

Exploring the Role of UK Higher Education in Developing Employability: A Mixed Methods Approach

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By

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Thesis Abstract

Exploring the role of UK higher education in developing employability: a mixed methods approach

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This thesis investigates current understandings surrounding factors making up the construct of employability. The project comprises three consecutive stages aimed at clarifying the nature of employability and Higher Education (HE) role in individual employability development.

Stage one, a review of the literature, was conducted to explore current patterns and conflicts regarding the nature of employability within published research. Investigations of this literature indicated a need to integrate previous theoretical developments within any future advancements of the concept of employability. Additional consideration of employers' perspectives was deemed necessary to develop a robust theoretical framework.

Stage two utilised Repertory Grid Technique (RGT) to explore the implicit theories of 22 employers and 14 HE instructors involved in the development of employability. Content analysis of elicited constructs developed 16 superordinate, and 30 subordinate categories to account for the data. A differential analysis of employers and HE instructors supported the generalisability of academically generated employability theories to employers; while highlighting potential areas of disparity between the two stakeholder's foci. Further support was given to the value of mediating employability processes (self and signal-management) as a focus of employability variations.

Stage three, sought to construct and offer initial validation of a measurement tool designed to assess personal strengths underlying the two named employability processes (self-management and signal-management). Exploratory Factor Analysis (EFA) identified 10 latent factors underlying the tools subscales; Positive Self-Evaluations, Signalling Fit, Verbal Communication, Planning, Honesty, Openness, Resilience, Working Cooperatively, Conscientiousness and Sensitivity to Others. Multiple Regressions partially supported the relationship between these strengths and measures of objective and subjective career success.

The thesis research offers original methodologies for exploring this phenomenon. It provides a conceptual framework representative of data gathered in stage one and two, which contextualises the role of individual strengths.

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“For with God nothing shall be impossible”
(Luke 1:37)

If it were not for the will of God, this project would not have come to fruition. I am blessed that I have God in my life and he strengthens me in all I aim to accomplish. When things have felt impossible, I have known that it is not my abilities alone that I needed to rely on. I give thanks to God for this opportunity and the support I have been provided from those around me.

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Dedicated to June Dorothy Nutter

(June 1928 - July 2018)

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Glossary of Terms and Abbreviations

Attention trap	Scale Item designed to identify those who are not giving attention to the way they respond to items.
Boundariless career mindset	<i>“Initiating and pursuing work-related relationships across organizational boundaries” (Briscoe, Hall & DeMuth, 2006, p.31).</i>
BPS	British Psychological Society
Capital	Assets or personal properties which are convertible to economic gain.
CC	Cultural capital
CS	Career Success
Conceptualisation	A structure given to help describe and/or understand an idea (i.e. a model, theory, conceptual/theoretical framework)
CVR	Content Validity Ratio: ratio of SME’s who agree the item is essential compared to those who did not.
EFA	Exploratory Factor Analysis
Element	<i>“The things or events which are abstracted by a construct” (Kelly, 1991 p.95).</i>
Employability skills	<i>“Attributes of employees, other than technical competence, that make them an asset to an employer” (Buck & Barrick, 1987).</i>
Employability orientation	Individuals’ inclination to engage in employability considerations (Van Dam, 2004).
FA	Factor Analysis

HC	Human Capital: The embedding of human resources within individuals (Becker, 1962).
HE	Higher Education
HEA	Higher Education Academy
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institute's
Implicit theories	Internal personal theories
Knowledge Based Economy	An economy that puts value on the role of knowledge or intellectual ability.
Massification of Education	The expansion of HE to an increasing proportion of the population, beyond an elite minority.
OCS	Objective Career Success: an externally verifiable indicator of career success.
PCA	Principle Component Analysis
PCT	Personal Construct Theory
Positional perspective	The viewpoint of defining employability as a reflection of a positional advantage above others.
Possessional perspective	The viewpoint of defining employability as a reflection of the personal attributes, skills, knowledge, one possesses within them.
ProceSSIONal perspective	The viewpoint of defining employability as a process to engage with.
RGT	Repertory Grid Technique: A technique grounded in PCT, which offers structure to interviews aimed at identifying what bipolar constructs inform an individual understanding of a topic.

SC	Social Capital: Capital which <i>“comes about through changes in the relations amongst people, that facilitate action”</i> (Coleman, 1988, p.100).
SCS	Subjective Career Success: self-perceptions of career success.
SCCT	Social Cognitive Career Theory
SCT	Social Cognitive Theory
SME	Subject Matter Expert
ST	Signalling Theory
Widening participation	The widening participation agenda aims to ensure everyone with the academic ability, can engage in HE at any point across their lifespan; increasing the numbers of younger students, as well as students from disadvantaged backgrounds such as those with lower incomes, disabilities, or from certain ethnic minority groups.

Dissemination List

The following research has been disseminated through several avenues.

Stage one, a review of current employability understandings:

- Williams, S., Dodd, L. J., Steele, C., & Randall, R. (2016). A systematic review of current understandings of employability. *Journal of Education and Work*, 29(8), 877-901. doi: 10.1080/13639080.2015.1102210
- Williams, S., Dodd, L., & Randall, R. (2013, September). *What is Employability: A systematic review of conceptualisations and discussion of HEI's role*. Paper presented at Newman University Teaching and Learning Conference on *Social Inequalities and Cultural Differences*, Birmingham.
- Williams, S., Dodd, L., & Randall, R. (2013, September). *What is Employability: A systematic review of conceptualisations and discussion of HEI's role*. Paper presented at the British Sociological Association Annual Conference on Work employment and Society, University of Warwick.
- Williams, S., Dodd, L., & Randall, R. (2013). *What is Employability: A systematic review of conceptualisations and discussion of HEI's role*. Poster presented at the HEA STEM Annual Learning and Teaching Conference on where practice and pedagogy meet, University of Birmingham.
- Williams, S. (2012, December). *Exploring the employability of higher education students in England: a systematic review of current understandings of employability*, Paper presented at the Department of Psychology Postgraduate Research Day, University of Leicester.

Stage two, a repertory grid investigation exploring employer's and instructor's implicit theories of employability:

- Williams, S. (2018). *Contextualising employment outcomes: A new framework for understanding HE employability development*. Manuscript in Preparation.
- Williams, S., Karypidou, A., Steele, C., & Dodd, L. (2018). *A personal construct approach to employability: Comparing stakeholders' implicit theories*, Manuscript submitted for publication.

- Williams, S., Karyipidou, A., Steele, C., & Dodd, L. (2018, July). *Employability as a personal construct: Understanding the role of employers in education for employability*, Paper presented at the 5th International Conference on Employer Engagement and Training, Department for Business Energy and Industrial Strategy.
- Williams, S., Karyipidou, A., Steele, C., & Dodd, L. (2018, June). *Understanding employability in Higher Education: A Personal Construct Theory Perspective*, Poster presented at the Division of Academics, Researchers and Teachers in Psychology Inaugural Conference.
- Williams, S. (2017, January). *A comparison of employers and instructor's implicit theories of employability*. Paper presented at the Division of Occupational Psychology Conference on Research into Practice, Liverpool.
- Williams, S. (2016, July). *What is employability? A comparison of employers and instructors implicit theories*, Poster presented at the Festival of Postgraduate Research, University of Leicester.
- Williams, S. (2016, June). *A comparison of employers and instructors implicit theories*, Department of Neuroscience's Psychology and Behaviour, Paper presented at the Postgraduate research day, University of Leicester.
- Williams, S. (2014). Repertory grids: Employability as viewed by those involved in recruitment. *SAGE Research Methods Cases*. doi: 10.4135/978144627305014534167

Stage three, the construction and initial validation of an employability audit tool:

- Williams, S. (2018). *Employability development in HE: A consideration of subjective career success*. Manuscript in Preparation.
- Williams, S. (2017, June). *Construction and initial validation of an employability self-audit tool*. Paper presented at the Department of Neuroscience, Psychology and Behaviour's Postgraduate research day, University of Leicester.

Chapter 1

Introduction

“More must be done to address the variability in employment outcomes for some graduates and to ensure all students and employers get the best return on their investment”

(Department for Business, Innovation & Skills (BIS), 2016, p.42)

1.1. Background to Thesis

This thesis aims to investigate current understanding surrounding factors making up the construct of employability so to inform its potential development through Higher Education (HE). There has been a longstanding relationship between HE and the economy (Gazier 1998; Kromydas, 2017; Lees, 2002). However, this relationship has altered a great deal in past decades, since the Robbins report (1963) emphasised employability as a main objective within HE, and the subsequent Dearing Report (National Committee of Inquiry into HE/NCIHE, 1997) called for the enhancement of employability skills, to meet the demands of the economy. These alterations have placed “employability” at the forefront of conversations around HE’s function (Tomlinson, 2012).

Documented increases in population size have resulted in an enhanced number of students accessing HE across the globe. Issues with growth in terms of resource capacity, changes in admissions practices, and associated changes in norms and culture, have been discussed as early as the 1970’s (Mohamedbhai, 2008; Trow, 1976). Referred to by some as an education revelation (Baker, 2015; Bennich-Björkman, 1997) the move from HE for the elite, to widening participation practices embedded within government policy, has further compounded this resource issue (Baker, 2015).

In 1963 the Robbins report recommended the expansion of HE provision to allow for an associated increase in student numbers. Consequently, tuition fees for participation in HE were introduced in the UK in 1998 in an effort to tackle expected rises in costs resulting from increased demand. This initial fee of £1,000 escalated to £3000 in 2006-7, on to £3225 in 2009-10 (in line with inflation), financial caps were then raised dramatically to £9000 in 2012/13 following recommendations from the Browne report to remove a cap altogether (Anderson, 2016; Browne, 2010). While the result of meeting original demand for HE, the increase in fees has led to increased pressure on institutions to evidence individual return on student’s investment “– *students will only pay higher charges if there is a proven path to higher earnings*” (Browne Report, 2010, p.31). This is despite the amplified competition for graduate opportunities resulting from increased HE participation levels. This approach presents a Human Capital (HC)

based rationale to prospective students in which their “investment” is expected to result in economic return through an increase in human resources.

Increases in tuition fees have resulted in an upsurge in discussions around students as consumers; aiming to possess a degree, rather than *be* a learner (Cain, Romanelli, & Smith, 2012; Molesworth, Nixon, & Scullion, 2009; Regan, 2012). HE is now being expected to “*convince students of the benefits of investing more*” (Browne, 2010, p.25), with significant attention being given to the contrasts in employment outcomes of graduates and non-graduates (Browne, 2010). As HE Institutes (HEI’s) cannot guarantee employment, they are forced to consider the contribution they can make to employability development. In the present thesis, Thijssen, Van der Heijden and Rocco’s (2008) *definition of employability as “an indicator of [an individual’s] opportunity to acquire and to keep an attractive job” (p.168)* was utilised as an initial base for further investigations of this construct (Working definition one). As such this definition considers employability not just in terms of attaining employment, but also individuals adequate functioning within these posts, reflecting two dominant areas of employability policy (Philpott, 1999). This definition was developed as the thesis progressed and supplemented with a comprehensive framework.

There is documented dissatisfaction amongst proportions of the HE community, regarding the relevance of employability development to their practice (Atkins, 1999; Barnett, 1994; Cranmer, 2006; Harvey, 2001; Jameson, Strudwick, Bond-Taylor, & Jones, 2012; Prickett, 1994; Tasker & Packham, 1994). Although a recent extensive survey in Portugal suggests that academics outside of the UK may be swaying towards perceptions of employability as their responsibility (Sin & Amaral, 2017). A focus on preparing graduates to offer valuable contributions to the workplace has been criticised by many as being juxtaposed to what HE’s aims and values should be (Barnett, 1994; Chomsky, 1988; Collini, 2012; Lorenz, 2012; Lynch, 2015; Marginson, 2013). This strengthening employability focus contrasts with traditional educational philosophy, in which knowledge is considered an important good in its own right. Likewise, this agenda diverges from HE’s perceived purpose, seen as fostering a love for learning (Newman, 1992), offering opportunities for the expression of individuality (Chomsky, 1975), and presenting an independent critical stance to knowledge and society (Barnett, 1994; Collini, 2012; Prickett, 1994; Tasker & Packham, 1990), which is arguably quite different from labour markets values and expectations which encompass a focus on

profitability. Instead there appears to be a move away from educational excellence, towards university as a conveyor belt, churning out workers to contribute to the national “knowledge-based economy”- in which knowledge is said to drive growth (Harris, 2001). While this is a thought that might leave some who have entered work in HE with the hope to inspire the future great thinkers, depressed; in the words of Cardinal Newman himself *“Let us act on what we have, since we have not what we wish”*. It remains that if not engaged with, the employability agenda can lead to dangerous consequences for the status of an institution; including decreased revenue through student recruitment and the potential to threaten institutional reputation amongst graduate employers (Harvey, Locke, & Morey, 2002).

1.2. Measuring Employability Outcomes

Until recently, all institutions were required to advertise the results of the Destinations of Leavers from HE (DLHE) survey, which documents the employment outcomes of graduates six months following graduation. This has now been replaced with the new Graduates Outcomes Survey (GOS), surveying graduates 15 months after graduation (HESA, 2018). The provided information is expected to inform students of the employment outcomes they can expect as a result of participation at a university. To this effect items of the DLHE/GOS are incorporated into Key Information Sets (KIS). The KIS are designed to offer information surrounding a course to allow potential students an informed choice in respect of their future study. GOS results will be filtered through to potential students via comparison sites such as UNISTATS and employability league tables such as those produced by The Guardian. These sources are again designed to inform students of the nature of the institutions competing for their custom. Thus, we find ourselves in a situation in which employment outcomes are being utilised as a proxy measure of institutions impact on employability.

Problems with the use of these statistics are multiple (see for example, Christie, 2017; Harvey, 2001). In addition to not representing a consideration of variations in entry requirements and pre graduation employment, these figures do not allow for a consideration of the variable length of training amongst professions, or a consideration of social structures influencing employment opportunities (Yorke, 2001). Harvey's (2001) position paper, discussing employability definitions and measurements, argued

that looking at the employment outcomes of students subverts the operationalisation process. He argued as far back as 2001, that failing to first define the concept of employability prior to exploring its measurement can provide a distorted picture of HE's contribution to employability. Likewise, Clarke (2008) supports the essential nature of a theoretical framework of employability so to efficiently and accurately measure the impact of employability development opportunities. Nevertheless, there has been little change to date in the way in which employability is discussed within government policy. Employability definitions are frequently lacking, beyond their use as synonyms for skills development. Perhaps even more concerning is the lack of contextual clarity being provided by University marketing material, in the promotion of employment outcomes and "employability" as a means of enticing potential students, HEI's have been reported to be the most frequent commentators of these distorted employability measures (Christie, 2017).

1.3. Thesis Aims and Structure

The aim of this thesis is to address the question what is the nature of employability as it relates to employability development in HE, and thus inform the nature and limits of HE's influence on the development of individual graduate's employability. This thesis aims to return to the beginning of the operationalisation process. As such this thesis considers the definition and make-up of this sort-after commodity, from the perspective of developing the employability of individual graduates. Through the utility of two approaches to data acquisition previously not applied to this area (systematic review and Repertory Grid Technique (RGT), an original conceptualisation of employability is presented. The framework contextualises HE's role in developing individual graduates' employability. The mediating processes which are informed by both personal strengths and contextual restrictions are considered in terms of their impact on the achievement of employment outcomes.

The thesis will commence with a review of the employability literature which led to the development of this research process, offering both context and direction for the present research. The initial definition of employability provided by Thijssen et al.'s (2008) see section 1.1., will be developed throughout this review of the literature, culminating in a definition of employability which will be taken forward into subsequent investigations.

Following this review, the methodology chapter will outline the epistemological and psychological stances underpinning this research.

These introductory chapters will be succeeded by the presentation of a further two sequential stages of inquiry. Each stage offers a unique contribution to addressing the research question. Stage two offers a repertory grid investigation into employers' and instructors' implicit theories of employability (chapter four), with an accompanying differential analysis exploring the areas in which these stakeholders perspectives converge and deviate (chapter five). This stage proposes an alternative perspective to the conceptualisation of employability outlined by the systematic review presented in chapter two, informed by current applied practice. This data is then compared to the findings emerging from the literature review, resulting in a robust employability framework. Subsequently, stage three discusses the construction and initial validation of a measure of personal strengths relevant to the application of employability processes outlined in the conceptual framework (chapter six and seven). The thesis will draw to a close with (chapter eight) a discussion of the implication of these research findings, summarising the achievements of the thesis, evaluating the thesis contribution, and offering links between this work and that presented within the literature review.

Chapter 2

Stage One – Reviewing Current Understandings of Employability

*“If we stopped to pay our respects to all the thinking which has preceded and
influenced what we have to say, we would never get it said”*

(Kelly, 1955, p.42)

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2.1. Introduction to Chapter

Given the question to be explored by this research “*What is the current understanding surrounding factors making up the construct of employability?*”, this thesis began with an investigation into the conclusions which can be drawn by current published works. The present chapter offers a multidisciplinary approach to the topic of employability, reviewing some of the more pertinent research which led to the development of this research process, offering both context and direction for the following research.

The review begins by outlining the unit of analysis which this thesis will explore, that is to say the comparable employability of individual students and graduates. This is followed by a consideration of commonalities across existing employability conceptualisations (i.e. conceptual and theoretical frameworks, theories, and models), at this level of analysis. This discussion of commonalities is informed by a systematic review of existing holistic employability conceptualisations (Williams, Dodd, Steele, & Randall, 2016). Paralleling progression through the literature a working definition of employability will be offered, informing the initial response to the research question.

2.2. Units of Analysis

Within the current employability literature, three units of analysis in the investigation of employability have been identified. Thijssen et al. (2008) refer to societal, company/organisational, and individual levels of analysis. At the societal or national (macro) level a consideration of high and low employment rates is the key focus. Such interventions may look to enhance labour opportunities, or access to these opportunities, benefit structures, or economic policies. At this level of employability focus is given to comparative investigations across groups. For example, Paranjape (2007) developed an index of employability, comparing individuals at different level of employability looking at indices of unemployment, income, and job mobility. Groups often cited as deserving special attention are younger and older workers, those of low educational standing, and women (Thijssen et al., 2008), but also the long-term unemployed (Kroft, Lange, Notowidigdo, & Katz, 2016), ex-prisoners (Alós, Esteban, Jódar, & Miguélez, 2015) and those with disabilities (Stafford, Marston, Chamorro-Koc, Beatson, &

Drennan, 2017). These groups are identified as requiring targeted policies to aid in reducing barriers to employment opportunities. A need for such policies illustrates the diversity of employability experiences at the level of the individual and the potential societal level barriers to an individual's employability development.

At a company/organisational (meso) level interest is focused on supply and demand and how company actions can utilise workers to meet this demand. This may involve a focus on functional flexibility, or engagement with training. An example of such work includes discussions of talent management (for example, De Vos & Dries, 2013). This literature offers guidance around what factors employers may manipulate to enhance individual engagement with interventions aimed at making the company more competitive. Such research illustrates the role of organisational practices on individual employability levels, through the nature and extent of employment development opportunities offered to existing employees.

The level of employability to be focused on here is that of the individual, a micro-level investigation. Thijssen et al. define this level as *“an indicator of an [individual's] opportunity to acquire and to keep an attractive job in the internal or external labour market”* (Thijssen et al., 2008, p.168). Therefore, this level is understood as exploring explanations of what can be done to aid individuals working to develop their employability.

Employability literature has evidenced an increasing focus on individual levels of employability. This individualised perspective is illustrated by reviews of the historical developments of employability definitions (Gazier, 1998), the increased financial onus on individuals and their families to fund HE tuition fees, aggregating of individual employment outcomes as assessments of HE's success in developing employability, as well as the rise in concepts such as the boundariless and protean career (Arthur, 1994; Hall, 2004). These concepts reflect a change in the relationship between companies and employers, which emphasises individual accountability for employment outcomes and career management (Arthur, Ciaman, & DeFillippi, 1995; Stickland, 1996) and consequently, the personalisation of failure to gain employment (Moreau & Leathwood, 2006).

