75	6	1.9	2.1	5.3
	1.00	81	25.0	28.5	33.8
	1.25	27	8.3	9.5	43.3
	1.50	17	5.2	6.0	49.3
	1.75	17	5.2	6.0	55.3
	2.00	72	22.2	25.4	80.6
	2.25	22	6.8	7.7	88.4
	2.50	6	1.9	2.1	90.5
	2.75	7	2.2	2.5	93.0
	3.00	20	6.2	7.0	100.0
	Total	284	87.7	100.0	
Missing	System	40	12.3		
Total		324	100.0		

Case Scenario #3: Average of Raters					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	25	7.7	8.8	8.8
	.50	2	.6	.7	9.5
	1.00	72	22.2	25.4	35.0
	1.25	16	4.9	5.7	40.6
	1.75	1	.3	.4	41.0
	2.00	115	35.5	40.6	81.6
	2.25	4	1.2	1.4	83.0
	2.75	14	4.3	4.9	88.0
	3.00	34	10.5	12.0	100.0
	Total	283	87.3	100.0	
Missing	System	41	12.7		
Total		324	100.0		

Case Scenario #4: Average of Raters					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	29	9.0	10.2	10.2
	1.00	52	16.0	18.4	28.6
	1.25	5	1.5	1.8	30.4
	1.50	29	9.0	10.2	40.6
	1.75	5	1.5	1.8	42.4
	2.00	73	22.5	25.8	68.2
	2.25	2	.6	.7	68.9
	2.50	24	7.4	8.5	77.4
	2.75	10	3.1	3.5	80.9
	3.00	54	16.7	19.1	100.0
	Total	283	87.3	100.0	
Missing	System	41	12.7		
Total		324	100.0		

Oneway

Notes		
Output Created		14-AUG-2006 09:43:05
Comments		
Input	Data	C:\My Documents\PAC\Rob Vodde\vodde.database.final.r.sav
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	324
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each analysis are based on cases with no missing data for any variable in the analysis.
Syntax		ONEWAY q1_a q2_a q3_a q4_a BY academy /STATISTICS DESCRIPTIVES /MISSING ANALYSIS .
Resources	Elapsed Time	0:00:00.16

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Case Scenario #1: Average of Raters	Control	164	1.3841	.8719	6.809E-02	1.2497	1.5186	.00	3.00
	Experimental	120	2.1375	.7675	7.007E-02	1.9988	2.2762	.00	3.00
	Total	284	1.7025	.9081	5.388E-02	1.5964	1.8085	.00	3.00
Case Scenario #2: Average of Raters	Control	164	1.4558	.6447	5.034E-02	1.3564	1.5552	.00	3.00
	Experimental	120	1.8750	.6498	5.932E-02	1.7575	1.9925	.00	3.00
	Total	284	1.6329	.6782	4.024E-02	1.5537	1.7121	.00	3.00
Case Scenario #3: Average of Raters	Control	164	1.4345	.8476	6.619E-02	1.3038	1.5651	.00	3.00
	Experimental	119	2.0084	.7018	6.433E-02	1.8810	2.1358	.00	3.00
	Total	283	1.6758	.8378	4.980E-02	1.5778	1.7738	.00	3.00
Case Scenario #4: Average of Raters	Control	164	1.5381	.9208	7.190E-02	1.3961	1.6801	.00	3.00
	Experimental	119	2.1702	.7563	6.933E-02	2.0329	2.3075	.00	3.00
	Total	283	1.8039	.9094	5.406E-02	1.6975	1.9103	.00	3.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Case Scenario #1: Average of Raters	Between Groups	39.328	1	39.328	57.159	.000
	Within Groups	194.030	282	.688		
	Total	233.358	283			
Case Scenario #2: Average of Raters	Between Groups	12.178	1	12.178	29.105	.000
	Within Groups	117.992	282	.418		
	Total	130.170	283			
Case Scenario #3: Average of Raters	Between Groups	22.717	1	22.717	36.431	.000
	Within Groups	175.224	281	.624		
	Total	197.942	282			
Case Scenario #4: Average of Raters	Between Groups	27.550	1	27.550	37.637	.000
	Within Groups	205.691	281	.732		
	Total	233.241	282			

BIBLIOGRAPHY

Abrams, J., Puglisi, D., and Balla, J. (eds) (1988) *Leadership in Organizations*. Garden City Park, NY: Avery Publishing Group, Inc.