Within each of these overlapping contexts (individual, organisational, societal) different stakeholders are involved, often introducing their own language, which muddies the

semantic waters (Collet, Hine, & du Plessis, 2015; Suarta, Suwintana, Sudhana, Hariyanti & Bali, 2017). Given the complexity of integrating these domains, it is not surprising that investigations of employability which combine a consideration of individual, organisational and wider contextual issues, are uncommon (Thijssen et al. 2008). However, definitions of employability which exclude contextual components reflect an artificial removal of the individual from the company and societal contexts. It is illustrated above, that these contexts hold consequences for individual employability development. As a result, the present working definition of employability introduced in section 1.1. is developed to acknowledge the role of these contexts on an individual level understanding of employability;

*“An individual’s opportunity to acquire and to keep an attractive job **within the context of changing personal, organisational, and societal, contexts**”* (working definition two)

2.3. Current Individual Level Employability Theories

Having identified a working definition for this thesis, existing research relevant to this understanding of employability needs to be explored. Such literature can inform an understanding of the makeup of employability, as defined by working definition one, potentially identifying a suitable existing conceptualisation to take forward within investigations of HE’s role. Several authors have offered reviews of the employability literature. In 1999 Gazier presented a historical review which illustrated an evolution in the way in which the term employability has been applied to our understanding of employment situations. Gazier (1998) illustrated an evolution in the term’s meaning resulting from the changing context in which individuals worked. Gazier discusses a journey from employability as a dichotomy of either being employable or not, indicating an alignment with employment definitions, to a consideration of employability as a continuum from more employable to less employable. This was followed by the more recent representation, Gazier puts as emerging in the 1960’s, which enhances focus on the adaptability of the individual. This change aligns with developments in the labour market through increased global competition result from technological and communication developments advancing the breadth and speed of globalisation (Aghion & Williamson, 1998). Increased competition has led to

companies being unable to guarantee a job for life. The frequent occurrence of major restructuring within organisations, which displaces employees, appears to be here to stay (Arthur et al., 1995; Wittekind, Raeder, & Grote, 2010); subsequently there has been a removal of job security and increasing uncertainty surrounding employment (Arthur et al., 1995).

Gazier's review has been followed by a review of challenges surrounding defining and measuring employability, by Harvey (2001). Harvey's review indicates the presence of a disregard for the diversity within employability's application and meaning in favour of a reductionist approach to measuring employability outcomes. In 2013 Holmes discussed the comparison between what he refers to as three competing perspectives. These perspectives saw graduate employability as either a possession – "*based on notions of skills and attributes*" (Holmes, 2013, p.538), a position – "*based on social positioning theory*" (Holmes, 2013, p.538) that explores the equality of individuals access to opportunities, or a process – "*the interactional nature of the education-employment trajectories by which individuals gain, or fail to gain, desired employment outcomes*" (Holmes, 2013, p.540). While this review illustrates three important categories of thinking around employability, filing whole conceptualisations of employability into these neat perspectives is not always easy, or indeed appropriate, for example see later discussions of Fugate, Kinicki, and Ashforth (2004). Additional reviews of employability offer further voices to this discussion (for example, Artess, Mellors-Bourne, & Hooley, 2017; Clarke, 2017; Guilbert, Bernaud, Gouvernet, & Rossier, 2016; Osmani et al., 2015; Small, Shacklock, & Marchant, 2018; Tomlinson, 2017), including the articulation of dissatisfaction with the adequacy of current conceptualisations (Christie, 2017; Hillage & Pollard, 1998; Lees, 2002; Tomlinson, 2012).

While these reviews offer an important insight into some of the patterns emerging within the employability literature, there is a lack of clarity regarding the comprehensiveness of these discussions. Specifically, are all existing holistic conceptualisations of employability considered within these reviews? As such, researchers entering the field of employability were previously left unclear around the existing base of employability conceptualisations from which they can approach

employability. In 2016 a review of employability conceptualisations at the level of analysis focused on within this thesis (individual level – comparing the employability of one person over another) offered a transparent and systematic search of employability conceptualisations published between 1960 and 2013. Such systematic approaches play an important role in informing evidence-based practice (Briner, Denyer, & Rousseau, 2009). While approaches to such reviews vary, the key characteristic of systematic reviews is the systematic nature in which papers are identified and considered (Gough, Oliver, & Thomas, 2012). Such reviews present several advantages when addressing the existing understanding of employability. Unlike narrative reviews, which do not clearly outline their approach to identifying and reviewing content, but aim to offer a story told by previous research, systematic review avoids a bias sample of existing work, presenting the full range of employability conceptualisations (Torgerson, 2003). Transparency of reasons for the inclusion and exclusion of manuscripts can be explicitly stated, allowing for replication and scrutiny of the results. Furthermore, this approach provides a rigorous means of exploring the consistency among studies (Petticrew & Roberts, 2006), although in the case of Williams et al., quality assessments are omitted as a function of the conceptual focus of this review.

Williams et al. (2016) extracted papers which offered a new, holistic conceptualisation of employability, which informed an understanding of employability at the level of the individual (see section 2.2.). The review identified 15 employability conceptualisations published between 1995 and 2013. Unlike Holmes's (2013) approach, this review categorised understanding at the level of individual components, and therefore offered a less reductionist approach to the comparison of current employability understandings. Furthermore, the number of employability conceptualisations reviewed within this paper exceeded that identified by Holmes.

Since this 2016 review a further two conceptualisations have been produced within the employability literature (see table 2.2.).

Table 2.1. Extracted conceptualisations and their named components

Author	Conceptualisation*	Components
Hogan Chamorro-Premuzic, and Kaiser (2013)	Integrative model	Social/interpersonal compatibility (Rewarding); Abilities, expertise, know-how (Able); Ambition, work ethic, drive (Willing); Candidate profile; Employer perception.
Bridgstock (2009)	Conceptual Model	Self-management skills; Career building skills; Acquisition, display and use of Self-management skills & Career building skills; Underpinning traits and dispositions; Discipline specific skills; Generic skills.
Thijssen et al. (2008)	Conceptual Model	Predictors of current employability Current employability of human resources; Broadening conditions (personal and contextual); Transition conditions (personal and contextual); Future employment perspectives.
Dacre-Pool and Sewell (2007)	Model	Career development learning; Experience (Work and Life); Degree subject knowledge, understanding and skills; Generic skills; Emotional intelligence; Self-esteem; Self-efficacy; Self-confidence; Reflection and evaluation.
Heijden and Van Der Heijden (2006)	Theoretical Framework	Occupational Expertise, complimented with four general competencies: 1) Anticipation and Optimisation; 2) Personal Flexibility; 3) Corporate Sense; 4) Balance.
McQuaid & Lindsay (2005)	Framework	Individual factors; Personal circumstances; External factors.
Fugate et al. (2004)	Model	Career Identity; Social and Human Capital; Personal adaptability.
De Grip et al. (2004)	Conceptual Model	Mobility (willingness and capacity to participate); Training (willingness and capacity to participate); Functional flexibility (willingness and capacity to participate)
Forrier and Sels (2003)	Conceptual Model	Labour market position; Movement Capital (MC); Opportunity to maintain or enhance MC; Willingness to maintain or enhance MC; Activities to maintain or enhance MC; Willingness to move; Ease of movement; Shock Event; Transition; Context.
Brown, Hesketh, and Williams (2003)	Conceptual Framework	Absolute employability; Relative employability
Knight and Yorke (2003)	Model	Understanding; Skills; Efficacy; Metacognition.
Harvey et al. (2002)	Model	Subject area; HEI; Graduate; Employability development opportunities; Employability attributes; Self-promotional skills; Willingness to develop; Extra-curricular experiences; Engagement; reflection; Pedagogy; Articulation of employability; Recruitment process; External factors; Employer.
Kluytmans and Ott (1999)	Model	Applicable know-how and skills; Know-how job market; Willingness to be mobile.
Hillage and Pollard (1998)	Framework	The Assets an individual possesses in term of knowledge, skills and attitudes; Deployment of those assets; Presentation of those assets; The context within which they seek work.
Arthur et al. (1995)	Framework	Knowing why; Knowing how; Knowing whom.

*Representing self-classification presented in the paper.

Table 2.2. Conceptualisations published post Williams et al. (2016).

Author	Conceptualisation*	Components
Sumanasiri, Ab Yajid, & Khatibi (2015)	Framework	Career developmental learning; Work and life Experience; Degree subject knowledge, skills and understanding; Generic skills; Emotional intelligence; Learning outcomes; University reputation.
Tomlinson (2017)	Model	Psychological capital; Identity capital; Cultural capital; Social capital; Human capital.

Considering the extracted manuscripts, several conceptualisations were based on reviews of the literature to varying degrees. For example, Dacre-Pool and Sewell (2007) offered selective sources to support the inclusion of the majority of their content. While the empirical groundings for other aspects of their model, such as reflection and evaluation, were less clear consequently. This conceptualisation has been argued to be based on limited research support (Sumanasiri et al., 2015). Other conceptual models were based on what appear to be extensive reviews of the literature (for example, Hogan et al., 2013; Thijssen et al., 2008), although the systematic process followed to review the literature and how this was combined to develop the presented theory is unclear, leaving it open to bias in the presentation of employability.

Five of these conceptualisations offered empirical support or grounding for their literature derived models (see table 2.3.); Heijden and Van Der Heijden (2006) presented a valuable comparison of employee and supervisor ratings on employability in evaluating their model, De Grip et al. (2004) offered a test of their own model at an industrial level, and Harvey et al. (2002) offered 16 case studies as illustrations of their communications around employability development.

While the support for these models is strong in places, there remains a question over the opportunity of this empirical research to identify new, perhaps overlooked, components of employability external to the prescribed structure imposed in the investigation. When key stakeholders are involved in this theory development, the nature of this involvement is unclear. Work by Hillage and Pollard (1998), in addition to incorporating a review of the literature, supplemented this with interviews with Department for Education and Employment (DfEE) officials and external experts and commentators. Unfortunately, there is insufficient detail surrounding this input, to evaluate the contribution of the empirical research in addressing any potential bias in the literature-based frameworks

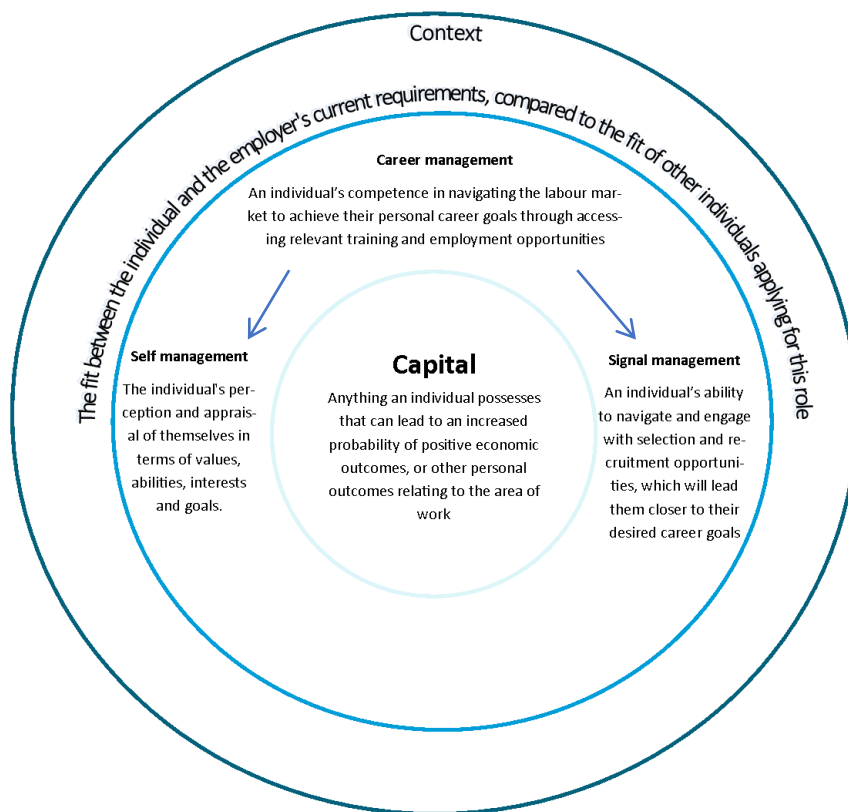
Table 2.3. Conceptualisations empirical basis

Manuscript	Manuscript type	Sample	Methodology
Tomlinson (2017)	Position paper	na	na
Sumanasiri et al. (2015)	Position paper	na	na
Hogan et al. (2013)	Position paper	na	na
Bridgstock (2009)	Position paper	na	na
Thijssen et al. (2008)	Position paper	na	na
Dacre-Pool and Sewell (2007)	Position paper	na	na
Heijden and Van Der Heijden (2006)	Empirical paper	314 employees and 334 immediate supervisors (290 pairs)	Exploratory study looking at a new structure not present in the literature. Operationalised and a measurement tool developed. Findings supported the model.
McQuaid & Lindsay (2005)	Position paper	na	na
Fugate et al. (2004)	Position paper	na	na
De Grip et al. (2004)	Empirical paper	13 sectors of industry.	While employability is considered at an individual level within part of this index, empirical support for this conceptualisation is only offered at a sector level. This is provided in the form of secondary data.
Forrier and Sels (2003)	Position paper	na	na
Brown et al. (2003)	Position paper	na	na
Knight and Yorke (2003)	Position paper	97 recent graduates and 117 supervisors, mentors, and co-workers (Knight & Yorke, 2004)	While note presented within the paper, the skills plus project on which the framework was based, utilized unspecified qualitative methods to explore the meaning of employability held by the sample.
Harvey et al. (2002)	Report	16 cases from employers and HEI's	Method used to collect data not specified.
Kluytmans and Ott (1999)	Position paper	na	na
Hillage and Pollard (1998)	Government report - Aiming to operationalise the concept of employability.	A review of the literature accompanied by interviews with DfEE officials and external experts and commentators (sampling method & size absent).	The model was developed from a review of the literature and interviews with DfEE officials and external experts and commentators. The complete framework was presented to those interviewed and DfEE officials thus suggesting approval of this theory. Methods by which literature based understandings, and interviews where combined is absent).
Arthur et al. (1995)	Position paper	na	na

development. It is also not clear whose viewpoint took precedence, or what activities occurred, in the event of a disagreement amongst these policy makers, commentators and other experts. This issue is replicated within Yorke and Knight's (2003) USEM model which was based on the Skills Plus Project; however, published outlines of the empirical procedure developing the model are absent.

Williams et al.'s (2016) synthesis of the 84 employability components available at that time produced three distinct categories, here after referred to as dimensions of employability. These three superordinate dimensions of employability were: capital, career management, and contextual components. This chapter will now proceed to utilise these dimensions to navigate the existing employability literature pertinent to this thesis.

Figure 2.2. Visual illustration of three dimensions of employability component



2.3.1. Employability capital.

The first dimension to be identified by Williams et al. was capital. This dimension was broadly defined as anything an individual possesses that can lead to an increased probability of positive economic outcomes, or other personal outcomes relating to the

area of work. The core features of this dimension were properties of the individual that elicit demand or functionality in the workplace (Williams et al., 2016).

The strong presence of this dimension within the employability literature mirrors the capital approach to HE investment, taken by government policy, in which employability is often equated with a discussion of knowledge and skills. However, here capital is not used to refer to only those components that are subject to development. The term “anything” is purposefully used to account for inherent and learnt, academic and personal, aspects of the individual. This capital dimension is further subdivided into four subcategories; human, psychological, social, and cultural. This division largely mirrors later conclusions by Tomlinson (2017).

2.3.2. Human capital (HC).

2.3.2.1.1. Definition and core features.

HC explains employability in terms of providing added functionality to the employer through an enhancement of the skills and knowledge available to them, for example, knowledge of the latest methods or procedures that could offer an economic gain to the organisation. Employability from this dimension therefore related to the degree to which the HC someone possesses allows them to compete for their desired job role. This desired role was informed by other dimensions of employability (see section 2.5.7.).

The HC perspective on employability links with the sociological theory of HC, which refers to the embedding of human resources within individuals (Becker, 1962). This capital cannot be separated from individuals and elicits favourable outcomes. These resources are expected to enhance future income, and thus human resource development through education is interpreted as an investment. HC theory proposes that an understanding of these less-tangible resources would explain occupational inequalities that had previously baffled researchers in the area (Becker, 1962). However, the observations of internal resources of individuals within economic theory goes much further back in time (Smith, 1776) and continues to develop (Goldin & Katz, 2009).

According to Williams et al. (2016) the first employability conceptualisation to refer to components which can be understood in terms of HC was Arthur et al. (1995). The intelligent career framework was linked to employability by Eby, Butts, and Lockwood (2003). Arthur et al.'s “knowing how” component referred to the knowledge and skills that individuals bring to the firm through formal and experiential learning. Each of these dimensions of career competency were seen as interconnected, suggesting a link between HC, and other capital categories (i.e. SC) and later employability processes (i.e. knowing why – self-management).

This dimension is further developed by the likes of Hillage and Pollard (1998), whose report represented HC in the component “Assets”. This asset component is then broken down into three subcategories; Baseline Assets – basic skills and essential personal attributes; Intermediate Assets – occupational specific skills, general key skills and key personal attributes; and High Skills – skills that help contribute to organisational performance. This taxonomy is not taken forward by later conceptualisations.

Since these conceptualisations, HC components have been incorporated to varying degrees by others. The degree to which this content is broken down also varies. For example, Knight and Yorke (2003) include a “Skills/ Skilful practice” component alongside reference to “Understanding” and “Metacognition”; Heijde and Van Der Heijden (2006) include “Occupational expertise” which the authors stated is growing in importance as a result of “*the intensification of knowledge*” (p.454); Dacre-Pool and Sewell (2007) include “Degree subject knowledge, understanding and skills” and “Generic skills”; and within Hogan et al. (2013) HC is present as “*abilities, expertise and know-how which employers perceive as the candidates ability to do the job*” (p.12). The value of contributions is variable, with other conceptualisations referring to HC with little conceptual advancement such as McQuaid (2006) who included discussion of HC through a breakdown of employability skills and attributes, within their “Individual factors” dimension into essential attributes, personal competencies, and high-level transferrable skills. However, without a definition of these it is difficult to take much more from this framework.

Data pertaining to the value of HC as a predictor of relevant proxy measures of employability, such as careers and performance outcomes, offers mixed results. Reports from 314 employees and 334 immediate supervisors (290 pairs) within a large Dutch

firm found measures of professional expertise to have no correlation with periods of unemployment, and a negative relationship with promotions (Heijde & Van Der Heijden, 2006). Furthermore, an investigation into the predictive value of Fugate et al.'s (2004) employability theory found their measure of HC (measured by education level) to have no significant contribution to understanding the employability of 416 unemployed Australians (McArdle, Waters, Briscoe, & Hall, 2007). However, in this case, the measure applied was a rather crude assessment of HC, and the researchers testify to this within their discussion. In contrast, reports from 458 alumni in Eby et al.'s (2003) application of Arthur et al.'s "Knowing how" and other components, found career/job related skills to significantly predict perceived CS, perceived internal and perceived external marketability.

The development of HC has been empirically linked to technological innovation, economic development, productivity growth, and social progress (Sofoluwe, Shokunbi, Raimi, & Ajewole, 2013). Similarly, Francis-Smythe, Haase, Thomas, and Steele's (2013) work has supported the link between this category of component and career success (CS) through named career competencies. These findings suggest a complex picture, between this strongly referenced component and employability. However, the question remains of what aspects of HC are most important.

2.3.2.2. Employability skills

Despite HE and government presenting a HC rationale for investment in HE, businesses have previously argued, through numerous avenues, that HEI's are not producing work ready graduates (Association of Graduate Recruiters (AGR), 2016; Atkins, 1999; Cotton, 1993; Chartered Institute of Personnel and Development (CIPD), 2012; Chartered Management Institute, 2002; Confederation of British Industry 2008, 2016; Davies, 2000; Davis, Buckley, Hogarth, & Shackleton, 2000; Leitch, 2006; Ray, McKinsey, & Abel, 2012; Jagger, Davis, Lain, Sinclair, & Sinclair, 2001). Although reports suggest that dissatisfaction at least in terms of graduates' literacy, numeracy, and problem solving, may now be reducing, concerns around self-management, analysis, and communication skills, as well as work experience, continue (AGR, 2016; CBI, 2016). As a result, the negative press regarding graduates' work readiness endures (BBC, 2017; Carr, 2017; Denham, 2013; Woolcock, 2014), representing a global

concern (De la Harpe, Radloff, & Wyber, 2000; Sin & Amaral, 2017; Wickramasinghe & Perera, 2010). Such a discrepancy between educational provision and the skills required for a work-ready graduate is referred to as the “skills gap” (Buck & Barrick, 1987). Research into employability skills, has identified a range of skills and personal attributes at the heart of this “skills gap”, meaning they offer a list of the possessions which employers see as key to employability. However, agreement on these important skills has been lacking, with skills sets varying in length and content.

In 1997 the Dearing report (National Committee of Inquiry into HE/NCIHE, 1997) concluded that the development of communication, numeracy, information technology, and learning how to learn, would become a key aim of HE. As such these skills were integrated into quality assurance guidelines for curriculum development. Nevertheless, numerous skills lists expand beyond the value of these skills, and results of surveys aimed at identifying the important employability skills, are mixed. A recent review by Suarta et al. (2017) considered reports from such significant bodies, across the globe, as: the Organisation for Economic Co-operation and Development (OECD) (OECD Skills Outlook, 2013); Think Global and British Council (Global skills gap, 2011); the American Management Association (AMA); the Australian Department of Education, Science and Training (2002); the United Nations Educational, Scientific and Cultural Organization (UNESCO); and within the UK, the Higher Education Academy (HEA). It also considered empirical research seeking employers’ perspectives (for example, Husain, Mokhtar, Ahmed, & Mustapha, 2010; Klibi & Oussii, 2013; Low, Botes, Dela Rue, & Allen, 2016; Ramli, Nawawi, & Chun, 2010; Robles, 2012). From this review Suarta and colleagues conclude the most significant skills to be communication skills, problem-solving, decision-making, teamwork, and personal attributes; self-awareness, self-confidence, independence, emotional intelligence, flexibility, adaptability, stress tolerance, creativity, initiative, willingness to learn, reflectiveness, life-long learning, and professional behaviour. Suarta et al. (2017) suggest the impact of varying terminologies across stakeholder’s groups could interfere in the production of agreement across research outputs. However, additional concerns such as the nature of perceived success measures (see section 2.3.75) and personal variations in implicit theories (see section 3.4.) could also account for this lack of agreement.

It is vital to emphasise that the accuracy of these skills gap discussions have been strongly contested, as those skills requested by employers might not be those utilised by

the role (Hesketh, 2000; Mason, Williams, & Cranmer, 2009; Stasz, 1997). Furthermore, the presentation or otherwise of such skills within graduates, or indeed students, does not equate to a contribution of HE.

2.3.2.3. Learning gain.

A relatively new development in the employability literature relevant to this HC discussion, is that of learning gains. Learning gain is defined by McGrath, Guerin, Harte, Frearson, and Manville (2015) as the “*difference between the skills, competencies, content knowledge and personal development demonstrated by students at two points in time*” (p.xi). Higher Education Funding Council for England (HEFCE), working in partnership with the HEA and Department for Business, Innovation and Skills (BIS) have commissioned various independent learning gain projects to explore a new approach to educational outcomes within the UK. It is hoped that this research will better illustrate the contribution of institutions to individuals’ baseline levels. This would allow for a more accurate assessment of what HEIs offer than traditional employment outcomes. It is the intent of such work to aid in the accountability, transparency, and comparability of HE outcomes.

While this concept is an encouraging advancement in the assessment of HE’s contribution to employability, it is still in a fledgling state. Conclusions around how to best assess this gain have raised numerous questions that have yet to be sufficiently addressed. These include: identifying what factors should be measured, and how they should be measured, the purpose of measuring them, acknowledging the diversity in individual student’s aspirations and requirements, potential unintended consequences of the measurements, and the role of external forces in driving learning gains.

Such questions return us to discussions of employability skills lists exploring what relevant dimensions of learning exist. By exploring this content, advancements in a learning gain assessment relevant to employability might be possible. This measure could then inform HEIs of what areas of employability development require further enhancement. Learning gain data could extend the benefits of HE engagement for students seeking to enhance their employability through a degree.

2.3.2.1. *Employability and learning.*

Links between learning and employability have been made within several employability conceptualisations. Yorke and Knight (2004) argued that embedding employability, whilst viewed in a negative light by those opposed to the employability agenda, fits within actions to enhance learning. Issues of willingness to engage in life-long learning are communicated through Fugate et al.'s (2004) inclusion of propensity to learn, named as a construct relevant to personal adaptability. This propensity can be thought to be driven by issues of perceived employability discussed later (see section 2.5.7.); albeit in a direction which requires further investigation (Houben, Cuyper, & Kyndt, 2016). Furthermore, Forrier and Sels (2003) include a consideration of learning agility, highlighting the importance of capacity to learn, which is also reinforced by Suarta et al.'s (2017) skills gap review which emphasised the role of information literacy. Yet, efforts to provide theoretical support to a consideration of learning and employability, is limited. In 2015 Sumanasiri et al. produced a framework that aimed to offer operational clarity and simplicity in its interpretation of the employability-learning partnership (see figure 2.3.).

Figure 2.3. Learning and Employability framework

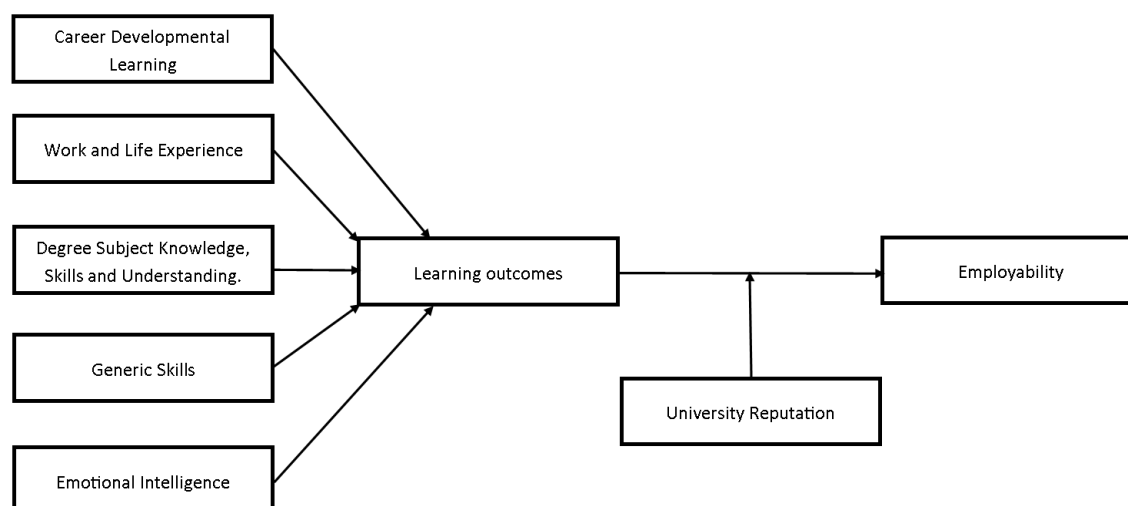


Figure 2.3. Taken from Sumanasiri et al. (2015, p.57)

Sumanasiri et al. model linked learning to employability through the addition of “learning outcomes”, based on the work of Phillips, McNaught, and Kennedy (2010) LEPO (Learning Environment Process Outcome) learning model, and “university

reputation” to a model which corresponds closely to the CareerEDGE employability model (see section 2.8.). This is despite their claims that the CareerEDGE model is based on limited research support. The authors argue that other models neglect the consideration of “learning” in graduate employability models, despite this reflecting HEI’s main function. Nevertheless, by introducing a consideration of university reputation, it is plausible that they overlook true “learning gain”, in an evaluation of universities’ contribution to employability development. That is to say, students entering into universities which hold high reputation are potentially equipped with a plethora of additional characteristics which may be less common within those students entering institutions that have lower reputations. It is conceivable that these baseline characteristics hold more direct relevance to the enhancement of employment outcomes, than the amount of learning achieved during attendance at the institution. This could only be fully assessed with a consideration of the success of those who had comparable baseline assets, but either chooses to enrol in a university of less prestige, or who did not enter into the university system. Thus, while aiming to offer clarity and simplicity in its interpretation, Sumanasiri et al. actually highlight some of the complexity of any relationship between learning at university and employability, without any clear acknowledgement of the need to consider this complexity.

2.3.3. Employability and psychological capital (PC).

2.3.3.1. Definition and core features.

The second sub-dimension of employability capital identified by Williams et al. (2016) was psychological capital (PC). PC was related to psychological capacities offering strengths within the job market. PC is described by one campaigner Luthans (2002), as relating to “*positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace*” (Luthan 2002, p.59). Luthan confines his focus to resources that can be developed. In comparison, within Williams et al.’s review this category is opened to include trait-like resources, so to avoid a limitation of this discussion, resulting from debates around the development of these psychological strengths. It is perceived that these strengths would be such, whether it was possible to

develop them or not. Thus, this component of employability included states such as confidence, hope, resilience, and personality traits such as conscientiousness. Guenther et al. (2017) argue that this dimension could be defined as identity capital; however, this definition conflates what someone has with who someone sees themselves to be, better placed within Williams et al.'s self-management dimension covered later in this chapter.

PC adds to HC, explaining employability from the standpoint of the individual's ability to offer optimal performance within the role offered, for instance, providing proactivity which would thrust the role forward as appropriate, or confidence which would allow for successful presentation of possessed skills or abilities.

2.3.3.2. Employability and adaptability.

Perhaps unsurprisingly, given the description of the most recent wave of employability definitions according to Gazier (1998), adaptability and resilience were dominating aspects of PC within the reviewed manuscripts. Adaptability is defined here as the ability to change, or to be changed, to fit new circumstances. This was first considered within an employability conceptualisation by Hillage and Pollard (1998), in their reference to "Strategic approach" within their deployment component. This was defined as "*the extent to which they are adaptable to labour market developments and realistic about labour market opportunities*" (p.17). Soon after, Kluytman and Ott (1999) presented their component "Willingness to be mobile". This was followed by "Willingness to develop" (Harvey et al., 2002) and subsequently by "Willingness to move" and perceived "Ease of movement" (Forrier & Sels, 2003). These components illustrate the importance of strength in the face of challenge such as uncertainty/stress associated with change. Further references are made to adaptability within McQuaid and Lindsay (2005) in the individual factors "Adaptability and mobility" and "Personal flexibility", and Eby et al.'s (2003) operationalisation of "Knowing why" to include "Readiness to adapt to circumstances".

Fugate et al. (2004) places adaptability at its heart, defining employability as:

"A psycho-social construct that embodies individual characteristics that foster adaptive cognition, behaviour, and affect, and enhance the individual-work interface." (Fugate et al., 2004, p.15)

Figure 2.4. Heuristic model of employability

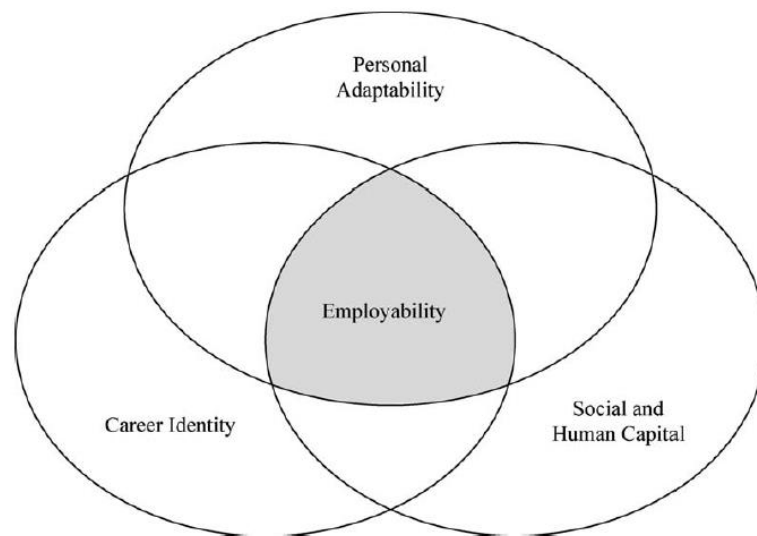


Figure 2.4. Fugate et al.'s Heuristic model of employability (2004, p.19)

Although some opponents of this theory see it as too closely aligned with related constructs such as career decidedness (Rothwell & Arnold, 2007), in which someone is certain or otherwise of the career path they wish to pursue, the theory has both an effective theoretical basis, and a strong resonance with a host of developments within the employability literature (Williams et al., 2016). This conceptualisation illustrates the limited nature of Holmes (2013) distinction between the aforementioned perspectives of possession, process, and position, poignant. The model combines both HC (possession), identity (proccessional), and social capital (SC) (positional) within an understanding of employability as work-based proactive adaptability (see figure 2.4 for an illustration of this model). Building on Ashford and Taylor's (1990) conceptualisation of adaptability, they call for the importance of information regarding the environment, the negotiation of challenges, and willingness to change. HC and SC provide resources to this activity, identity provides direction, and personal adaptability optimises change.

Fugate's conceptualisation names several personal adaptability factors, one which fits best within the category of PC, and which has been connected to proxy measures of employability, is openness. Openness has been connected to success within job searching (Uysal & Pohlmeier, 2011), and has also been proposed as an antecedent to

perceived CS (Eby et al., 2003), and employability orientation (Van Dam, 2004 – see figure 2.9.), having been shown by meta-analysis to be linked to increased training success (Barrick & Mount, 1991; Salgado, 1997). An application of openness to the concept of employability is represented in several employability conceptualisations. The role of openness is illustrated in Kluytman and Ott's (1999) definition of employability as:

“The willingness of an employee to adapt to changes in the job contents and location (willingness) and the extent in which the know-how and skills can be applied outside the organization (ability)” (Kluytman & Ott, 1999, p.266).

Figure 2.5. Components of employability as defined by Kluytman and Ott (1999)

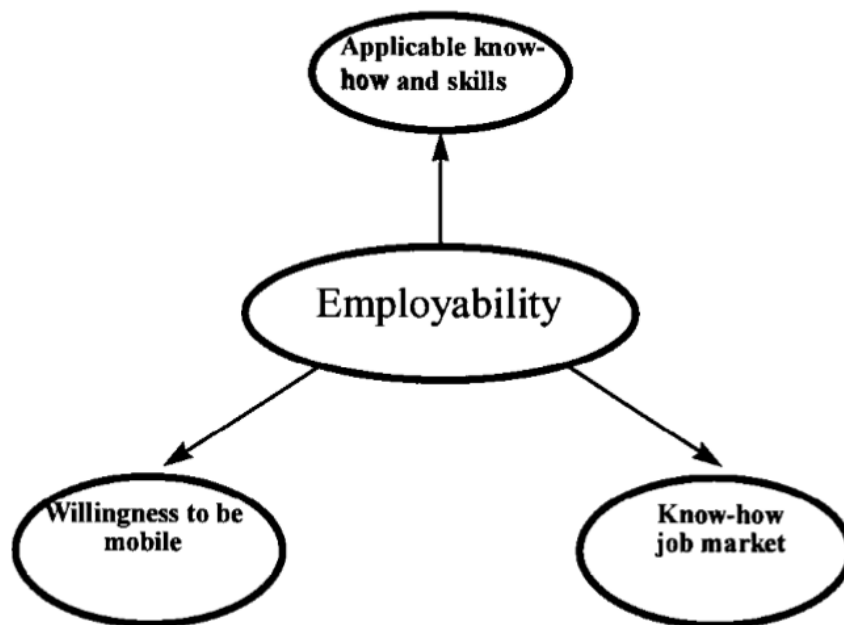


Figure 2.5. Employability conceptualisation taken from Kluytman and Ott (1999, p.263)

Five years on, this openness/willingness was integrated into a conceptualisation by De Grip, van Loo, and Sanders (2004), who defined employability as;

“The capacity and willingness of workers to remain attractive for the labour market (supply factor), by reacting to and anticipating changes in tasks and work environment (demand factors), facilitated by the human resources development instrument available to them (institution)” (p.216).

De Grip et al. (2004) acknowledge three dimensions of employability requiring the combining of capacity and willingness. The focus of these capacities and willingness are mobility, training, and functional flexibility. This conceptualisation illustrates the importance of movement within employability. Capacity relates to contextual components and other possessional factors allowing these “attitudes” to be actualised. Hence, De Grip et al. (2004) expand on Kluytmans work, illustrating the importance of developing applicable know-how, through willingness and capacity to train, as well as willingness and capacity to be functionally flexible. This functional flexibility is reminiscent of job-crafting literature, defined as *“the self-initiated changes that employees make in their own job demands and job resources to attain and/or optimize their personal (work) goals”* (Timms, 2012, p.173). The value of this openness in understanding employability continues within later conceptualisations. For example, Bridgstock (2009) named openness as an underlying trait or disposition impacting successful career development. Furthermore, openness could be linked to Hogan et al.’s (2009) “willingness” dimension.

A consideration of the role of openness further expands the present employability definition beyond an acknowledgement of an individual’s opportunity to acquire and to keep an attractive job within the context of changing personal, organisational, and societal, contexts.” (working definition 2.1), to the capacity and willingness to engage with such opportunities. Thus, the context of available opportunities is included alongside individual’s ability and willingness to engage with them;

*“An individual’s **capacity and willingness to engage in** opportunities to acquire and to keep an attractive job within the context of changing personal, organisational, and societal, contexts” (working definition three)*

Another employability researcher exploring the role of adaptability is Forrier. Forrier and Sels (2003) present movement capital, which reflects a person’s capacity to cope with change as a function of their possessions. Furthermore, the self-defined process model shows the importance of transition management within the functioning of employability. Either derived from willingness to move, or a shock event forcing a transition, transition is a key part of this process; progressing from one labour market position i.e. unemployed, student, part-time, to another. This model explores what leads

to a transition and can be arguably referred to as pastiche of March and Simon (1958) seminal work on voluntary turnover, which referred to personal and contextual factors i.e. desirability of a move (low satisfaction, and shock or jarring event) and ease of movement (perceived job alternatives, strong economy). By incorporating movement capital and transitional processes, Forrier, Verbruggen, and De Cuyper's (2015) aimed to unite the two notions of employability as transition and as movement capital and offer further potential understanding around employability.