Alpert, G. P., Dunham, R. G., and Stroshine, M. S. (2006) *Policing: Continuity and Change*. Long Grove, Illinois: Waveland Press, Inc.

Anderson, L.W. and Krathwohl (Eds.). (2001) *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Anderson, L. W. and Sosniak, L. A. (1994) *Bloom's Taxonomy: A Forty-year Retrospective*. Chicago: National Society for the Study of Education.

Babbi, E. (2002) *The Basics of Social Research,* 2nd ed. Belmont, CA: Wadsworth-Thomson Learning, Inc.

Bachman, R. and Pateanoster, R. (2004) Statistics for Criminology and Criminal Justice, 2nd ed. New York: McGraw-Hill.

Bailey, W.G., (ed) (1989) *The Encyclopedia of Police Science*, 2nd ed. New York: Garland Publishing.

Bandura, A. (1997) *Self-Efficacy: The exercise of control*. New York, NY: W.H. Freeman and Company.

Bandura, A. (1995) *Self-Efficacy in Changing Societies*. Cambridge, UK: Cambridge University Press.

Bandura, A. (1977) *Social Learning Theory*. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. and Walters, R.H. (1963) *Social learning and personality development*. New York: Holt, Rinehart and Winston.

Barclay, K. (2001) *Humanizing Learning-At-Distance*. (Doctorial Dissertation, Saybrook Graduate School, Honolulu, HA. 1988).

Barlow, D. E. and Barlow, M. H. (2000) *Police in a Multicultural Society: An American Story*. Prospect Heights, Ill: Waveland Press, Inc.

Bennett, W. W. and Hess, K. M. (2004) *Management and Supervision in Law Enforcement*, 4th ed. (2004) Belmont, CA: Wadsworth/Thomson Learning.

Berube, M. S., Severynse, M, Ellis, K. and Jost, D.A. (2001) *Webster's II New College Dictionary*. Boston: Houghton Mifflin.

Birzer, M. L. and Roberson, C. (2007) *Policing Today and Tomorrow*. Upper Saddle River, NJ: Pearson Prentice Hall.

Birzer, M. L. (2003) The Theory of Andragogy Applied to Police Training. *Policing: An International Journal of Police Strategies and Management*, Vol. 26, Issue 1, 29-32.

Birzer, M. L. and Tannehill, R. (2001) A More Effective Training Approach for Contemporary Policing. *Police Quarterly,* Vol. 4, No. 2, 233-252.

Bloom, B. S. (ed). (1969) *Taxonomy of Educational Objectives.* New York: David McKay Company, Inc.

Bohlander, G., Snell, S. and Sherman, A. (2001) Managing Human Resources, 12th ed. Cincinnati, Ohio: South-Western College Publishing.

Brankin, P. A. (1989) Adult Developmental Theory and Learning Theories: Their Impact Upon Police Training. *Law and Order*, Vol. 37, Issue 3. March 1989.

Brown, L. and Willis, A. Authoritarianism in British police recruits: Importation, socialization or myth? *Journal of Occupational Psychology*, Vol. 58: 97-108.

Brandl, S.G., and Barlow, D.S. (2004) *The Police in America: Classic and Contemporary Readings*. Belmont, CA: Wadsworth-Thomson Learning, Inc.

Brewer, N. and Wilson, C. (1995) *Psychology and Policing*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Briton, D. (1996) *The Modern Practice of Adult Education: A Postmodern Critique*. New York: State University of New York Press. [Leicester]

Broder, J. D. (1998) *How to Recognize Good Policing*. Thousand Oaks, CA: Sage Publications.

Brockette, R. G., and Hiemstra, R. (1991) *Self-direction in adult learning: Perspectives on theory, research, and practice*. London and New York: Routledge.