Figure 2.6 Forrier and Sels (2003) employability process model

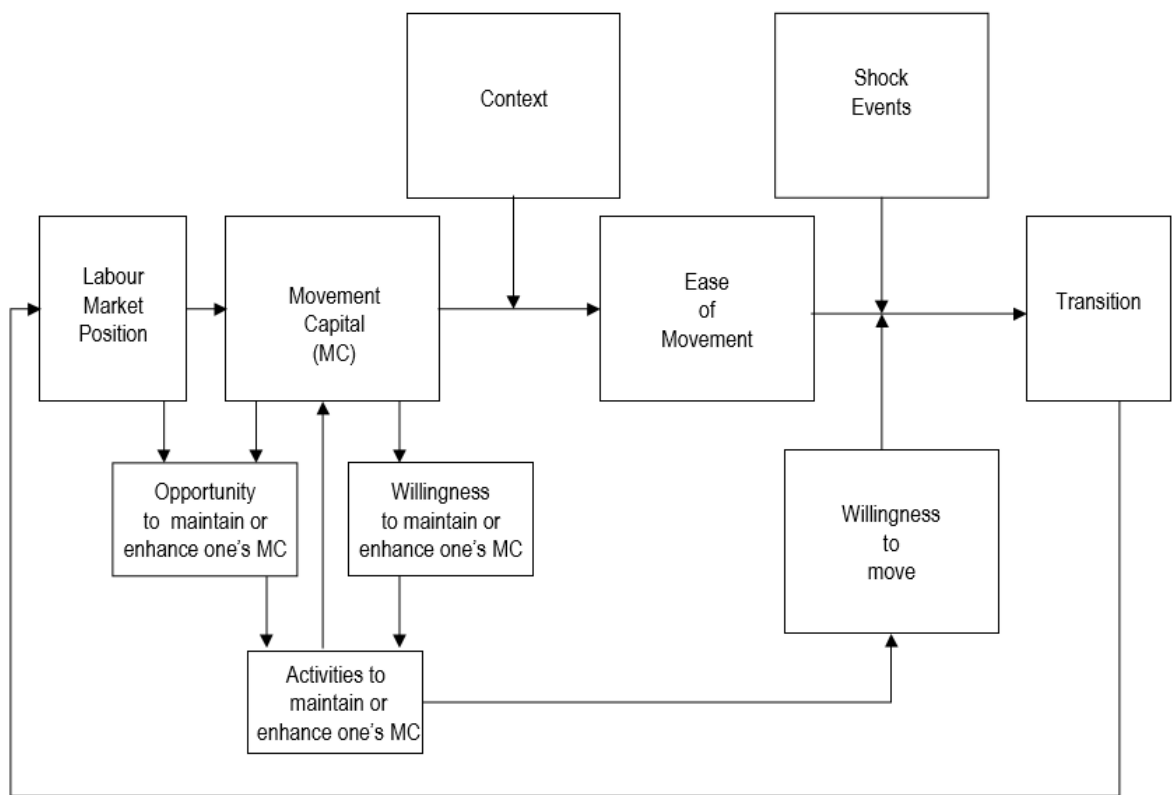


Figure 2.6. Taken from Forrier and Sel (2003, p.108)

Consequently, employability relates to your ability to transition between roles either within or between organisations. The importance of this transition discussion is further reinforced by inclusion within Thijssen's 2008 conceptualisation referred to as the employability-link model. Capital is again identified as an important part in transition within, into and out of, the labour market. Indeed, effective transition has been argued as a possible explanation for the current "skills gap" (Atkins, 1999; Cramner, 2006) (see section 2.3.2.2.).

Figure 2.7. The employability-link model

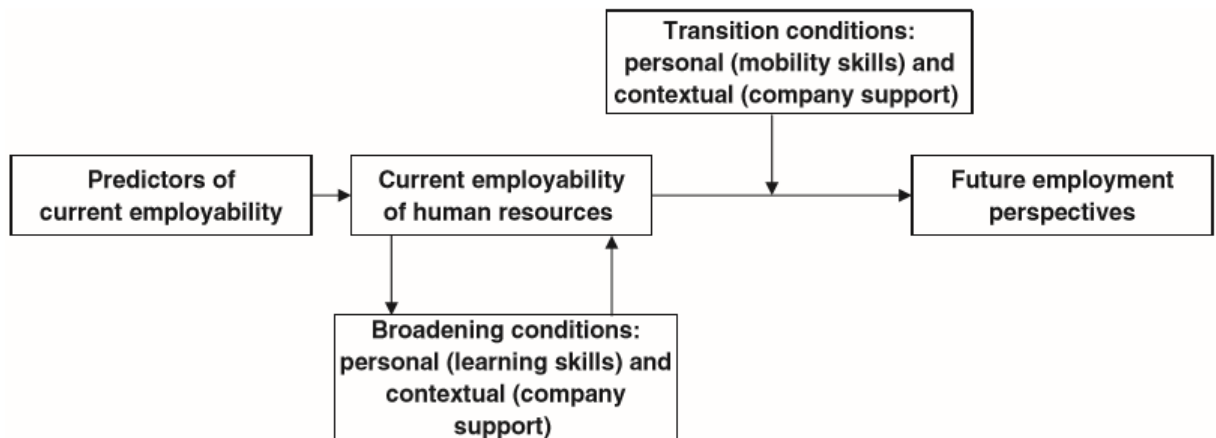


Figure 2.7. Taken from Thijssen et al. (2008, p.178)

Nevertheless, support for the role of adaptability, beyond conceptual discussions, is mixed. McArdle et al.'s (2007) longitudinal study of unemployment supports a positive relationship between proxy measures of adaptability with perceived employability, and internal and external marketability. Heijde and Van Der Heijden (2006), however, found no significant predictive value of their “Personal flexibility” variable on job/life satisfaction, perceived success, or internal/external marketability. Results of Forrier et al.'s (2015) investigation of their “Movement capital” component, which represents personal strength, found it to influence perceived employability and later transitions. Their work also highlights the incomplete nature of this explanation. These findings suggest a consideration of further components is necessary, so to more fully understand the role of this adaptability within employability.

2.3.4. Social capital (SC).

2.3.4.1.1. Definition and core features.

A further capital category, present within Williams et al. (2016) was SC. Based on Bourdieu's (2011) classification, SC was defined as *social obligations or connections seen as convertible to economic capital*. This capital sub-dimension further explains the

concept of employability through the additional value of existing relationships, which can be utilised to enhance the economic capital of the company. Thus, from this dimension employability is the degree to which the potential employee possesses social connections that can be utilised to enhance their functionality in the workplace.

Support for the unique contribution of SC in understanding employability is provided in relation to perceived CS, and internal and external marketability (Eby et al., 2003; Fugate et al., 2004). Heijde, and Van Der Heijden's (2006) "Corporate sense" component was also found to be a significant predictor of number of promotions. This component was defined as the ability to participate within "*an integrated team, identify with corporate goals, and accept collective responsibility for the decision-making process*" (Heijde & Van Der Heijden, 2006, p.455), illustrating a strong connection with the present dimension's definition. Furthermore, research has supported the impact of SC in offering opportunities to jobs that HC alone would bar access (Bechky, 2006), offering value above HC (Zippay, 2001).

The term SC applies the role or social membership to economic theories of capital. This concept represents yet another array of competing perspectives; its main protagonists include Bourdieu, Coleman, and Putnam; and it suffers the same fate, as many concepts within this review, varying in its definition. However, there is a common thread amongst these variations. Coleman (1988) discusses SC as the creation of HC that "*comes about through changes in the relations amongst people that facilitate action*" (p.100). As such the capital exists not in the person, but in the relations with others. Thus, it is not a personal possession. SC is said to exist in three forms: obligations and expectations, information channels, and social norms (Colman, 1998). These are all benefits derived through membership in groups, networks or other social structures (Portes, 1998). Consequently, SC is said to reflect opportunity (Burt, 1997).

SC has a history within current conceptualisations of employability, as long as that of HC. Arthur et al.'s (1995) "Knowing whom" component, described as career-related networks and contacts – was named as relevant to CS. Eby et al.'s (2003) work operationalised this as representing "*a resource for expertise, reputation development, and learning*" (pp.10-11). Not long after this Fugate et al. (2004) also adopted SC as a component of their employability conceptualisation alongside HC. In measuring SC, Fugate and Kinicki (2008) focused on the size and strength of a network, while SC was

operationalised by Eby and colleagues as experience with a mentor, and breadth of internal and external networks.

SC cannot be considered in isolation of other human resources necessary to participate in the active development of these relationships. The inherent connection between these two forms of capital may be communicated in the deliberate pairing of SC and HC within Fugate's employability conceptualisation. Nevertheless, as with the lack of progression of previous HC taxonomies, the combining of HC and SC found in Fugate's model, is not consistently integrated into later holistic employability conceptualisations for example, McQuaid and Lindsay (2005) and Dacre-Pool and Sewell (2007), although a consideration of the role of relationships is included within other later conceptualisations.

One explanation for the removal of SC from some later conceptualisations, is the growth in consideration of antecedents of SC within HC components. For example, the increased emphasis given to issues such as emotional intelligence, first considered within a holistic model of employability by Heijde, and Van Der Heijden, (2006) "Corporate sense" component, and subsequently within Dacre-Pool, and Sewell's (2007) model. There is a wealth of literature to support a relationship between emotional intelligence and optimal social function / social competence (Brackett, Rivers, & Salovey, 2011; Eisenberg, Fabes, Guthrie, & Reiser, 2000; Lopes et al., 2004) Defined by Salovey and Mayer (1990) as *"the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions"* (p.189), the concept has been linked to attributes including political awareness, self-confidence, conscientiousness, and achievement motives (Brackett et al., 2011). This would suggest that failure to develop these abilities would represent a double negative on employability outcomes; resulting in a deficit in the capacity to accrue SC, as well as effecting successful team performance within posts (Barczak, Lassk, & Mulki, 2010; Barbuto & Burbach, 2006).

2.3.5. Employability and cultural capital (CC).

2.3.5.1. Definition and core features.

The fourth and final subcategory of capital presented by Williams et al. (2016) was cultural capital (CC). Theories of CC represent another attempt to address dissatisfaction spanning from the HC theory within economic theory. CC emphasise the social fit between the individual's ideas, customs, and social behaviour, and the employers, representing a shared culture (Bourdieu, 2011). Synergy with the culture valued by the employer is expected to provide an increased drive towards similar goals to that held by the company. As such, rather than endorsing the existence of a high culture, which is desired by all employers, compatibility between employers and employees culture is what is emphasised here.

While limited in its coverage within the employability conceptualisations covered in Williams et al.'s review, this theoretical advancement offers additional explanatory value to an understanding of the components within the identified conceptualisations. Representations of social compatibility between employer and employee have become increasingly prevalent in recent conceptualisations of employability. In 2006 a new competency-based employability model was produced by Heijde, and Van Der Heijden, which combined Occupational Expertise which reflects profession-specific abilities and knowledge (HC), with four generic competencies; Anticipation and Optimisation, Personal Flexibility, Corporate Sense, and Balance. Corporate Sense referred to the importance of working as part of a team, identifying with corporate goals, and sharing company values. This conceptualisation introduces a new consideration of the important interface between the drives and goals of a company, and the individuals which work for them. Results of empirical research into the effectiveness of Heijde, and Van Der Heijden's model showed Corporate Sense as explaining the largest amount of variance in CS, a proxy measure of employability. Furthermore, Balance was found to positively relate to job and life satisfaction.

Later conceptualisation of employability by Hogan et al. (2013) also combined abilities and attitude components with a consideration of the interface between employer and employee. They referred to Heijde and Van Der Heijden's corporate sense as reflecting employability as a socially desirable behaviour. Hogan et al. (2013) define

employability, within their RAW model, as a result of employers' perceptions of potential employees' ability to

“(a) get along with coworkers – rewarding; (b) learn and do the job – able; and (c) be productive – willing.” (Hogan et al., 2013, p.4)

To a lesser extent conceptual work by Bridgstock (2009) does include reflection on the achievement of personal goals, within the career management dimension, and related appraisals of values and work/life balance, as part of self-management. However, this interim model appears to disregard a consideration of the employer-employee interaction. This illustrates the tendency of current conceptualisation to discount significant developments made by its predecessors, noted thus far in reference to HC taxonomies and considerations of SC.

CC also accounts for the value placed value on a degree and other experience (Dacre-Pool & Sewell, 2007; Harvey et al., 2002) as well as current labour market positions (Forrier & Sels, 2003) on employability. The investment in time and/or money presented by these commodities equates them with a level of prestige or enhanced status (Bourdieu, 2011). Reference to the role of institutional reputation within perceived employability scales (Rothwell & Arnold, 2007) and employability frameworks (Sumanasiri et al., 2015) is also suggestive of the value of this capital form. Furthermore, such a consideration of CC may explain the presence of discriminatory practices within selection processes (Forrier & Sels, 2003; McQuaid & Lindsay, 2005), as a result of judgements around the applicant's in-group status.

Moving on from this dimension, despite the core focus on sources of capital within much of the employability literature, particularly when considering the contribution of HE, evidence from Williams et al.'s review points towards the equally important role of managing this capital within the process of job searching, application, and job performance.

2.3.6. Dimension two: career management.

2.3.6.1. Definition and core features.

Supplementing an understanding of employability as capital, Williams et al.'s integrative synthesis highlights the importance placed on career management as a dimension of employability. This indicates the need to consider employability in terms of capital beyond performance in a set job role, as well as the role of personal interests, values, and career goals/ orientation in outlining an individual's desired employment.

This dimension explains employability in terms of an individual's competence in navigating the labour market to achieve their personal career goals through accessing relevant training and employment opportunities (Williams et al. 2016). While capital is an important part of these conceptualisations, alone it cannot explain the entirety of components identified within this review. One might have a high level of capital, relevant to certain job roles, but unless this capital is successfully linked to these relevant job roles, the capital becomes irrelevant.

Results of the content analytical approach applied by Williams et al. to categorising existing employability conceptualisations components, distinguish between two sub-dimensions of career management: self-management and signal-management.

2.3.7. Self-management.

2.3.7.1. Definition and core features.

Self-management referred to the internal assessment of relevant personal aspects pertaining to one's career. These included how one orientates themselves to the world of work, or their "Career identity", as well as their appraisal of goals, values, and capital. This was expected to drive the strength and direction of action in the workplace. Williams et al.'s Self-management was modelled on the definition provided by Bridgstock (2009), representing the impact of "*the individual's perception and appraisal of themselves in terms of values, abilities, interests and goals*" (Bridgstock, 2009, p.37). This personal context of values, abilities, interests and goals provides a lens

through which that individual sees employment and themselves. These issues inform their orientation towards employability development and employment *opportunities*, as well as current employability development and employment *activities*, and the outcomes they aim to achieve from engagement with these.

Self-management considerations were first included within writing by Arthur et al. (1995) as “Knowing whom”. Knowing whom referred to “*The nature & extent of a person’s identification with the employing firms culture*” (p.9). Although aspects of this component fit best within CC in reference to knowing whom, Arthur emphasises the importance of occupational identity such as, “I am a welder”, not “I am a [insert company name]er”. As such the importance of being clear of one’s own values, rather than just the values of the company one works for, is important here. This was referred to as offering motivation for action.

Appraisal of current capital was introduced to this self-management category by Hillage and Pollard’s “Deployment” components. Deployment refers to knowing what you have and how you choose to use it. Hillage and Pollard include within “Deployment” career management skills, relating to self-awareness, opportunity awareness, decision making skills, transition skills, job-searching skills, and strategic approach. These abilities illustrate the unique capital relevant to effectiveness within this dimension of employability. Not only does this dimension reflect the application of capital, and offer drive and direction to access further capital, but a distinct type and level of capital is required here for effective functioning. It is proposed that while capital within the first dimension will likely change, it is less expected that this capital will alter drastically. Such capital is referred to in the literature as career competencies.

2.3.7.2. Career competencies.

In 2004 De Grip and colleagues linked these self-management processes with capital development. De Grip et al. (2004) stated that someone’s capacity to participate in training is influenced by meta-cognitive knowledge (i.e. knowledge and opinion about learning), and knowledge and opinions about one's own learning capacities. These represent two of the three types of worker know-how De Grip et al. (2004) report as

effecting willingness to participate in training. Combined, De Grip et al.'s. precursors to training reinforce inferences of how self-management impacts upon capital in terms of development, and unique capital needed to engage with this development. The value of meta-capital was reinforced by Bridgstock's (2009) career development focused employability theory. Bridgstock contends there is a need for a focus on meta skills, by which she referred to *"the abilities required to continuously recognise and capitalise on employment and training related opportunities and integrate these with other aspects of the individual's life"* (p.34).

Research into career competencies seeks to define and measure such competencies. These competencies are defined by Francis-Smythe et al. (2013) as:

"Learned capabilities that result in successful performance in individual career management and defined as behavioural repertoires and knowledge that are instrumental in the delivery of desired career-related outcomes" (p.230).

Lists of these competencies, vary in their content. While not linking these competencies to the concept of employability, Francis-Smythe et al. (2012) like Eby and colleagues, also utilised Arthur et al.'s (1995) intelligent career framework as their base. This research illustrates significant predictive power of such competencies for subjective career success (SCS) and objective career success (OCS) measures. This reflects an observable connection between the competencies listed by such research, and employability conceptualisation.

2.3.7.3. Career identity.

While these career competencies impact the functioning of career management, there remains the question of what goals this management is directed to. Personal goals are therefore another important part of self-management processes. Fugate et al. (2004), as part of their "Career identity" component, highlight that in addition to identifying who you are in general, rather than who you are within the company, it is also vital that one considers who they wish to be. This component is a motivating and directing component of employability. Referred to as a "cognitive compass" including "goals, hopes, and fears; personality traits; values, beliefs, and norms; interaction styles; time horizons; and so on" (p.17). This value is supported by investigations into the perceived

CS and perceived internal and external marketability of alumni students by Eby et al. (2003). Eby et al. found that “Knowing why” components, incorporating aspects of identity, contribute to an overall explanation of 44% of the variance in these employment outcomes.

Career identity as defined by Meijers (1998) is “*a structure of meanings in which the individual links his own motivation, interests and competencies with acceptable career roles*” (p.191). This identity informs acceptable career goals and means of achieving these goals, based on an individual’s interests, values and motives. Holmes’s (2013) employability review identifies such a focus as a key aspect of employability, utilises identity as his “sensitising concept” guiding discussions within an established theoretical framework. From this viewpoint, employability is what has been referred to as an “identity project” (Harré, 1983). Holmes’s talks of becoming a graduate; not possessing this identity but identifying and being identified as it. Thus, this perspective embodies an understanding of employability as a social construction negotiated between the individual and external observers. Holmes’s emergent identity perspective on employability acknowledges the role in which social input can have on personal evaluations. In this way, this identity is less about uncovering the truth as possessed by the individual, and more of a socially constructed negotiation of the truth. The outcomes of this process, as reported by Holmes (2013) are illustrated in figure 2.8. Here either the individual claiming an identity worthy of consideration by the recruiter, is affirmed by the recruiter who agrees with this presented identity (zone four), the identity put forward is not agreed (zone two), the identity is imposed on the individual (zone three) or the identity is indeterminate (zone one).

Figure 2.8. Claim-affirmation model of modalities of emergent identity

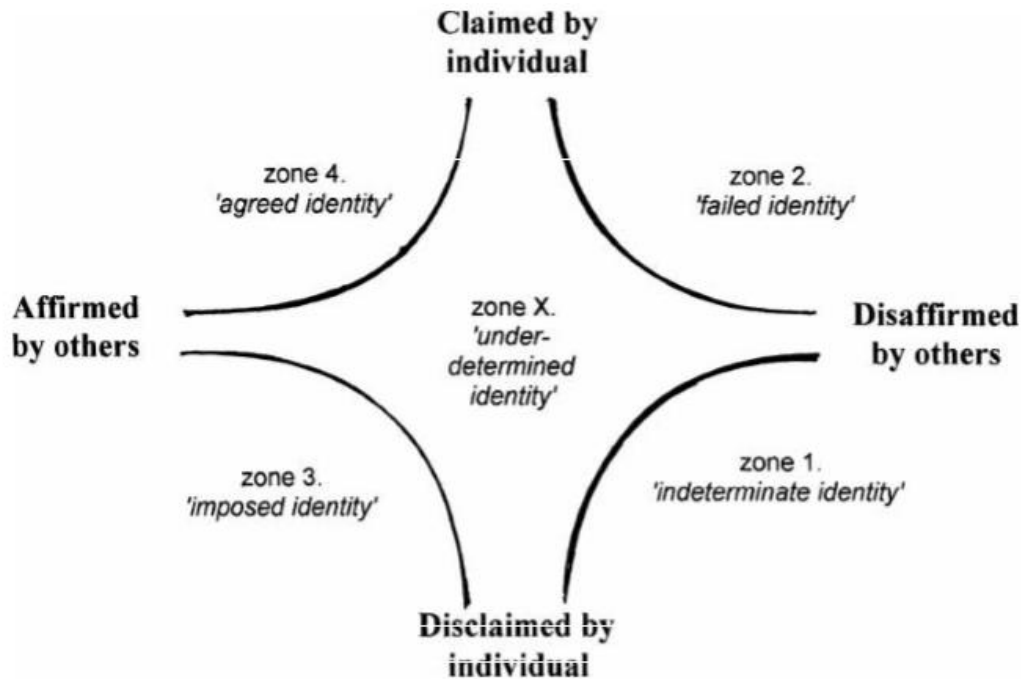


Figure 2.8. Image extracted from Holmes (2013, p.550).

In the context of work by the likes of Hogan et al. (2013) this identity is that which is compatible with the preferred identity of the employer. Even if the identity is agreed, that is not to say that said identity matches the requirements of the employer. Thus, in this sense CC is again identified as important; however, from this dimension it is understood as a process of management, rather than a possession. Support for the role of career identity as understood in the context of employers identity needs is supported by Fleisher, Khapova, and Jansen (2014). Exploring Arthur's career competencies, Fleisher et al. support the mediating effect of balance between personal values, interests, and circumstance, and the work context, on the value that developing capital can have on the organisation. Their investigation into career satisfaction, expected to be influenced by successful self-management, found that development of knowing why, knowing who, and knowing what, career competencies effected contributions to organisational culture, capabilities, and connections, to varying degrees, depending on the level of career satisfaction reported by the individual. This supports the unique value of self-management processes to the application of capital understandings of employability.

Rather than acknowledging the existence of multiple possible desired identities varying depending on the social make up of those working within and recruiting for the context, Holmes implies a target identity, agreed by both potential employee and recruiter, and this target identity is determined as “Graduate”. Concerns could be raised regarding the adequacy of a “Graduate” identity for understanding this process. Such a singular identity simplifies the complexity of desired identities. The use of graduate identity reduces the explanatory power of any theory, minimising its application to those who have passed through HE. It also assumes that careers a graduate may wish to pursue would require a graduate identity. Yet, Ball (2003) contested the value of graduate level work as realistic of expectations in the twenty-first century where the diversity of work one might enter may include smaller enterprises or freelance work. While there is emphasis on specific employability outcomes in HE promotion, this drive to engage in HE cannot and should not explain the role HE plays for all in their future working lives.

Several career identities have been proposed within the employability literature, some of which address the impact of identity on skills development. Most prominent within this work are discussions of Boundaryless and Protean careers, and career orientation. Both adaptive, flexible, long term approach to considering careers the common feature a boundaryless career, according to Arthur and Rousseau (2006) is “*independence from, rather than dependence on, traditional organisational career arrangements*” (p.6). Likewise, Hall’s career orientation “Protean career” refers to “*a career orientation in which the person, not the organisation, is in charge. Where the person’s values are driving career decisions, and where the main success criteria are subjective*” (Hall, 2004, p.1).

Both Boundaryless and Protean careers, as well as similar concepts, are posed as alternatives to traditional views of intra-organisational vertical career progression, mapped out by the organisation, and offering job stability. They reflect changes in psychological contracts between employers and employees, where the individual takes the responsibility for directing and powering career movement. While these concepts reflect popular directions in exploring beneficial mindsets for employability and employment outcomes, other orientations towards work and employability exist within the literature.

2.3.7.4. Employability orientation.

An individual's identity can vary in terms of the positioning of work and employability within their self-identity. This leads on to a consideration of what has been termed employability orientation. At a company or organisation level, results of the 2016 CBI/Pearson education and skills survey suggests attitude to work is the most important factor in recruitment, followed by aptitude for work.

Individuals' inclination to engage in employability considerations has been termed employability orientation, which is how someone approaches the phenomenon of employability. Van Dam coined the term to refer to this attitude. She identified several factors within the organisational climate that could facilitate engagement with employability development necessary for organisational benefits (see figure 2.9.). Findings suggest a strong link between this orientation and employability activities.

Figure 2.9. Van Dam's conceptual model of employability orientation

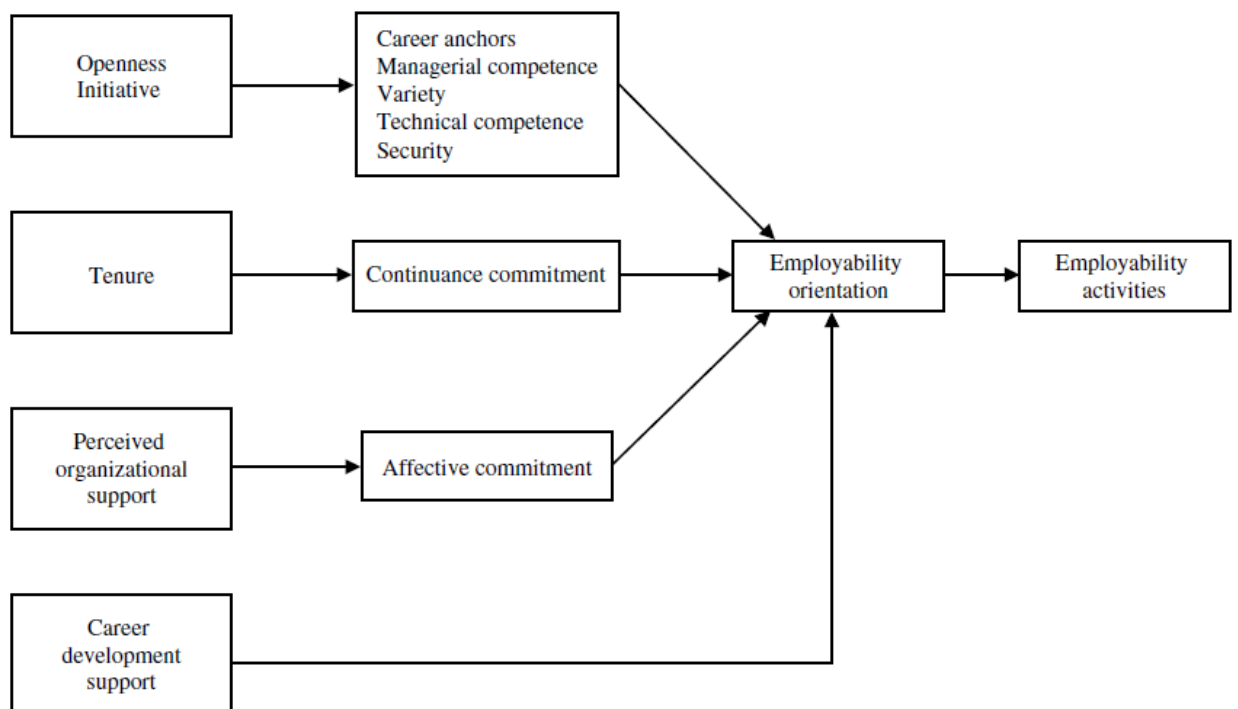


Figure 2.9. Taken from Van Dam (2004, p.32)

While Van Dam's work takes an organisational view of this orientation, others have explored individual's orientation and its consequences for employability. Tomlinson's

(2007) conducted research into the various orientations one can take towards the labour market. Tomlinson (2007) saw employability as a form of identity, defining it as:

“A measure of their absolute potential to attain and undertake future employment.”

(p.292)

He argued there is a tendency to view students in universalistic terms, however, his work with 53 final-year students supported the view of work as a *“personal matter which involves the location of self and identity in an ongoing process of engagement with the labour process within which they operate”* (p.287). He developed his ideal-type model of student’s orientation to work, career, and employability, which identified four distinct identities varying in terms of how individuals positioned themselves in respects of two criteria; 1) orientation to market (market or non-market orientation – end) and; 2) approach to this orientation (active or passive – means).

Figure 2.10. Ideal-type model of student orientation

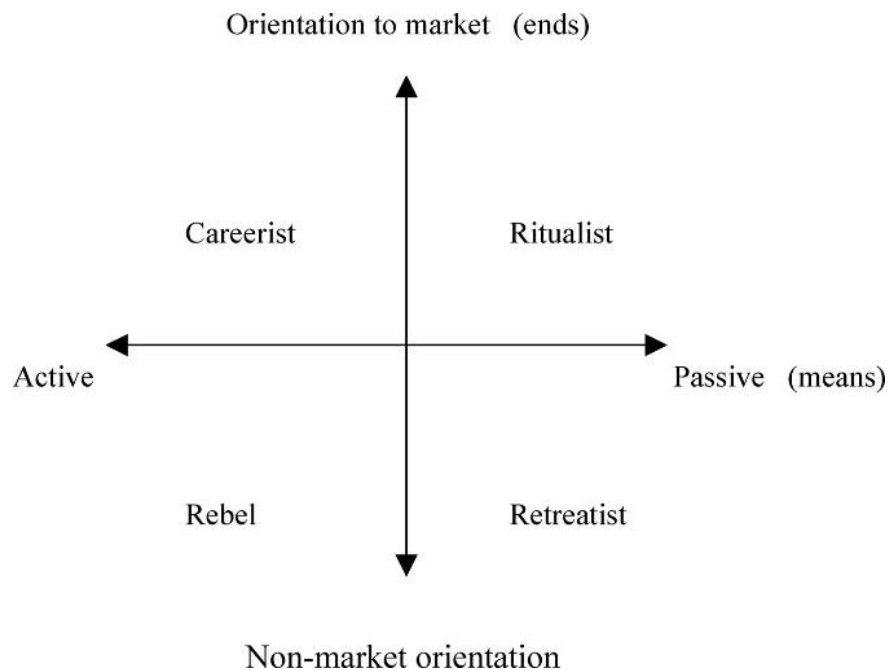


Figure 2.10. Taken from Tomlinson (2007, p.293).

As a consequence, students can be seen as Careerists, which reflect a more typical alignment with employability discussions, seeing career as life; a Ritualist, in which work is a ritual process representing an end they aspire to, but are passive in achieving; a Rebel, a hypothetical construct not present within the data, who would be expected to

be an active rejecter of traditional labour market goals; or a Retreatist, who abandons labour market goals and employability as a worthwhile focus. This model illustrates the impact of identity on employability and its outcomes. It also highlights the role of active engagement which was a feature of work by Clarke (2009), a prolific employability researcher in Australia, who explored the attitudes of managers during transition.

Connections can be made between this dimension and work relating to career anchors. Introduced by Schein in 1978, the career anchor model outlined how perceived talents and abilities, individual's values, and an individual's needs inform a self-concept which holds together a person's view of where they see themselves going. Once again, expanding on this perspective, the present management dimension considers not only the individual's identity, but an awareness of the expectations and requirements of the employer.

2.3.7.5. Career success.

The core features of this self-management dimension are elements of an individual's feelings or values influencing how they relate to the working world. This in turn influences which opportunities presented in the context are pursued, and what actions to develop or apply capital (and thus develop or present 'signals') the individual is driven to engage in. As such employability derived from this dimension relates to the achievement of "personal goals" and "employee career satisfaction" through the matching of these goals with available opportunities.

An individual level focus on employability means a greater diversity of pursued outcomes and thus measures of success. An acknowledgement of this is lacking from much of the UK Government reports describing aspirations for how HE will develop graduates; as well as in empirical research exploring employment outcomes. If we consider what is meant by employability skills, relevant to HC understandings of employability, Suarta et al. define these as:

*"A group of essential abilities that involve the development of a knowledge base, expertise level and mindset that is increasingly necessary for **success** [emphasis added] in the modern workplace"* (Suarte et al., 2017, p.337).

It is proposed that this particular definition, emerging from debates about skills gaps between what employers want and what they receive, would be expected to represent employers' perception of success. In this sense, research into employability skills should be asking employers what they view success to be. Just as theory would suggest employers differ in their perceptions of certain forms of evidence, when recruiting employees (see section 2.5.8.2. and 3.4.), it is also reasonable to assume that employers will have individualised views on success, impacted by their personal beliefs, company ethos, and the level of management at which they operate. Without a consideration of what respondents see as representing success, it is unclear whether they are considering the same outcomes in their assessment of skills/attributes value. Research today, for the most part, fails to consider this diversity. Research into the identification of employability skills by Klibi and Oussii (2013) asked respondents to "*nominate the skills that they deemed to be most important for job success in accounting*" (p.121) – with no explanation as to what success should be considered as. Similarly, Low et al. (2016) ask for respondents to describe their "ideal" accounting graduate, which would likely vary depending on what goals the respondent saw the ideal graduate as achieving. As an example, a very ethically aware company may wish for graduates who have a grounding in ethical issues, while a company whose focus is purely on profit, may be more interested in a graduate who can manage large workloads, manipulate statistical data or present information tailored to specific audiences. Other studies, such as that by Husain et al. (2010), do not offer an outline of their empirical approach which makes it unclear what respondents were being asked to rate the importance of the skills in relation to. Furthermore, Ramli et al., (2010) asked respondents how important an employability skill was for an employee's employment – which would suggest their functioning within the role, however, standards of functioning are again likely to vary amongst respondents. Is thought given to excelling in the role, or to surviving? This lack of methodological clarity is repeated within work by Conrad and Newberry (2011) who provide the response set given, but not the question asked i.e. trivial, elective, useful or essential for what? As a final example, Singh, Thambusamy, and Ramly (2013), while focusing on work readiness, thus giving a clearer idea of what success/outcome is being considered when rating skills, omit a description of the exact phrasing presented to participants, including any definition provided of work readiness. These details may reflect the presumption of a homogenous perception of success held by researchers in this area, thus making an awareness of the value of this information in

presenting research procedures appear irrelevant. While these sources consider the employer's perspective, they take employers to be a single homogenous group with shared expectations of employees.

In assessing the development of employability, in terms of being successful, perceptions of success also need to be considered beyond the views of employers. Ultimately the question arises of whose success we are interested in. Without determining a specific group focus, even instances in which a clear definition is presented offer a diversity of results, i.e. direct managers' views of excelling in a role, a company's view of excelling in a role, co-worker's views, individuals', family's views.

The ultimate consequences of these methodological and conceptual ambiguities are that the homogeneous nature of these investigations into relevant employability skills is brought into question. It is suggested that a consideration of SCS goals is necessary in order to effectively assess employability development.

2.3.7.6. Measures of career success (CS).

A consideration of just a handful of employability definitions introduces a diverse range and scope of associated outcomes; meeting personal aspirations and potential (CBI, 1999), satisfaction in their chosen occupation (Dacre-Pool & Sewell, 2007, p.280), and in other cases consideration is given as wide as benefits to "*themselves, the workplace, the community & the economy*" (Knight & Yorke, 2006, p.3). Literature pertaining to assessments of CS, an avenue of success frequently utilised as a proxy measure of employability, also presents diverse outcomes. OCS indicators include obtaining employment, but could also refer to promotions, and income. At a subjective, quality, level, these outcomes relate to discussions of job mismatch, satisfaction levels, and impact (Ng, Eby, Sorensen, & Feldman, 2005). Literature around SCS acknowledges the personal nature of such satisfaction levels in individual's assessments of their career (Ng & Feldman, 2014; Pan & Zhou, 2015). Distinct from job satisfaction, which reflects a current satisfaction level, SCS gives consideration to movement towards an ultimate career goal, and thus reflects a longitudinal picture (Heslin, 2005). This concept has been reported to consist of at least three dimensions; intrinsic fulfilment, external compensation, and work-life balance (Zhou, Sun, Guan, Li & Pan, 2013). Others have

produced as many as five dimensions (for instance, Derr & Laurent, 1989; upward mobility, security, autonomy, excitement, balance).

This context presents additional complexity to the meaning of employability. In the case of the present working definition, reference to an “attractive job” pertains to that individual’s personal values and aspirations. Furthermore, a view of an attractive job is considered within the organisational, personal and social context, and the opportunities they allow for, thus while at one time point an individual may find job x to be unattractive, a change in context may mean that job x becomes more desirable.

Multiple links between individual perceptions of success and employability have been made. Griffeth, Hom, and Gaertner (2000) illustrates the role of low job satisfaction on voluntary turnover (that is entering into a transitional phase within the labour market). Some negative outcomes are hypothesised to have long lasting detrimental effects for individual’s employability. It has been argued that overeducated workers will, in the long-term, lose their cognitive resilience due to non-use, resulting in a negative impact on their productivity (Grip, Bosman, Willems & van Boxlel, 2008). Furthermore, other research has indicated that it is dissatisfaction within a role which can lead to skills withdrawal, often misinterpreted as a skills shortage on the part of the employer (Hurrell, 2016). Additionally, the impact of structural factors on individual outcomes cannot be ignored. Compelling discussions of the role of capital development in the absence of demand have been made by Keep, in his various works (Coleman & Keep, 2001; Keep, 2002; 2003). Social congestion resulting from mass education means many graduates will be subject to under employment, in which their skills and knowledge, potential, are not fully utilised. Brynin (2002) presents evidence for the persistent widespread trend of overqualified workers throughout the global economy, including Finland, Germany, the US (Brynin, 2002) and Canada (Li, Gervais, & Duval, 2006). Furthermore, examination of trends in over and under skilling, and overeducated workers in Portugal, suggest that increased heterogeneity in the workplace may lead to increased skills-mismatches (Figueiredo, Biscaia, Rocha, & Teixeira, 2017). Meaning that one may not find themselves utilising the skills they develop. The selection of an attractive job may be reassessed continuously, reflecting the implications of this job choice on such aspects of work experience and the constantly changing organisational and societal context surrounding it.

2.3.7.7. Compromise.

Further to discussions of career identity, and personal career aspirations, the importance of self-management when faced with workplace constraints, is communicated within Heijde and Van Der Heijden's (2006) employability model. Supplementary to previously discussed Occupational Expertise which reflects profession-specific abilities and knowledge (HC), and the generic competencies; Anticipation and Optimisation, Personal Flexibility, and Corporate Sense, is Balance. Balance compliments corporate sense, referring to compromise between opposing interests of the employee and employer. It expands on issues of commitment to company verses personal flexibility, formalising this for use as part of an employability conceptualisation. While not presented within later conceptualisations by Dacre-Pool and Sewell (2007), Thijssen et al. (2008), Bridgstock (2009), Hogan et al. (2013), Sumanasiri et al. (2015), Tomlinson (2017), this balance adds further considerations to employability enhancement.

The role of career aspirations in the working life of individuals, is encapsulated well within King's (2004) framework of self-management. Based on Crites's (1969) model of vocational adjustment, this model shows the importance of personal career aspirations on this self-management process. King (2004) proposes that frustration or conflict around the achievement of these career outcomes, leads to adjustment behaviours that are similar across all jobs, and stages of life, despite expected changes in preferred career outcomes, and motivators to achieve these. It is this frustration or conflict that drives action to adjust to external circumstances thwarting their chance of success.

In his discussion of the nature of self-management King identifies three behaviours:

- 1) Positioning – Placing yourself in a position to achieve the career goal through acquiring contacts, skills and experience
- 2) Influence – Attempting to influence those who act as gatekeepers to career outcomes
- 3) Boundary management – which reflects the balancing of work and non-work demands.

Causes of these behaviours are linked to self-efficacy, a desire for control, and career anchors. While the increasing importance of employability is alluded to by King, how he sees self-management fitting within or alongside the concept is not discussed.

2.3.7.8. The role of self-evaluative thinking.

An understanding of employability through Williams et al.'s (2016) self-management dimension develops upon career identity and aspirations, to include the importance of realistic appraisals of one's abilities and values. The mediating role of self-evaluation is best illustrated in the employability conceptualisation of Dacre-Pool and Sewell (2007). Dacre-Pool and Sewell (2007) proposed that the way in which we judge ourselves and our abilities can be influential in how we act. Specifically, they highlight the role of Self-Efficacy, Self-Esteem, and Self-Confidence (Dacre-Pool & Sewell, 2007). Thus this model presents these self-evaluations as a gateway to employability through which capital passes through.

Figure 2.11. CareerEDGE employability model

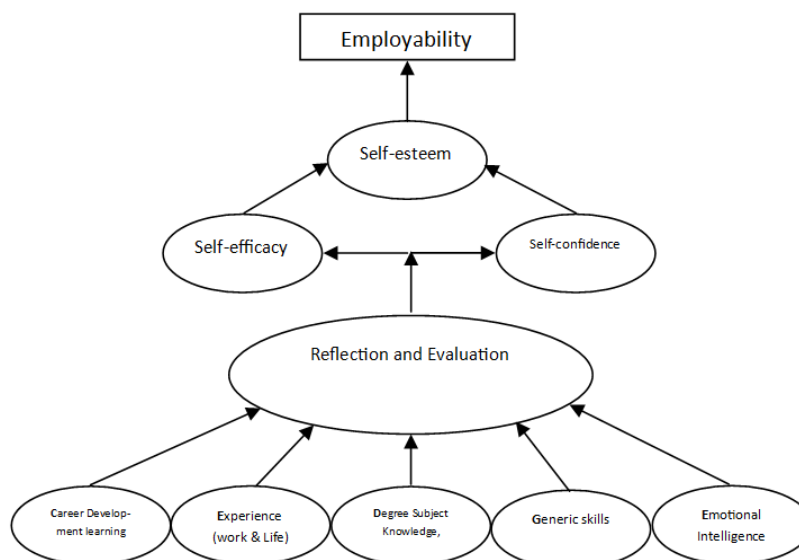


Figure 2.11. Employability flowchart extracted from Dacre-Pool and Sewell (2007, p.280).