Brookfield, S. D. (1986) *Understanding and Facilitating Adult Learning*. San Francisco: Jossey-Bass Publishers.

Burke, B. (1997) Kolb's Learning Cycle: Applying a learning style model to classroom *Teaching at UK, Spring, 1997, Vol. 3, No. 2.* http://www.uky.edu/UGS/tlc/news/kolb.jpg.

Candy, P. C. (1991) *Self-Direction for Lifelong Learning*. San Francisco: Jossey-Bass.

Cantor, J. A. (2000) *Higher Education Outside of the Academy*. ASHE-ERIC Higher Education Report. Vol. 27, No. 7. San Francisco: Jossey-Bass Publishing.

Cattell, R. B. (1987) *Intelligence: Its Structure, Growth and Action*. Amsterdam: North-Holland.

Celeste, R. (1996) *Development of a Police Academy Administrator's Handbook Outlining a Comprehensive Curriculum Model of a Police Recruit Training Program*. (Doctorial Dissertation, Nova Southeastern University, 1996).

Cervero, R. M. and Wilson, A. L. (2001) *Power in Practice: Adult Education and the Struggle for Knowledge and Power in Society*. San Francisco: Jossey-Bass Publishers.

Champion, D. H. and Hooper, M. K. (2003) *Introduction to American Policing*. New York: Glencoe McGraw-Hill.

Charles, M. T. (2000) *Police Training – Breaking All the Rules: Implementing the Adult Education Model into Police Training*. Springfield: Charles C. Thomas.

Clark, C. S., Dobbins, G. H., and Ladd, R. T. Exploratory Field Study of Training Motivation. *Group and Organization Management*, 18, 1993: 292-307.

Cleveland, G. (2006) Using Problem-Based Learning in Police Training. *The Police Chief Magazine*, November, 2006: 29-37.

Cole, G. F. and Smith, C. E. (2008) *Criminal Justice in America*, 5th ed. Belmont, CA: Thomson Wadsworth.

Conser, J. A. and Russell, G. A. (2000) *Law Enforcement in the United States*. Gaitherburg, Maryland: Aspen Publishing.

Creswell, J. W. (1994) *Research Design: Qualitative and Quantitative Approaches*. Thousand Oaks, CA: Sage Publications.

Creswell, J. W. (1998) *Qualitative Inquiry and Research Design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.

Cross, P. K. (1981) *Adults as Learners: Increasing Participation and Facilitating Learning*. San Francisco, CA: Jossey-Bass.

Curzon, L. B. (2006) *Teaching in Further Education*, 6th ed. London: Continuum.

Darkenwald, G. and Merriam, S.B. (1982) *Adult Education: Foundations of Practice*. New York: Harper-Collins.

Dempsey, J. S. and Forst, L.S. (2008) *An Introduction to Policing*, 4th ed. Belmont, CA: Thomson-Wadsworth.

Dewey, J. (1916) *Education as Growth*. In Jarvis, P. (2003) *Adult and Continuing Education: Theory and Practice*, 2nd ed. London: Routledge-Falmer.

Earle, H. H. (1973) Police Recuit Training: Stress vs. Non-Stress. Springfield, Illinois: C. C. Thomas

Elias, J. L. and Merriam, S. B. (1995) *Philosophical Foundations of Adult Education*, 2nd ed. Malabar, FL: Krieger Publishing Company.

Fay, J. (1988) *Approaches to Criminal Justice Training*, 2nd ed. Athens, GA: University of Georgia.

Fitzgerald, J. D. and Cox, S. M. (2002) *Research Methods and Statistics in Criminal Justice: An Introduction*, 3rd ed. Belmont, CA: Wadsworth Thomson Learning.

Fosdick, R. (1972) *American Police Systems*. Montclair, N.J.: Patterson Smith Publishing.

Gaines, L.K. and Kappeler, V.E. (2005) *Policing in America*, 5th ed. Cincinnati, OH: Anderson Publishing.

Gaines, L. K., and Miller, R. L. (2005) *Criminal Justice in Action*, 3rd ed. Belmont, CA: Wadsworth.