Processes of reflection, evaluation and decision making, as incorporated into work of Dacre-Pool and Sewell, and Yorke and Knight, are emphasised by Bridgstock who defines employability as:

*“An ongoing process of engaging in **reflective, evaluative** [emphasis added] and decision-making processes using skills for self-management and career building, based on certain underlying traits and dispositional factors, to effectively acquire, exhibit and use generic and discipline-specific skills in the world of work”* (Bridgstock, 2009, p.36).

Figure 2.12. Conceptual model of graduate attributes for employability

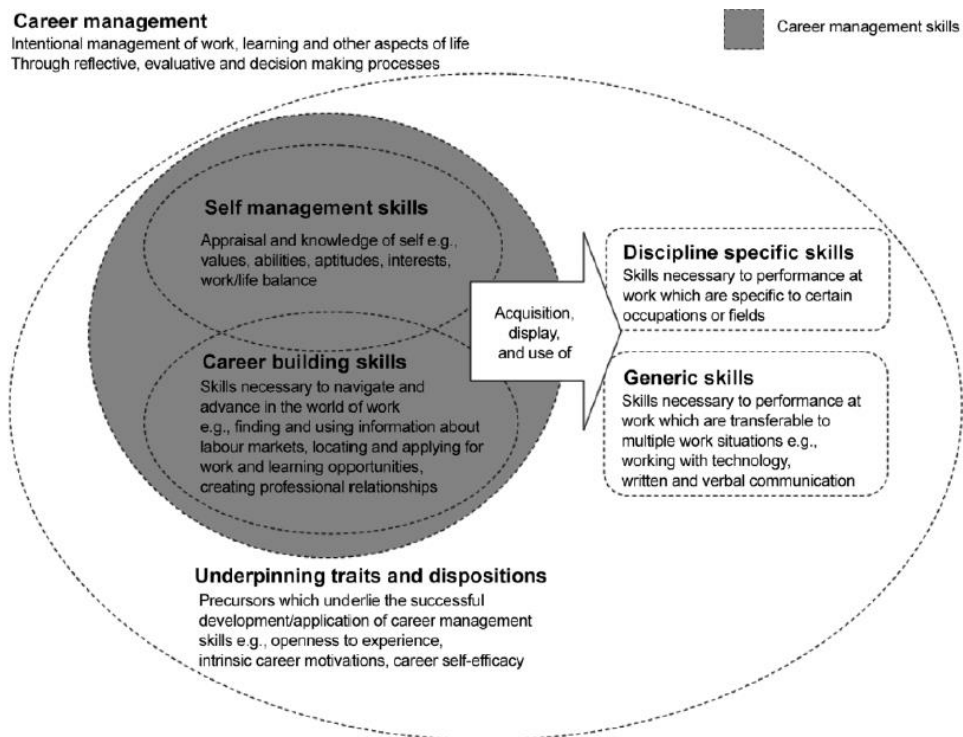


Figure 2.12 Taken from Bridgstock (2009, p.36)

It is argued that a lack of self-management competencies would lead to unrealistic goals. This dimension could explain how those with capital and good signal-management (see section 2.5.8.) can fail to access employment opportunities. Bridgstock’s (2009) career management is also made up of two components, the first being utilised as the basis of the current sub-dimension of employability, as indicative of its theoretical strength in bringing together aspects of other employability conceptualisations. The second was career building, focused on navigating the world of work, subsumed within the signal-management dimension to follow. While traits and

dispositions are placed separately to this component within Bridgstock's conceptualisation, this work represents the closest to the synthesis presented.

2.3.7.9. Self-efficacy.

The value of self-evaluation is further supported by a meta-analysis by Judge, Erez, Bono, and Thoresen (2003) into the relationship between employability and locus of control, emotional stability, generalised self-efficacy, self-esteem. Within this analysis of 274 correlations, the authors illustrate that these traits are among the best predictors of job satisfaction. Gaining an attractive job role (see working definition three, section 2.3.3.2.) would be expected to be associated with high job satisfaction; this suggests the value of these constructs in potentially influencing employability. The best of these predictors, according to this meta-analysis, is that of generalised self-efficacy, a self-evaluation incorporated into Yorke and Knight's (2003) USEM model. Judge et al. (2003), showed a positive relationship between generalised self-efficacy and job satisfaction and performance.

Empirical research into the impact of self-efficacy on employability related variables suggests that, as with other work addressing self-efficacy (Bandura, 1997), a specific/narrow focus, in this case on career self-efficacy, is of value to this discussion (McArdle et al., 2007; Nauta, van Vianen, van der Heijden, van Dam, & Willemssen, 2009). Specific forms of self-efficacy, aimed at offering a more informative link with employment outcomes, range from career self-efficacy, career search self-efficacy (Solberg et al., 2004); role breadth self-efficacy (Parker, 1998); and career decision making self-efficacy (Choi et al., 2012).

Self-efficacy has also been linked to higher order constructs such as PsyCap or psychological capital, which indicates an overlap in the explanatory value of self-efficacy, resilience, optimism, and hope (Luthans, Youssef-Morgan, & Avolio, 2015). Evidence of PsyCap's predictive value suggests this higher order construct predicts positive and negative employee attitudes, desirable and undesirable behaviours and performance outcomes (Avey et al., 2011; Luthans, Avey, Avolio, Norman, & Combs, 2006). While this conceptualising supports the positioning of self-efficacy within PC, the placing of these self-evaluation concepts within self-management emphasises the mediating role they are seen to reflect.

Self-efficacy is also part of the wider Social Cognitive Theory (SCT). This theory has been applied to a careers domain (Social Cognitive Career Theory or SCCT) which expanded Bandura's (1986) SCT to explain the dynamics of various internal and external career development factors. SCCT employs Bandura's SCT to the context of early career development. The theory emphasises the importance of three social cognitive mechanisms: 1) self-efficacy, 2) outcome expectations 3) goal representations. Results of Choi et al.'s (2012) meta-analysis support claims that SCCT offers additional information to that of self-concept.

Core Self-Evaluation offers yet another high order construct in which to place Self-Efficacy. Core Self-Evaluation is a broad trait comprising Locus of Control, Self-Efficacy, Emotional Stability and Self-Esteem (Judge, Locke, & Durhams, 1997). Research into the value of this higher order construct suggests its value in predicting job satisfaction and performance (Bono & Judge, 2003), and understanding life satisfaction, career identity development (Hirschi, 2011) and occupational health (Best et al., 2005).

The commonality across all these concepts, PsyCap, SCCT, Core self-evaluations, is not only a connection with Self-efficacy, but a continued broadening of evaluative processes which remain linked to proxy measures of employability.

2.3.7.10. Perceived employability.

Forming part of Forrier, Sels, and Stynen's (2009) employability theory, perceived employability represents a specific employment-related self-evaluation. A review of literature within this area defines perceived employability as concerned with:

“The individual's perception of their [sic] possibilities of obtaining and maintaining employment” (Vanhercke, Cuyper, Peeters, & Witte, 2014, p.593).

Vanhercke et al. (2014) argue for the importance of this concept, as it is these perceptions, rather than measures of employability possessions, which will impact an individual's employability related behaviour. As such the value of a subjective approach to employability should not be discounted. Nevertheless, research offering comparisons of student's perceptions of their employability and employer's ratings indicate divergence in these views. These studies have shown students frequently underestimating their skills (Baker et al., 2017; Wickramasinghe & Perera, 2010). Such

contrasts may reflect variations in what is understood as necessary or important for employability assessment.

Figure 2.13. Forrier, Sels, and Stynen (2009) employability framework

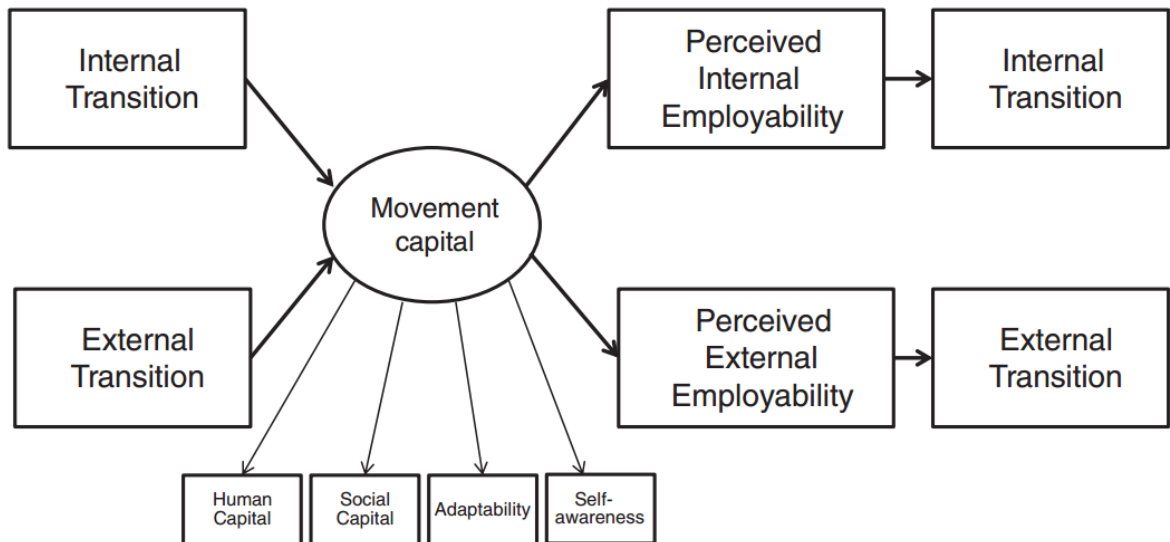


Figure 2.13. Taken from Forrier, Verbruggen, and De Cuyper, (2015, p.58).

A longitudinal investigation into perceived employability by Wittekind et al., (2010) found self-presentation skills and willingness to develop new competencies, to be unrelated to levels of perceived employability. Yet, it is expected that these aspects, as illustrated within sections 2.38. and section 2.3.3.2. would impact on the success of an individual in attaining and retaining a job role. This finding highlights an important limitation of perceived employability measures. Furthermore, it directs attention towards the perceptions of those awarding or distributing employability outcomes, so to best inform students about what constituted employability. Only by offering an accurate structure for individuals self-evaluations, can these internal processes be considered accurate, and thus impact behavioural outcomes (such as job searching, training participation) appropriately.

2.3.8. **Signal-management.**

2.3.8.1. Definition and core features.

Williams et al.'s career management dimension of employability involves more than a management of one's own resources, values, interests, and aspirations. It is also vital to understand how, when and where to target capital to achieve personal goals. This second aspect of career management is referred to as signal-management. This is defined as an individual's ability to navigate and engage with selection and recruitment opportunities, which will lead them closer to their desired career goals.

Signalling theory (ST) was proposed by Spence in 1973, in response to dissatisfaction with capital theories. Spence argued that it is not the underlying capital which is important in exchanges between recruiters and potential employers, but the way this underlying capital is signalled. When faced with a gap in understanding around the candidate's suitability for a role, the candidate (signaller) attempts to bridge this gap by offering visible indicators of the underlying factors they want to put forward. The recruiter (receiver) then has a proxy measure of the information they need to make an informed decision around recruitment. These proxy measures may include experience, qualifications, or references. Furthermore, the higher the cost to the signaller, associated with the signal i.e. in terms of financial, time or effort costs, the more value that is placed on the signal by the person receiving and evaluating those signals (Connelly, Certo, Ireland, & Reutzel, 2011). There has been a wide range of support for this theory's explanatory power (Kjelland, 2008). However, resistance by economists to accept signalling theories is strong (Weiss, 1995). One aspect of HC which is particularly enlightening of the importance of signals beyond the capital itself is that of expertise. Given the tacit nature of expertise, signals of this commodity are limited. Even when articulated, it is not always possible for non-experts to recognise, or value its worth (Ericsson, Charness, Feltovich, & Hoffman, 2006). As such, rewards for this level of ability are not given. These circumstances support the important aspect of successfully signalling capital, rather than the capital itself translating skills and abilities into occupational outcomes.

Within this dimension signalling processes are further expanded upon to include an account of the role of identifying relevant signalling opportunities and signal expectations, i.e. identifying appropriate sources of vacancies, and being aware of how to identify and present appropriate signals. As such employability viewed from this dimension relates to an individual's ability to identify, select, and engage with selection and recruitment opportunities, which will lead them closer to their desired career goals.

The literature explored in relation to career management suggests that in addition to personal possessions in the form of skills and attributes, signals of these possessions, social relationships, and group membership, play an important role in determining the employability of an individual. As a result, the working definition of employability is expanded to reflect the capacity to identify relevant opportunities, which may relate to job vacancies, expansion or training;

*“An individual's capacity and willingness to **identify, and** engage in opportunities to acquire and to keep an attractive job within the context of changing personal, organisational, and societal, contexts, **through the presentation of themselves as a compatible candidate**” (Working definition four)*

The idea of employability communicated by this category was first applied as part of a holistic model of employability by Hillage and Pollard (1998). This framework considered the role of recruitment and selection processes and job matching attempts, as well as job searching and strategic approaches to securing employment. This supports the need for knowledge and skills around the selection of signalling opportunities. They also include the component of articulating your strengths, which links to the importance of communication skills in effectively presenting signals. This aspect of employability was carried forward by Harvey et al. (2002) as “*Articulation of employability*”, a component Harvey saw as having a core impact on employability.

From the signalling perspective, the experience or other signals one possesses become what are traded in for economic gain, rather than the capital supposedly displayed through this signal. This perspective has led to such terms as experience economy (Brown, Hesketh & Williams, 2004) entering into employability discourse, reflecting the value placed on experience by employers seeking signals of work readiness.

Experience itself is also incorporated into employability theories. Dacre-Pool and Sewell (2004) discuss the role of work and life experience; and work experience and training are highlighted as capital by Fugate et al. (2004). These instances illustrate the way in which these two perspectives (Capital and Signals) are at times conflated with proxy measures of capital incorporated into employability theories as capital themselves.

Signalling theory was formed to account for the exchange process occurring during recruitment but was first linked to a conceptualisation of employability by Forrier and Sels in 2003. They suggested its value in understanding the abilities offered by potential employees. However, this was later dropped in favour of a perceived employability focus, such as with other developments to this theory, the reasoning for this abandonment is unclear. After Forrier and Sels (2003), signalling continued to have a valued presence in employability conceptualisations in the form of “*Job seeking*” (McQuaid & Lindsay, 2005), “*Career development learning*” (Dacre-Pool & Sewell, 2007), “*Cooperate sense*” (Heijde & Van Der Heijden, 2006) “*Career building skills*” (Bridgstock, 2009), and Hogan et al.’s (2013) inclusion of employers perceptions. Nevertheless, other models such as Knight and Yorke (2003) USEM model, exclude a consideration of these processes. Once again this finding supports conclusions that current employability conceptualisations do not sufficiently consider past conceptual developments within their formulation.

Published after the original review, Sumanasiri et al.’s (2015) Learning and Employability Framework includes the role of Learning outcomes, defined as “*knowledge, behaviour, skills or understanding which can be **demonstrated** [emphasis added]*” (Phillips et al., 2010, p.2495). This definition could be more representative of signalling, than to claims of reflecting learning processes. ST can also be linked to King (2004) “*self-promotion*” influence behaviour, acknowledging the need to present self-favourable, in the absence of an objective measure of job performance.

2.3.8.2. Developments to signalling theory.

Despite its value, there are concerns with the comprehensiveness of ST. The accuracy of these signals is likely subject to distortion, either via the signaller’s conscientious intent, or the receiver’s bias in interpretation (Bailly, 2008; Cai, 2013). For example, those

studying a degree, depending on what subject it is in, have been found to differ in the skills they develop (Wilton, 2008). Without knowledge of the specific subject or degree, it is doubtful that these nuanced differences are communicated by this signal alone. While a signal would inform the receiver of certain information, the way in which this signal is interpreted will vary across receivers depending on their experience and current knowledge. Bailly's (2008) model of employer's belief emphasises the multiple ways in which one can interpret and evaluate the same signal. He proposes that as a result of recruitment experience one will come to adapt the value they place on different signals. Furthermore, this can occur through private learning (recruiting an individual themselves) and public learning (observing the predictive power of signals through others' recruitment decisions and the outcomes of these). Similarly, Cai (2013) further expanded Bailly's theory, stating that Bailly did not explain how initial signals are developed, or the mechanisms underlying public learning processes. Using Institutional Theory, again showing the psychosocial cross over for employability at an individual level, Cai illustrates the two-way communication between institutional values and practices, and individuals' actions. In both these cases the objectivity through which signals are interpreted, is questioned. Both advocate the role of public and private learning to inform these signals.

In addition to these perspectives on signals, individual differences will occur regarding perceived trustworthiness (Klotz, Motta Veiga, Buckley, & Gavin, 2013) and compatibility during these recruitment processes). These variables are likely to distort the relationship between Capital and employment outcomes.

2.3.8.3. Signalling and SC.

Signal-management components within existing employability conceptualisations illustrate connections with the role of networking and SC navigating signalling opportunities. Having access to important networks was highlighted by Hillage and Pollard (1998) as an aspect of their deployment component. The next year, Kluytmans and Ott (1999) introduced their model which included the component "*Job market know-how*", which referred to engaging in regular exchange of information through formal and informal networks.

These relationships also offer an additional variable to this signalling process. In-group preferences are as well established within psychological research as SC is within sociological research. Both illustrate the benefits of securing membership on helping behaviour. SC increases trustworthiness, as a function of existing ties that would be lost in the event of deception – this is particularly valuable when looking at employment transactions as a signalling process, as signals can be relied on as good quality representations. This might also explain potential impacts of prestige of universities (Rothwell & Arnold, 2007; Sumanasiri et al., 2015) with the potential loss to an institution of high status being greater as a result of contrary evidence to the institutionally approved signal, than institutions which are perhaps less known in the profession.

The saliency of this group identity is of particular importance (Levine, Prosser, Evans, & Reicher, 2005), supporting the need to signal this with the relevant individual, in order to receive these in-group benefits. This signalling acts as a social primer which can go on to impact the recipient's interpretations, judgements and actions. Molden (2014) supports the mere exposure of relevant stimuli impacting individuals in a host of ways which are "*often even outside of people's intention or awareness*" (Molden, 2014, p.1). This research supports the importance of impression management, in terms of the information given out relating to group membership, but also the importance of interpersonal relationships in developing links with relevant groups, in order to accrue in-group benefits.

These advancements in understandings of signalling processes do not appear to have been integrated into employability conceptualisations in any obvious manner. A consideration of experiential learning in the impact and interpretation of signals may further illustrate the complexities of this concept.

2.3.9. **Dimension three: context.**

2.3.9.1.1. *Definition and core features.*

The final dimension of employability identified in Williams et al. (2016) is context. As Forrier and Sels (2003) so eloquently states “*employability is not a static characteristic of persons, but is rather time and place-related*” (Forrier & Sels, 2003, p.107). Several components of existing employability conceptualisation illustrate the ways in which context seeps into all individual aspects of employability. An understanding of capital components as relating to applicable know-how, and the mediating effects of signalling processes in presenting employability, represent just part of this contextual influence.

According to Williams et al. (2016), the core features of this dimension are external circumstances that influence the capital demanded of an individual, and how this demand is potentially met. Employability as seen from this dimension relates to the fit between the individual and the employer's current requirements, compared to the fit of other individuals applying for this role. This dimension illustrates how the weights of various aspects of capital vary within each recruitment scenario.

While Arthur et al.'s (1995) conceptualisation resulted from an understanding of the changing context of employment, both in terms of employer and employee expectations or culture, their model, like others, did not incorporate contextual components as a main component of employability. Context as a named component of employability, was instead introduced to holistic employability conceptualisations by Hillage and Pollard's (1998) framework. Within their framework reference is made to both personal circumstances and the labour market in which one seeks work. Furthermore, the role of recruitment process, job matching processes (for instance, recruitment firms, vacancy advertising), macro-economic demands and labour market tightness, location of employment (labour market circumstances), labour market regulations, and benefit rules are all referred to as relevant external factors.