Galbraith, M. W. (ed.) (1990) *Adult Learning Methods: A Guide for Effective Instruction*. Malabar, Fl.: Krieger Publishing.

Galbraith, M. W. (ed.) (1991) *Facilitating Adult Learning: A Transactional Process*. Malabar, FL: Kriegler Publishing Company.

Gagné, R. M. (1972) *Domains of Learning*, Interchange, 3(1): 1-8.

Gardner, H. (1993) *Multiple Intelligences: The Theory in Practice*. New York: Basic Books.

Goldstein, H. (1993) *The New Policing: Confronting Complexity*. Washington, DC: National Institute of Justice Research in Brief, December 1993.

Goleman, D. (1997) *Emotional Intelligence.* New York: Bantam Books.

Griffin, C. (1999) Lifelong Learning and Social Democracy. *International Journal of Lifelong Education*. 18, 1999: 329-342.

Garrison, D. R. Self-Directed Learning: Toward a Comprehensive Model. *Adult Education Quarterly*, 48, 1997: 18-33.

Grow, G. O. (1991) Teaching learners to be self-directed. *Adult Education Quarterly*, 41, 1991: 125-149.

Hagen, F. E. (2006) *Research Methods in Criminal Justice and Criminology*, 7th ed. NY: Allyn and Bacon.

Hamilton, R. and Ghatala, E. (1994) *Learning and instruction*. New York: Mc Graw-Hill.

Heimlich, J. E. and Norland, E. (1994) *Developing Teaching Style in Adult Education*. San Francisco, CA: Jossey-Bass Publishing.

Henry, V. E. (2003) The Compstat Paradigm: Management Accountability in Policing, Business and the Private Sector. Flushing, NY: Looseleaf Law Publications.

Hess, K. M. and Wrobleski, H. M. (2006) *Police Operation: Theory and Practice*, 4th ed. Belmont, CA: Thomson Wadsworth.

Hicks, W. D. and Klimoski, R. J. Entry into Training Programs and Its Effects on Training Outcomes: A Field Experiment. *Academy of Management Journal*, 30, 1987: 542-552.

Holden, R. N. (1994) *Modern Police Management*, 2nd ed. Upper Saddle River, NJ: Prentice-Hall, Inc.

Houle, C. O. (1961) *The Inquiring Mind: A study of the Adult who Continues to Learn*. Madison, WI: University of Wisconsin Press.

Houle, C. O. (1992) *The Literature of Adult Education*. San Francisco, CA: Jossey-Bass.

Hughes, R. L., Ginnett, R. C., and Curphy, G. J. (1996) *Leadership, Enhancing the lessons of experience*. Chicago, Ill.: Times Mirror Higher Education Group, Inc.

Jarvis, P. (1987) *Adult learning in the social context*. New York: Routledge.

Jarvis, P. (1987) Adult Learning in the Social Context. *Adult and Continuing Education: Major Themes in Education*. London: Routledge.

Jarvis, P. (2003) *Adult and Continuing Education: Theory and Practice*, 2nd ed. London: Routledge-Falmer.

Jarvis, P. and Griffin, C. (2003) *Adult and Continuing Education: Major Themes in Education*. London: Routledge.

Jensen, G., Liveright, A., and Hallenbeck, W. (eds) (1964). *Adult Education: Outlines of an Emerging Field of University Study*. Washington: Adult Education Assoc. of the USA.

Johnstone, J. W. C. and Rivera, R. J. *Volunteers for Learning: A Study of the Educational Pursuits of Adults*. Hawthorne, NY: Aldine, 1965.

Kallen, H. M. (1962) *Philosophical Issues in Adult Education*. Springfield, Ill: Charles C. Thomas Publisher

Kappeler, V. E., Sluder, R. D., and Alpert, G. P. (1999)   Breeding Deviant Conformity, Police Ideology and Culture. In *The Police and Society* (1999: 238-263). Prospect Heights: Ill: Waveland Press, Inc.

Kelling G. L. and Moore, M. H. (1998) The Evolving Strategy of Policing. *Perspectives on Policing*, No. 4: 1-15. Washington, DC: National Institute of Justice.

Kempfer, H. (1955) *Adult Education*. New York: McGraw-Hill Book Company, Inc.

Kirkpatrick, D. (1998) *Evaluating Training Programs*, 2nd ed. San Francisco: Berrett-Koehler, Inc.

Kidd, J. R. (1978) *How Adults Learn*, 2nd ed. Englewood Cliffs, NJ: Prentice-Hall.

Klein, S. B. (2002) *Learning: principles and applications*, 4th ed. Boston, MA: McGraw-Hill.

Klevins, C. (1972) *Materials and Methods in Adult Education*. New York: Klevins Publications Inc.

Knowles, M. S. (1962) *The Adult Education Movement in the United States*. New York: Holt, Rinehart and Winston, Inc.

Knowles, M. S. (1977) *The Adult Education Practice in the United States*. 2nd ed. Huntington, NY: Krieger Publishing Co.

Knowles, M. S. (1980) *The Modern Practice of Adult Education: Andragogy versus Pedagogy*. New York: Holt, Rinehart and Winston, Inc.

Knowles, M. S. (1984) *Andragogy in Action*. San Francisco, CA: Jossey-Bass Publishing.

Knowles, M. S. (1990) *The Adult Learner: A Neglected Species*, 4th ed. Houston: Gulf Publishing.

Knowles, M. S. (1995) *Designs for Adult Learning*. Alexandria, VA: American Society for Training and Development.

Knowles, M. S., Holton, E. F., and Swanson, R. A. (1998) *The Adult Learners: The Definitive Classic in Adult Education and Human Resource Development*. 5th ed. Woburn, MA: Butterworth-Heinemann.

Kolb, D.A., Rubin, I.M., and McIntyre, J.M. (1974) *Organizational Psychology: Readings on Human Behavior in Organizations*, 4th ed. Englewood, NJ: Prentice-Hall, Inc.

Kolb, D. A. (1984) *Experiential Learning: Experience as the Source of Learning and Development*.   London: Prentice Hall.

Kotler, P., and Andreasen, A. R. (1996) *Strategic Marketing for NonProfit Organizations,* 5th ed. Upper Saddle River, NJ: Prentice-Hall.

Krajnc, A. (1989) *Andragogy*. In C. J. Titmus, Lifelong learning for adults. Oxford: Pergamon.

Krathwohl, D. A. (1998) *Methods of Educational and Social Science Research: An Integrated Approach*, 2nd ed. NY: Addison-Wesley Educational Publishers, Inc.

La Grange, R. L. (1998) *Policing American Society,* 2nd ed. Chicago: Nelson-Hall.

Langworthy, R. H. and Travis, L. F. (2003) *Policing in America*, 3rd ed. Upper Saddle River, NJ: Prentice Hall.

Lawson, M. J. (1995) Instruction and Training. In Brewer, N. and Wilson, C. *Psychology and Policing*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Lefkowitz, J. (1975) Psychological Attributes of Policemen: A review of Research and Opinion. *Journal of Social Issues* 31, No. 1 1975: 3-26.

Lefrancois, G. R. (2000) *Theories of Human Learning*, 4th ed. Belmont, CA: Wadsworth/Thomson Learning.

Lewin, K. (1935) *A Dynamic Theory of Personality*. New York: McGraw-Hill.

Lieberman, D. A. (2004) *Learning and Memory: An integrative approach*. Belmont, CA: Wadsworth/Thomson Learning.

Light, G. and Cox, R. (2006) *Learning and Teaching in Higher Education: The Reflective Professional*. London: Sage Publication, Ltd.

Lindeman, E. C. (1926) *The Meaning of Adult Education*. New York: New Republic, Inc.

Lindeman, E. and Gessner, R. (eds) *The Democratic Man: Selected Writings of Eduard C. Lindeman*. Boston, MA: Beacon Press, 1956).

MacKeracher, D. (1996) *Making Sense of Adult Learning*. Toronto: Culture Concepts Inc.

Maki, P. (2004) *Assessing for learning: Building a sustainable commitment across the institution*. Sterling, VA: Stylus Publishing.