Two of the most significant contributions to considering context within individual level employability are the works of Brown et al. (2003) and De Grip et al. (2004).

2.3.9.2. Relative and absolute employability.

According to Brown et al. (2003), employability policies often ignore the “*duality of employability*”. Brown et al. (2003) argue that we too readily focus on absolute employability that is the appropriate skills, knowledge, commitments or business acumen held by an individual, neglecting a consideration of supply and demand which translate this into relative employability. Their Positional Conflict Theory (PCT) illustrates the need to move from a focus on what employers appear to want in graduates, which has dominated the skills agenda, to a focus on how individuals can learn to stand out. Brown et al. (2004) state that, keeping in mind this importance of legitimising recruitment choices, it is inevitable that any profile of employability developed today will be quickly reached by a higher number of individuals aiming to compete and, subsequently, stand out, thus introducing higher thresholds and additional factors, to the standard employed person. As such, the degree offers a positional advantage only over those who do not possess one.

This argument is further enforced by Cremin (2009) who emphasised the impossible nature of pinning down a skills list. Cremin (2009) argued that there can be no formal or static definition of employability as individuals active within a competitive job market context strive constantly to keep ahead of others, and thus employability is a “*condition that can never be fulfilled*” (p.131). Employability levels fluctuate with capital demand, resulting in higher requirements for employment in instances of over-demand, wherein employers may be regarded as occupying a stronger bargaining position and lower thresholds for employment in circumstances of under-demand. This once again illustrates the importance of presenting an understanding of employability which encapsulates the constant flux of context surrounding individuals’ endeavours in the workplace. This perspective is acknowledged within the current working definition of employability which in addition to excluding generic terms such as soft skills or generic skills, also excludes reference to specific skills or personal attributes, reflecting the state of constant flux surrounding these requirements. Despite the strength of this argument, a consideration of the surrounding applicant pool is not integrated into later conceptualisations.

2.3.9.3. Changing capital demand.

A second noteworthy contribution to understandings of the employability context is the work of De Grip et al. (2004). Alongside a consideration of the individual's mobility, training and functional flexibility, a taxonomy is presented of those developments that lead to change in the demand for capital. De Grip et al.'s (2004) empirical investigation of their employability concept offers support for the sector level impact of demographic, economic, organisational and technological developments in previous HC becoming obsolete and alternative HC taking centre stage.

In addition to these major contributors to the development of contextual components of employability, personal circumstances such as age, access of opportunities, institutional infrastructural, and labour market barriers, are acknowledged by conceptualisations (Kluytman & Ott, 1999, p.208). Also represented within the contextual impacts noted in these extracted papers are: *"a range of socioeconomic contextual factors related to individuals' social and household circumstances"* (McQuaid & Lindsay, 2005, p.212), the impact of *"Shock events"* (Forrier & Sels, 2003) that disturb continuous employment, and broadening and transition conditions (Thijssen et al., 2008). Further contextual factors relating to the university in which one applies is discussed by Harvey (2001), who notes the impact of subject studied, and geographic region, age, and socio-economic/ethnic background of a graduate.

Support for the role of context in employability is strong. A review of the human resource development and economic literature by De Grip et al. (2004) concludes that this *"clearly show[s] that [an understanding of employability] has to encompass both individual and contextual factors"* (De Grip et al., 2004, p.212). These contextual issues are thought to be incorporated within the present working definition, under the term "capacity" at the start of the definition.

2.3.9.4. Questions of meritocracy.

A final aspect of the context to consider, alluded to within Holmes's (2013) employability review, is the unequal distribution of opportunity within society. Employability perspectives focusing on capital and career development aspects of employability present the implicit assumption that the development of employability

takes place within a meritocratic society, in which those with the best skills, knowledge, personal attributes, win in the employability challenge. However, some employability researchers argue that there exist differing employment outcomes amongst groups, which cannot be explained by variations in possessed HC. Holmes highlights positional perspectives on employability, which move away from a meritocratic view of society, referring to the role of HE in the maintaining of social positions, resulting in inequalities in the distribution of employability (Holmes, 2013). These perspectives are concerned with the cultural reproduction inherent in employment decisions. Cultural reproduction refers to existing structures seeking to maintain norms and values and other cultural factors from generation to generation (Jenks, 2002; Nash, 1990). This implies that individuals in power will seek to employ others that embody the same values and norms system, maintaining existing social structures.

Illustrative of this point, research supports the difficulty of those not within the existing social network of senior management levels, gaining access to these positions (Metz & Tharenou, 2001). Moreover, Bathmaker, Ingram, and Waller (2013) offer support for the existence of a middle-class advantage over privileged access to capital. Explorations of students' perceptions of their employability supports an awareness of class, as well as sex, disadvantage which an undergraduate degree alone did not eliminate (Morrison, 2014). Such conclusions are supported by Jackson (2014) who found the development of competencies linked to employability, to be influenced by an assortment of external factors, including sex, work experience, geographical origin, and engagement.

This pattern begs the question, if all groups are being offered access to opportunities within HE, why is this not having a proportionate impact on these groups' employment outcomes? Given the role of culture in allowing for effective cooperation within a group (Goodenough, 1981), it is not unexpected that culture seeks to reproduce itself within environments requiring group cooperation. The role of socialisation processes in acculturating staff into relevant work culture is not foolproof, thus recruitment of someone already indoctrinated to some degree into relevant norms and values could enhance cooperation aims. There is evidence to suggest that even with the possession of capital, one may not access an appropriate available job, and in the absence of this capital, one may secure a job for which they are not equipped to function effectively within (Bechky, 2006). This situation has led to a number of theoretical developments

by critiques of HC theory, which may account for these variations, namely, SC Theory and Signalling Theory (ST).

2.4. Summary of Chapter

This chapter commenced with a consideration of the diverse contexts in which the concept of employability operates. This discussion illustrated the multifaceted and connected nature of employability. A consideration of the present literature informing an understanding of employability at the level of the individual. Utilising the integrative synthesis of Williams et al. (2016), this review discussed three common categories of components present in holistic theories of individual level employability. These categories related to capital (human, social, psychological, and cultural), career management (self- and signal-management), and contextual components. Definitions of these categories are presented within table 2.4., below. This review concludes with a working definition of employability as;

“An individual’s capacity and willingness to identify, and engage in opportunities to acquire and to keep an attractive job within the context of changing organisational, societal, and personal contexts, through the presentation of themselves as a compatible candidate”.

A consideration of existing holistic employability conceptualisations indicates an absence of data-driven formulations offering clear and replicatable methodological information which will enable such conceptualisations to be scrutinised. A lack of parallel development in understanding these developments and failure to incorporate the latest conceptual developments within new publications validates the value of such a literature review in preparation for further conceptual work.

Table 2.4. Common categories of employability understanding

Capital: Anything an individual possesses that can lead to an increased probability of positive economic outcomes, or other personal outcomes relating to the area of work	Human capital	Information and skills that the individual possesses that are perceived as contributing to the production process
	Social capital	Social connections that can be utilised to enhance their functionality in the workplace
	Cultural capital	Situations which the individual has experienced that are perceived as enhancing the properties of the individual, which lead to functionality in the workplace
	Psychological Capital	Psychological capacities offering strengths within the job market
Career Management: An individual's competence in navigating the labour market to achieve their personal career goals through accessing relevant training and employment opportunities	Self-management	The individual's perception and appraisal of themselves in terms of values, abilities, interests and goals.
	Signal-management	An individual's ability to navigate and engage with selection and recruitment opportunities, which will lead them closer to their desired career goals
Context: The fit between the individual and the employer's current requirements, compared to the fit of other individuals applying for this role		

Chapter 3

Methodology

“Progress in science is not a simple line leading to the truth. It is more progress away from less adequate conceptions of, and interactions with, the world”

(Kuhn, 1970, p.xi)

3.1. Introduction to Chapter

What employability is, and the value of this concept within HE, are clearly highly contested. There are multiple voices contributing to, and in some cases competing to offer, an understanding of this phenomenon (Williams et al., 2016). Nevertheless, the question remains of how we can work within the context of institutional demands be they directed by the government, student body, or the institution themselves, to develop this phenomenon within students.

While all working to address the research question “*What is the current understanding surrounding factors making up the construct of employability?*”, the literature review and subsequent empirical studies making up the present research thesis vary in their methodological approach. The present chapter will discuss the common thread running through this research; the researcher’s standpoint on employability will be discussed, in terms of epistemological stance informing the research question, design, and selection of a psychosocial perspective.

3.2. Epistemological Stance

While a pure positivist standpoint would see generalisations free of context, as both desirable and possible (Nagel, 1986), it is questionable whether such a perspective would address what chapter two illustrates to be a context dependent question of what current UK HEIs can contribute to the development of employability. Indeed, such an approach would replicate criticisms that can be directed towards current employability research, that it is overly reductionist and as a result shows little relationship with the real context of employability development. Furthermore, with the personal investment of the researcher in addressing this issue it would not be realistic to remain emotionally detached from the focus of this investigation, which itself was subjectively selected through a consideration of one’s working context. Such a passion is something that students have acknowledged makes a good tutor (Crosswell & Elliott, 2004), employers have argued makes a good employee (see section 4.4.1.2.) and thus it is proposed also may make a committed and proactive researcher. Nevertheless, taking a purely qualitative stance in which, no generalisations are possible, would have implications for the value of this research in offering an agreeable response to the research question.

This could offer practical implications for the progression of employability development for groups of individuals. Rather, the importance of both a detailed and rich data set resulting from a consideration of individuals' experiences, and an ability to generalise findings to offer practical implications for UK HEIs, was felt to be necessary to develop an intervention which would truly consider employability at the level of the individual. Given this aim, Pragmatism was considered as a philosophical stance which would accommodate the inclusion of both qualitative and quantitative research methods. As such a focus is given to the commonalities across these divergent stances including 1) the use of empirical research to address the research question, 2) the inclusion of safeguards to minimise sources of bias, and 3) the attempt to offer a warranted assertion regarding the development of individual's employability within HEIs (Johnson & Onwuegbuzie, 2004).

Pragmatism is referred to here as relating to an interest in whether knowledge is useful, over the nature of knowledge and truth (Morgan, 2013). Contrary to the colloquial use of the term to imply a short-term focus in which the link between theory and practice may be severed, pragmatism within the context of this research is focused on a relatively long-term application of knowledge around employability, to the university context.

Taking this pragmatic stance introduces several assumptions which it is important to make explicit. The existence of multiple, and sometimes competing realities are acknowledged; that is realities which alter with the accumulation of individual experiences (Guba & Lincoln, 1994). Nevertheless, knowledge is viewed as a continuum from uniquely individual at the most detailed end, and socially shared at the broader extremity. All knowledge is acknowledged as socially bound, as we enter into a world that has already been interpreted by those who came before us. Beliefs arise from experiences which, while not representing universal truths, incorporate warranted beliefs which are shared by the present society. These beliefs inform action which leads to consequences, in a way that is open to change in any given situation (Morgan, 2013). As such, while an individual level of employability is considered here, this is understood as inseparable from context (see section 2.2.).

One of the strengths of pragmatism lies in its connection to questions around combining qualitative and quantitative research, leaving the researcher open to apply any research

methodology which best facilitates the research (Feilzer, 2010; Morgan, 2013). This extends to the practicality of research outcomes which focus on the production of ‘useful’ knowledge. This stance therefore allows for an incorporation of both, more idiographic (repertory grid), and nomothetic (surveys) approaches to addressing the present problem of what is meant by employability and how HE can contribute to its development. This perspective runs throughout the research process and will be alluded to within forthcoming sections of this chapter.

3.3. Employability within the HE Context

To increase the amount of relevant shared knowledge possessed by informers of this research, the context of investigation was clearly defined as employability as it relates to HE and both graduate and undergraduate level provision. Those individuals sampled within the present research are purposively sampled to reflect knowledge and experience pertaining to employability as understood from the context of undergraduate students, and graduate.

A consideration was given to the narrowing of this focus to specific disciplinary areas. However, it was felt that this increased narrowing of the subject area would lead to information which was not only limited in its application, but prone to more rapid change, resulting from an enhanced focus on specialist knowledge and skills which would be subject to regular contextual demands for development, such as technological, organisational, economic and demographic developments outlined within De Grip et al. (2004). Instead, by incorporating experiences from a range of disciplines and professional vocations, the researcher can identify commonalities within employability which go beyond these areas of technical expertise. Thus, enhancing the breadth and duration for which this knowledge is valuable. This wider non-subject-specific HE context reflects frequent requirements within graduate vacancies, for applicants to possess a degree of unspecified subject.

This contextual choice has implications for the populations sampled within this research. Multiple stakeholders were selected for stage two, to offer insight into this context. The HE sample covers a range of stakeholders from the standpoint of current and graduated students, including careers services, academics, placement supervisors, as

well as a variety of stakeholders from the perspective of employers such as Retail, Law, Health, Education.

3.4. Psychological Perspective

In attempting to bridge the competing perspectives acknowledged to exist within the pragmatic viewpoint of knowledge, one is drawn to a theory of the self that is evolving and context dependent. The process of identity formulation and transitions in identity, as well as compatibility between the self and others must reflect this epistemological perspective. The psychological and philosophical lens, through which this pragmatic research is conducted, is Personal Construct Theory (PCT).

Just as the present research was born from a pragmatic desire to address the issue of how to develop student's employability within HEIs; PCT was also born of a pragmatism foundation. This similarity supports the functionality of this theory within a pragmatic investigation. George Kelly (1955) argued that any psychological theory should explain what makes men move, what direction the man will take, and what explains individual differences in a lawful manner. In this respect, a successful theory of employability requires an understanding of what those interested in employability are seeking, who they would select, and differences in these stakeholder's selections.

PCT aimed to address the aforementioned goals of psychological knowledge. The theory had a single fundamental postulate:

“A person's processes are psychologically channelized by the ways in which he anticipates events” (Kelly, 1955, p.46).

This postulate anteceded everything else within his theory. The postulates represents both the push and pull factors of human behaviour, in which it is assumed that an individual is by nature, in motion, and this lack of motion would remove the individual as a subject of study within psychology. This postulate is supplemented by eleven corollaries, which follow from and elaborated on it (see table 3.1.).

Table 3.1. Kelly's eleven corollaries

Corollaries	Definition
Construction	"A person anticipates events by construing their replication" (Kelly, 1955, p.50)
Individuality	"Persons differ from each other in their construction of events" (Kelly, 1955, p.55)
Organisational	"Each person characteristically evolves, for his convenience in anticipating events, a construction system embracing ordinal relationships between constructs" (Kelly, 1955, p.56)
Dichotomy	"A person's construction system is composed of a finite number of dichotomous constructs" (Kelly, 1955, p.59)
Choice	"A person chooses for himself that alternative in a dichotomized construct through which he anticipates the greater possibility for extension and definition of his system" (Kelly, 1955, p.64)
Range	"A construct is convenient for the anticipation of a finite range of events only" (Kelly, 1955, p.68)
Experience	"A person's construction system varies as he successively construes the replications of events" (Kelly, 1955, p.72)
Modulation	"The variation in a person's construction system is limited by the permeability of the constructs within whose range of convenience the variants lie" (Kelly, 1955, p.77)
Fragmentation	"A person may successively employ a variety of construction subsystems which are inferentially incompatible with each other" (Kelly, 1955, p.83)
Commonality	"To the extent that one person employs a construction of experience which is similar to that employed by another, his psychological processes are similar to those of other people" (Kelly, 1955, p.90)
Sociality	"To the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person" (Kelly, 1955, p.95)

It was Kelly's view that all individuals act as scientists, observing events and utilising this information to inform a system which evolves with each new experience, to better predict future events. It was his belief that while there exists shared experience, all individuals will construe an event in a different way, dependent on the perspective they take to interpreting this. These systems of construing were described as multi levelled, with some superordinate constructs subsuming other subordinate constructs, consisting of dichotomies, and adaptable, incorporating new information to better predict future events. It is through this lens of considering individuals experiences, which an understanding of employability will be sought.

Founded in the clinical setting of a psychotherapist, PCT has since been applied to the area of work and organisational psychology by several researchers (for example, Anderson, 1990; Dick & Jankowicz, 2001; Hagedom, 2015; Hedman, Tan, Hoist & Kjeldsen, 2017; Napier, Keil, & Tan, 2009). Furthermore, implicit theories, that is unspoken theories through which we understand the world around us, were reported by Sternberg (1985) as of use for developing conceptual frameworks. Specifically Sternberg states that these theories are of value when one is unsure of even the definition on which to base an explicit theory in which components of the construct are measured (Sternberg, 1985). The value of PCT in offering a structure in which to understand such implicit theories again supports the value of this psychological theory as a foundation for investigation around the meaning of employability. Furthermore, parallels were identified between this perspectives and developments in ST (Cai, 2013) which further highlighted the ease with which this theory could be applied to the topic at hand. PCT also fits with the development of personalised perspectives on CS frequently joining objective measures of CS to better inform our understanding of individual's success.

Alternative theoretical bases were considered as the foundation of this research. Emergent identity, which has been utilised by both Holmes (2013) and a PhD thesis by Donald (2017), were explored. As were trait personality theories, which have become increasingly common in exploring desirable candidates. However, such theories did not benefit from the specifically designed data collection methods aligned with PCT, nor did they benefit from the parallels in philosophical foundations in pragmatism, as adopted within this thesis. PCT moves beyond trait personality theories illustrating the development and evolution of discrete viewpoints towards divergent contexts. Trait theories do not explain inconsistent behaviours; an argument put forward by Mischel (1968) a social cognitive theorist. The appropriateness of Social Cognitive Theory (SCT) was also considered as a foundation for this research. Reference to SCT is increasingly common within the field of employability, with connection between self-efficacy and employability as well as CS. Like PCT and emergent identity, this theory has evidenced its practical applications in exploring and adapting people's thinking and associated behaviour, through practices within a counselling setting. However, the clarity with which PCT accounts for the formulation of viewpoints, was seen as more favourable for the current investigation. It is acknowledged that selection of a

psychological stance, as with epistemological stance, is somewhat subjective, stemming from alignment with personal beliefs developed through personal experience. As such, no individual theory is viewed as correct in comparison to opposing or alternative theories, rather they are utilised pragmatically as a tool by which to investigate the phenomenon of employability.

3.5. Ethical Principles of Psychological Research

This research, in part, was grounded in a desire to engage in the employability agenda within an ethical manner. As alluded to within the publication of stage two (Williams, Karypidou, Steele, & Dodd, 2018), it is identified as the ethical responsibility of HEIs to provide accurate information so not to misled potential students, and to offer the best possible training to model evidence-based practice (Bharman & Spill, 1988; Nagy, 2005). Too frequently a drive to maintain accuracy appears to be speared on by self-interest of institutions to avoid legal processes (for example, new Competition and Markets Authority (CMA) requirements). However, the importance of accurate presentation of information has long been highlighted in the British Psychological Societies related principle of integrity in which values of honesty, accuracy, and clarity are paramount. These values are encouraged to be promoted in all aspects of our professional lives. By presenting courses as providing employment benefits without an acknowledgement of contextual factors, or optimal investment in providing evidence-based practice, it is argued that academics and institutions, are not modelling these basic ethical principles.

Notwithstanding the ethical impetus to this research, it is also important to consider how ethics relates to the research process itself. When engaging in research which has human beings at the centre of the investigation, it is important to consider the moral standard one holds themselves by, and the ethical frameworks under which they are governed. This distinction between institutional governance (ethical frameworks) and personal morality is emphasised as while present guidelines can offer a valuable source of information as to appropriate conduct, it is only through a consideration of individual researchers own moral compass, that potential short falls in ethical guidelines can be identified.

The nature of ethical behaviour is governed by our perceptions of what represents morality. That is the distinction between what is considered right and wrong. The researcher felt it necessary to consider her own moral standpoint, alongside her philosophical standpoint around knowledge, as part of the process of ensuring this research's moral standing within the Newman and Psychological research community. This consideration also reflected the personal outcomes of growth, which further encouraged the initiation of this research.