Manheimer, R. J., Snodgrass, D. D., and Moskow-McKenzie, D. (1995) *Older Adult Education: A Guide to Research, Programs, and Policies*. Westport, Ct: Greenwood Press.

Marsick, V. J. 1990. Case study. In *Adult Learning Methods: A Guide for Effective Instruction*, ed. M. W. Galbraith, 225-246. Malabar, Florida: Krieger Publishing Company.

Masaryk, T. O. (1927) The Universal Need of Adult Education: Presidential Address to Council of World Association for Adult Education. In Jarvis, P. and Griffin, C. (2003: 3-7) *Adult and Continuing Education: Major Themes in Education*. London: Routledge.

Maslow, A. (1943). A theory of human motivation, *Psychological Review*, vol. 50, 1943, 370-96.

Maxfield, M. G. and Babbi, E. (2001) *Research Methods for Criminal Justice and Criminology*, 3rd ed. Belmont, CA: Wadsworth Publishing.

Merriam, S. B. (2001a) Andragogy and Self-Directed Learning: Pillars of Adult Learning Theory. *New Direction for Adult and Continuing Education*. Vol. 89, 3-13, Spring 2001.

Merriam, S. B. (2001b) Something Old, Something New: Adult Learning Theory for the Twenty-First Century. *New Direction for Adult and Continuing Education*. Volume 89, 3-13 Spring 2001.

Merriam, S. B. and Brockett, R. G. (1997) *The Profession and Practice of Adult Education*. San Francisco, CA: Jossey-Bass Publishing.

Merriam, S. B. and Cunningham, P. M. (eds) (1989) *Handbook of Adult and Continuing Education*. San Francisco: Jossey-Bass.

Miller, L. S., and Hess, K. M. (2002) *The Police in the Community: Strategies for the 21st Century*, 3rd ed. Belmont, CA: Wadsworth Group.

Miller, L. S. and Hess, K. M. (2005) *Community Policing: Partnerships for Problem Solving*, 4th ed. Belmont, CA: Thomson-Wadsworth Group.

Morgan, D. L. (2002) *Essentials of Learning and Cognition*. Boston, MA: McGraw Hill.

National Advisory Council for Adult Education. *Terms, Definitions, Organizations, and Councils Associated with Adult Learning*. Washington, D.C.: National Advisory Council for Adult Education.

National Center for Education Statistics. *Preliminary Data: Participation in Adult Education*, 1978. Washington, D.C.: Office of Education of Education, U.S. Department of Health, 1979. Education, and Welfare, 1980.

O'Keefe, J. (2004) *Protecting the Republic: the education and training of American police officers*. Upper Saddle River, NJ: Pearson Prentice Hall.

Orlich, D. C. (1978) *Designing Sensible Surveys*. Pleasantville, NY: Redgrave Publishing Company.

Ormrod, J. E. (1995) *Human learning*. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Ornstein, A. C. (1997) *Foundations of Education*, 7th ed. Chicago, IL: Rand McNally Publishing Company.

Ortmeier, P. J. (2006) *Introduction to Law Enforcement and Criminal Justice*, 2nd ed. Upper Saddle River, NJ: Prentice-Hall.

Osland, J. S., Kolb, D. A., and Rubin, I. M. (2001) *The Organizational Behavior Reader*, 7th ed. Upper Saddle River, NJ: Prentice-Hall, Inc.

Paul, R. and Elder, L. (2006) *Critical Thinking*: *learn the tools the best thinkers use*. Upper Saddle River, NJ: Pearson Prentice Hall.

Pavlov, I. (1927) *Conditional reflexes*. (G. V. Anrep, Trans.) London: Oxford University Press.

Peak, K. J. (2006) *Policing America: Methods, Issues, Challenges*. (5th ed.). Upper Saddle River, NJ: Pearson Prentice-Hall.

Penland, P. R. *Self-Planned Learning in America*. Pittsburgh: Book Center, Graduate School of Library and Information Science, University of Pittsburgh, 1977.

Peters, J. M., and Jarvis, P. (1991) *Adult Education: Evolution and Achievement in a Developing Field of Study*. San Francisco, CA: Jossey-Bass Publishers.

Petty, G. (2004) *Teaching Today*, 3rd ed. Cheltenham, UK: Nelson Thornes, Ltd.

Pole, T. (1816) The Origin and Progress. A History of Origin and Progress of Adults Schools, 2nd ed. (1816: 1-5). In Jarvis, P. and Griffin, C. (2003) *Adult and Continuing Education: Major Themes in Education*. London: Routledge.

Pollack, J. M. (1998) *Ethics in Crime and Justice: Dilemmas and Decisions*, 3rd ed. Belmont, CA: Wadsworth Publishing.

Pratt, D. D. 'Andragogy as a Relational Construct'. *Adult Education Quarterly*, 38, 1988: 160-181.

Purpura, P. P. (2001) *Police and Community: Concepts and Cases*. Boston, MA: Allyn and Bacon.

Reed, E. S. (1996) *The Necessity of Experience*. New Haven, CT: Yale University Press.

Reece, I. and Walker, S. (2005) *Teaching, Training and Learning*, 5th ed. Oxford, England: Business Education Publishers Limited.

Riggio, R. E. (2000) *Introduction to Industrial/Organizational Psychology*, 3rd ed. Upper Saddle River, NJ: Prentice-Hall.

Roberg, R., Crank, J. and Kuykendall, J. (2000) *Police and Society*, 2nd ed. Los Angeles, CA: Roxbury Publishing.

Roberg, R.R., and Kuykendall, J. (1997) *Police Management*, 2nd ed. Los Angeles, CA: Roxbury Publishing.

Roberg, R.R., Kuykendall, J., and Novak, K. (2002) *Police Management*, 3rd ed.
  Los Angeles, CA: Roxbury Publishing.

Roberg, R., Novak, K., and Cordner, G. (2005) *Police and Society*, 3rd ed. Los Angeles, CA:
  Roxbury Publishing.

Robbins, S. P. (2000) Managing Today, 2nd ed. Upper Saddle River, NJ: Prentice Hall.

Rogers, A. (2002) *Teaching Adults*, 3rd ed. Philadelphia, PA: Open University Press.

Rosenstock, Eugen (1921), "Angewandte Seelenkunde", *Die Arbeitsgemeinschaft 4
  Monatsschrift für das gesamte Volkshochschulwesen* 4: 129-146.

Royal Canadian Mounted Police, Cadet Training Handbook (1999). Regina, SK: RCMP
  Academy, Depot Division.
   http://www.rcmp-grc.gc.ca/depot/ctp/publications/cadet_training_handbook/ctp

Sadker, M.P. and Sadker, D.M. (2005) *Teachers, Schools, and Society*, 7th ed. Boston,
  MA: McGraw Hill.

Savery, J. R. and Duffy, T. M. 'Problem Based Learning: An Instructional Model and Its
  Constructivist Framework'. In Brent G. Wilson (ed.). *Constructivist Learning
  Environments: Case Studies in Instructional Design*. Englewood Cliffs, NJ: Educational
  Technology Publications, 1996.

Scarman Centre (2001) *Research Methods*, Module III. University of Leicester, UK.

Saunders, C. B. (1970) *Upgrading the American Police: Education and training for
  better law enforcement*, Washington, DC: The Brookings Institution.

Saville, G. (2006) Emotional Intelligence in Policing, *The Police Chief Magazine*,
  November, 2006: 38-41.

Schine, J. (1997) *Service Learning*. Chicago, Ill: National Society for the study of
  education.

Schmalleger, F. (2007) *Criminal Justice Today: An introductory text for the 21st century*,
  9th ed. Upper Saddle River, N.J.: Pearson Prentice Hall.

Schunk, D. H. (2004) *Learning Theories: An Educational Perspective*, 4th ed. Upper Saddle
  River, NJ: Prentice-Hall.

Schutt, R. K. (2001) Investigating the Social World, 3rd ed. Thousand Oaks, CA: Pine Forge
  Press.

Selye, H. (1974) *Stress Without Distress*. New York, N.Y.: J.B. Lippincott Co.

Skinner, B. F. (1968) *The technology of teaching*. New York: Appleton-Century-Crofts.

Smith, M. C., and Pourchot, T. (eds) (1998) *Adult Learning and Development: Perspectives
  from Educational Psychology*. Mahwah, NJ: Erlbaum Publishers.

Smith, R. M., Aker, G. F., and Kidd, J. R. (1970) *Handbook of Adult Education*. New York:
  Macmillan Company.

Stark, J. S. and Lattuca, L. R. (1997) *Shaping the College Curriculum: Academic Plans in Action*. Boston, MA: Allyn and Bacon.

Stevens, D.J. (2003) *Applied Community Policing in the 21st Century*. Allyn and Bacon: Boston.

Stoner, J. A. F., and Freeman, R. E. (1992) *Management*, 5th ed. Englewood Cliffs: Prentice-Hall.

Stubblefield, H. W. and Keane, P. (1994) *Adult Education in the American Experience*. San Francisco, CA: Jossey-Bass Publishers.

Suskie, L. (2004) *Assessing Student Learning*. Bolton, MA: Anker Publishing Co., Inc.

Swanson, C. R., Territo, L., and Taylor, R. W. (2001) *Police Administration: Structures, Processes, and Behavior*, 5th ed. Upper Saddle River, NJ: Prentice Hall.

Tannenbaum, S.I., Mathieu, J. E., Salas, E., and Cannon-Bowers, J. A. (1991) Meeting Trainees Expectations: The Influence of Training Fulfillment on the Development of Commitment, Self-Effiacy, and Motivation. *Journal of Applied Psychology*, 76, 1991: 739-769.

Taylor, K., Marienau, C, and Fiddler, M. (2000) *Developing Adult Learners*. San Francisco: Jossey Bass Publishing.

Thorndike, E. L., Bregman, E.O., Tilton, J. W., and Woodyard, E. (1928) *Adult Learning*. New York: McMillan Company.

Tough, A. (1971) *The Adults Learning Project: Episodes and Learning*. Toronto: Ontario Institute for Studies in Education (2nd ed) (1971: 6-15). In Jarvis, P. and Griffin, C. (2003) *Adult and Continuing Education: Major Themes in Education,* Vol. II, 35-44. London: Routledge.

Turner, T. (2006) The Need for Emotional Intelligence in Leadership. *FBI Law Enforcement Bulletin*, September, 2006: 10.

Trojanowicz, R., and Bucqueroux, B. (1992) *Toward Developing of Meaningful and Effective Performance Evaluations*. East Lansing: Michigan State University.

van Enckevort. *Andragology:. A New Science*, Nederlands Centrum Voor. Volksontwikkeling,. Amersfoort, The Netherlands, April, 1971 (Mimeographed).

Vella, J., Berardinelli, P. and Burrow, J. (1998) *How Do They Know They Know?: Evaluating Adult Learning*. San Francisco: Jossey Bass Publishing.

Walker, S. and Katz, C. M. (2005) *The Police in America*, 5th ed. New York: McGraw-Hill.

Walker, S. and Katz, C. M. (2008) *The Police in America*, 8th ed. New York: McGraw-Hill.

Weinblatt, R. B. (1999) New Police Training Philosophy: Adult Learning Model on Verge of Nationwide Rollout. *Law and Order*. Vol. 47, Issue 8. August 1999.

Wertheimer, M. (1912) Experimentelle Studien über das Schen von Bewegung. *Zeitschrift für Psychologie*, 61, 161-265.

Whisenand, P. M. and Ferguson, R. F. (2002) *The Managing of Police Organization*s, 5th ed. Upper Saddle River: Prentice Hall.

White, M. D. (2007) *Current Issues and Controversies in Policing*. Boston, MA: Pearson Education, Inc.

Wlodowski, R. J. (1985) *Enhancing Adult Motivation to Learn*. San Francisco: Jossey-Bass.

Zinn, L. M. (1998) Philosophical Foundations of Adult Education. *Adult Learning*, Vol. 9, Spring, No. 3, 1998: 6-7.