The present research was subject to ethical approval by Newman University, and University of Leicester. As such the Newman University (Newman University, 2008), University of Leicester (University of Leicester, 2016), and British Psychological Society's (BPS) ethical guidelines were consulted in the developmental stages of each research approach. These guidelines all take a utilitarian stance to right and wrong. Utilitarianism takes a consequentialist perspective, subscribing to the notion that more benefit than disadvantage for the greatest number of people informs judgements of right and wrong.

Here a focus is given to the BPS Code of Human Research Ethics (2014) due to its compatibility with previously mentioned HEIs guidelines. This framework is governed by four principles:

1. Respect for the autonomy, privacy and dignity of individuals and communities
2. Scientific integrity
3. Social responsibility
4. Maximising benefit and minimising harm

Considering these principles within the context of the present research the following standards were judged as particularly relevant.

Maintaining self-determination in choosing to participate in research was important; particularly at stage three in which participants were drawn in part from the educational community from which the researcher may be seen to hold some authority. It was therefore important to ensure all students were aware that participation or otherwise with the research process was both optional, and anonymous. This meant that participants were informed that their involvement in the study had no implications for their study either in terms of grades received or relationship with the researcher or her

colleagues. Online questionnaires were completed anonymously, and face to face questionnaires, administered in class time, were accompanied with an invitation to engage with the survey and return with a signed consent form, engage with the survey and retain the copy, or complete an alternative task in which they brainstormed aspects they say as relevant to employability, and rated their possession of these. This allowed non-participation to be discrete, and benefits regarding reflection on employability, highlighted by the employability conceptualisations of Dacre-Pool and Sewell (2007) and Harvey et al. (2002), to be retained without agreement for the data to be utilised for research purposes. Furthermore, while an incentive was offered for participation, this incentive was unaffected by withdrawal from the research during the task.

Additional practices further respected the dignity of individuals and communities, including recognition of a non-binary sex categorisation and an open upward age range, both reflecting an awareness of the diversity of potential participants.

All participants were fully briefed regarding the nature and purpose of the research prior to participation, and all were informed of their right to withdraw from the research. Personal information such as the job roles and locations of participants within stage two were reported separately so to prevent the identification of those involved in the research.

The time taken to complete the data collection process was also considered a significant ethical issue. To show respect for participants time, it was important that the anticipated minimum duration of participation was accurate. In the case of stage two an agreed end time for the interview was logged prior to commencing interviews. While this meant in some cases a complete account of the individual's implicit theory was not possible, the process allowed for maintenance of a respectful relationship between the participants and the researcher and the community they represented. It was hoped that such respect would encourage continued participation in research activities in the future, leading to a minimising of harm to the community.

Following the reviewing of research procedures by two academic staff members within Newman University, and an additional staff member allied with University of Leicester, ethical approval for stage two and three of the research was granted by both HEIs, prior to data collection (see appendix). This approval reinforces perceptions of the quality and value of data collected via the methods described within this chapter.

3.6. Originality

This thesis presents a number of original methodological and theoretical approaches to the topic of employability. Firstly, this research represents the first PCT approach to understanding employability as well as the first wholly inductive approach to theory development in this area, with a publicly available and rigorous account of the methodological approach applied. This study is now in review with the publication “Education + Training”. In the absence of published research pertaining to the use of telephone interviews for the medium of conducting a RGT, this study may also represent a novel approach in this respect. Finally, the thesis offers a unique collection of existing and newly constructed subscales for the purposes of measuring employability development. This scale is unique in its ability to address the breadth of strengths identified as relevant to the functioning of employability processes identified within the conceptual review.

3.7. Summary of Chapter

The present research will represent a pragmatic approach to addressing the question of what is meant by employability in relation to the HE context. This will focus on the level of the individual, and what identifies an individual as of a higher or lower level of employability than another individual. A combination of considering the knowledge base of employability conceptualisation, currently informing the understanding of employability (Chapter two), and individuals personal theories of employability as based on previous/current experience (chapter four), will be utilised to develop an understanding of the socially shared experience of employability. This is expected to further inform an understanding of how employability is, and can, be developed within HEIs and as a result, inform the development of a measurement tool to evaluate these aspects (chapter six and seven).

Chapter 4

Stage 2a – Investigating Stakeholder’s Implicit Theories of Employability

“Theories are the thinking of men who seek freedom amid swirling events”

(Kelly, 1955, p.22)

Content from this chapter was published in 2014: Williams, S. (2014) Employability as viewed by those involved in recruiting, *SAGE Research Methods Cases*. doi: 10.4135/978144627305014534167

4.1. Introduction

The purpose of theory is to aid in our understanding of the relevant components of a phenomenon, and how they interact to explain variations in that phenomenon (Creswell, 2013). Within chapter two, existing published conceptualisations, that is theories, frameworks and models, which could inform the research question “*What is the current understanding surrounding factors making up the construct of employability?*”, were reviewed. Three dimensions were identified from the literature as appearing crucial to a complete understanding of employability, namely; capital, career management, and context (Williams et al., 2016).

Nevertheless, the identified conceptualisations reflected a primarily confirmatory approach to researching employability, in which a conceptualisation was devised prior to accessing data relating to this understanding from relevant stakeholders (see section 2.3.). This situation brings into question the completeness of any developed theory, as representative of how this concept is referred to and applied within current practise.

The addition of implicit theories of non ‘experts’ to existing explicit theories, offers further depth to our understanding of a concept (Sternberg, 1990). PCT would suggest that everyone, who works within a context in which the concept of employability is valuable, will hold their own personal theories of what it denotes (Kelly, 1955). It is proposed that to offer a comprehensive view of what employability represents, and how it functions within the present environment, these implicit theories which shape the behaviour of those operating within this context, must be explored. Results of the systematic review (Williams et al., 2016) suggest that previous freedom for these personal theories to be incorporated into theory development is unclear (see chapter two- Hillage and Pollard (1998) and Knight & Yorke, 2004). This lack of clarity, and academic focus, highlights the need for a systematic and transparent extraction of these implicit theories, so to allow their comparison with, and integration alongside existing views presented in published conceptualisations.

Further to this lack of clarity, it is important to acknowledge that Williams et al.’s review illuminates trends within the scholarly arena, however, the real-world

assessment of employability and its relationship with the distribution of employment outcomes, do not exist within scholarly texts. A lack of focus on academic literature as a means of informing working practice is supported by Francis-Smythe, Robinson, and Ross (2013) whose investigation of evidence-based management practices within senior managers showed research evidence represented minimal importance. This content was overlooked in favour of evidence from other professionals, both within and outside of their organisation, their intuition/instinct, and their personal values. These later two factors are expected to be integrated within individual's personal construing system. This reflects the value of sourcing this information, for the understanding of employability within the work context.

Additionally, the application of these theories within HE contexts is unknown. Pond and Harrington's (2013) work within business departments of HEIs uncovers patchy application of employability theory within the design of development initiatives. It is therefore necessary to seek out the knowledge and experience of those involved in the practice of employability, so to explore the effectiveness of this scholarly framework in encapsulating employability in these real-world settings.

4.2. Study Objectives

The aim of the present study is to apply the Repertory Grid Technique (RGT) to elicit primary data around the application of the employability concept by employers and those involved in employability development within HE (instructors). This technique will allow for an unconstrained understanding of stakeholders implicit theories of employability.

4.3. Method

4.3.1. Design.

Given the adoption of PCT for this pragmatic investigation ideally these methods will have their foundations in PCT. This ensures that all aspects of this theory have been considered in producing a procedure that will elicit appropriate content for understanding an individual's construing system, as it applies to the topic of employability.

It is argued that methods by which implicit theories are brought in to consciousness are in fact more successful in extracting knowledge from relevant participants than standard interview techniques employed in preceding conceptualisations informed by stakeholders (for example, Hillage and Pollard's interviews with DfEE officials and external experts and commentators). Knight and Yorke's (2014) skills plus project appears to be the single employability framework which is born out of qualitative data, with interviews conducted with graduate employees, and their colleagues. However, the nature of this project's methodological approach is not clear, with methodological detail absent from the key publications linked to this project (Knight, & Yorke, 2004; Knight, & Yorke, 2003; Yorke & Knight, 2006). It is suggested that while this research represents an extensive investigation, still more components may be relevant to a complete understanding of employability, which may not have been easily recalled through the applied interview technique.

This position is supported by empirical research comparing standard semi-structure interview techniques with methods of knowledge acquisition born from PCT. Lemke, Clark, and Wilson (2011) found that RGT resulted in a greater depth of construct elicitation than did semi-structured questioning alone. This is further supported by Goffin, Raja, Claes, Szwejcowski, and Martinez (2012) who reported identifying over 100 more constructs via RGT than via a semi-structured interview not using this technique. Before a decision was made to apply this method, the most common alternatives to RGT were also considered.

The five most popular means of accessing individual's implicit theories were reviewed for their appropriateness in connection to this research. These are; Self-characterisation sketches, Salmon line, Critical incidences, Q sort methodology, and RGT.

Self-characterisation sketches refer to a brief writing task in which the participant writes about themselves (Crittenden & Ashkar, 2012). While it would have been possible to instruct participants to write about others, it was felt the lack of structure within this technique may result in stunted responses. The *salmon line* developed by Phillida Salmon involves a visual line in which participants place people and explain their decision (Burr, King, & Butt, 2014). While benefits to this approach were acknowledged, RGT was felt to offer more structure to a discussion and thus was expected to illicit more detailed content. An additional method is the use of *Critical Incident Technique (CIT)* which involves the use of events to encourage discussions of inferences and predictions (Flanagan, 1954). It was a concern that the adoption of a CIT would require a restriction to the contexts in which employability was seen as evident. Furthermore, selection of these contexts may have led to a biasing of responses which may reflect a broader range of contrasting contexts than those offered up for discussion.

The *Q sort methodology* is perhaps the most well-known of the techniques, frequently applied in attachment research (Korver-Nieberg, Berry, Meijer, & Haan, 2014). It has also been linked to benefits in other areas such as nursing research (Simons, 2013) and in better understanding concepts such as chain management (Deshmukh & Mohan, 2016). This method involves two processes, Q sorting, in which participants sort a collection of items (words or statements) as either making assertions about a subject matter, or not. This is followed by Q technique factor analysis which groups participants who Q sort in comparable ways (Watts & Stenner, 2005). However, this method is unable to break up its subject matter into component parts. It is these component parts, their nature, development and measurement, that is ultimately of interest in the present research, and for this reason this methodology was disregarded. Even protagonists of Q sort methodology argue RGT is a serious rival (Watts & Stenner, 2005), it is therefore logical that RGT, which does allow for the breakdown of component parts, be considered here.

There are many aspects to the use of RGT which are beneficial to this investigation. Firstly, it is necessary that the selected data collection method allows for a clear description of the components which make up employability, both those which are readily available to the interviewee, but also those which they may be unaware of influencing employability judgements; an advantage of RGT (Rogers & Ryals, 2007). Secondly, it is important that data represent the interviewee's experience and personal theory rather than information based on expectations around how employability should be judged, or expectations imposed on the participant through research. Both these sources of bias could lead to alignment of these responses with the literature, as a result of the researchers experience through the systematic review or recommendations received through reference to the literature by the participant, this situation could lead to a false and misleading replication of previous findings with no added value to the research, or socially desirable responses which do not reflect the view of employability from an employer's perspective. Again, RGT processes are reportedly designed to encourage the neglect of this social influence and focus on individual internal theories (Jankowicz, 2004).

RGT has been identified as particularly appropriate for exploratory studies where constructs are unclear (Goffin, 2002, as cited in Goffin et al., 2012). Evidence of the effectiveness of these grids in developing conceptual models is present within the literature (for instance Lemke et al. 2011) supporting their utility in the current context. Based on these considerations, RGT was employed in the present data collection process.

4.3.2. Participants.

It is suggested by the literature that those who find the topic interesting, have special expertise in the area, confront the topic frequently in daily life, and have thought about the topic before, will elicit the most constructs leading to the richest source of data (Jankowicz, 2004). Students were not considered as a sample here, as it was felt their experience with the concept of employability would be limited to a single narrative. Instead, two stakeholder populations were sampled; firstly, 22 employers involved in

the recruitment and or management of individuals within organisations and teams, were recruited via a snowball sampling technique. An initial volunteer sample was identified through advertisement of the study on relevant employability mailing lists, and personal and institutional contacts of the authors. Volunteers were then given information pertaining to the research, to distribute to their contacts.

The final employer sample included 15 participants recruiting for exclusively graduate positions, and five recruiting for roles which did not require an undergraduate degree but frequently recruited graduates. A further two employers recruited for a mixture of graduate and non-graduate roles. Job titles included; Assistant Supervisor, Directorate Manager, Human Resources Advisor, Human Resources Manager, Head Teacher and Director. This sample involved those within retail, marketing, education, childcare, law and the National Health Service (NHS). In addition, three participants were recruiters for charitable organisations.

Moreover, 14 HE instructors were sampled whose focus was employability development. This sample included a range of positions, including Placement Tutor, Head of Careers Services, and Employability Lecturer. The sample included one “red brick”, one “plate glass”/1960’s university, and 13 “new universities”.

Initial sample size was guided by reported saturation levels in previous RGT papers. Previous research has suggested that little is added to the richness of data from RGT from a sample size greater than 10 (Moynihan, 1996). Alternatively Tan and Hunter (2002) recommended a sample size of 15-25 as few new constructs are developed after this point; other studies such as Goffin et al. (2012); Blundell, Wittowski, Wieck, and Hare (2012); Sharma, Winter, and McCarthy (2013); Lemke et al. (2011), recruiting 39-33, 17, 25, and 40 respondents respectively, report a varying saturation level. For this reason, a minimum sample size of 25 was targeted, with a minimum of 10 participants per subsample. This was consistent with other UK PhD thesis work using RGT (for instance, Doyle (2012) who recruited 16 participants).

Following perceptions of the researcher that no new constructs were emerging, a lull in recruitment, and meeting of the minimum guide sample size of 10 for each sample, analysis was initiated. After a finalisation of the initial categorisation system, the appropriateness of this sample size for the present investigation was assessed. The number of new categories present within each subsequent grid was explored. Results of this analysis supported perceptions of information redundancy (See figure 5.1.). These results suggest little was added to the data after a sample size of 12; only three new categories appearing beyond this point. No new categories emerged after participant 18. This investigation supports the appropriateness of the current sample size.

Figure 3.1. The number of new categories produced with each new grid within the initial employer sample

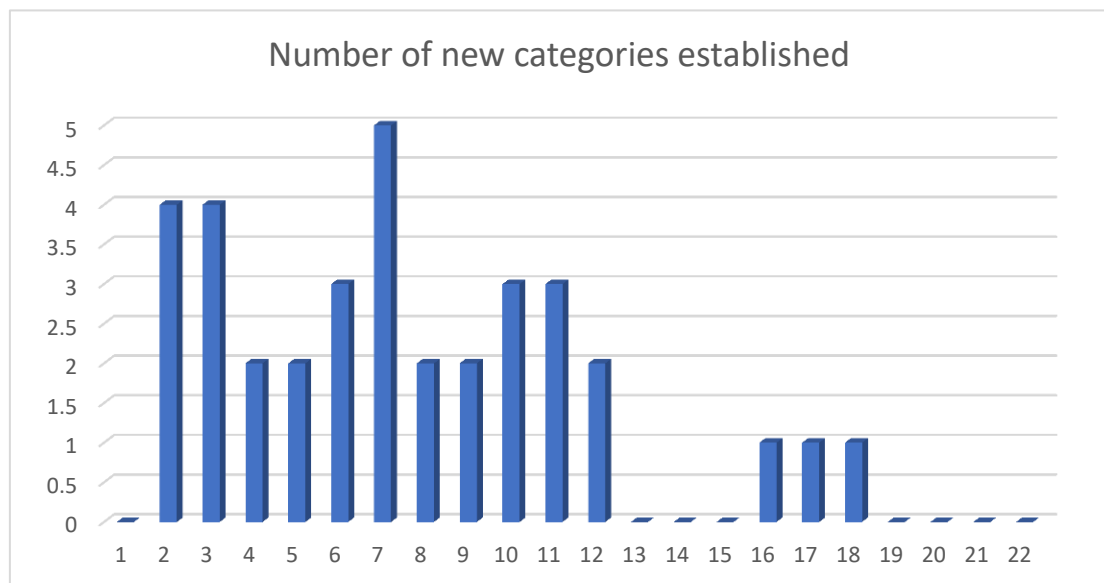


Figure 3.1. A frequency chart reflecting the number of new categories produced through each new participant data. Information redundancy began to occur at participant 13 and was consistent from participant 19-22.

The research process was advertised to participants as taking approximately one hour. This figure was deemed more likely to produce positive recruitment responses according to the views of an opportunity sample of employers approached during a single recruitment fair. Interviews range from 26-139 minutes, with an average of

55minutes 32 seconds. Participant's availability was discussed at the beginning of each interview, with some participants only being able to offer 30 minutes, and others willing to give no end time to the interview process. While no interview was cut short by the lapse of time, in instances in which participants reported having minimal time, less elaboration was offered by participants regarding responses. This may reflect the unconscious constraining of thought processes by the participant, to meet their time parameters. All participants were invited to contact the interviewer with any additional constructs that came to mind following the lapse of the interview, no responses were given. This time constraint may have led to bias in the dataset. It is possible that those participants with less available time to participate reflect a unique sample who with additional time may have uncovered original data.

4.3.3. Data collection approach.

Semi-structured interviews representing a mixture of face-to-face and telephone interviews, were performed to complete the grids. There are a variety of approaches to the application of RGT (Fransella, Bell, & Bannister, 2004). The proceeding text outlines the approach taken within the present study.

4.3.3.1. Element elicitation.

Elements refer to "*the things or events which are abstracted by a construct*" (Kelly, 1991, p.95). The elements selected for RGT depend on which aspects of the interviewee's construing are to be evaluated. In this study the observations which were relevant to the construing of employability were people that represented different levels of employability.

To ensure a variety of employability levels participants were asked to name two individuals representing the highest level of employability, two of a moderate level of employability, and two of low employability. This breakdown mirrors the approach of Goffin et al. (2012). These individuals did not have to be current employees, nor individuals which were employed. Furthermore, the participant did not have to be

involved in the recruitment of these individuals. Similarly, instructors could sample from current and past students. This flexibility was aimed at encouraging the identification of the most salient examples for the participant, as well as preventing an artificial restriction of focus to interactions during recruitment. It was felt that if individuals had to be recently employed or recruited by the employer a focus would turn to initial recruitment rather than any long-term assessment of employability.

4.3.3.1. Construct elicitation.

Constructs represent a way in which two or more things are alike and thereby different from a third or more thing (Fransella et al., 2004), an aspect of our understanding around an issue which helps us make sense of it. According to PCT these constructs are bi-dimensional in nature - consisting of two extremes of meaning. For example, the construct of light might be presented as bright – dark representing a single continuum. These constructs help us to understand elements by placing them somewhere on this bi dimensional pole as a means of understanding them. The present investigation is aiming to identify the constructs used by participants to understand the employability of individuals (individuals reflecting the elements). These constructs may fall within the description of a value, attitude, personality trait, ability, etc., reflecting a mixture of concepts. However, here they are understood merely as a continuum employed by the participant to understand employability and their categorisation as a value, or attitude is outside of the scope of this research.

To elicit the participants constructs a dyad rather than the more commonly referred to triad method was employed as it has been suggested that this process is less confusing for participants (Landfield 1971 as cited in Fransella et al., 2004). This was investigated through an initial pilot applying a triad approach to construct elicitation. Feedback from the participant confirmed the difficulty level perceived in this task and thus a dyad method was employed for the main study. To elicit constructs the respondent were asked to select two elements (people) and asked “*in what ways are these two people similar in terms of their employability?*” For example they might be comparable in terms of their attendance. For each construct, participants were then asked to state the

opposite pole, providing a bipolar construct. While some methods use the term “*different*”, it has been noted that this might encourage the consideration of different constructs rather than a polar opposite to that construct (Fransella et al., 2004) i.e., “Ice cream” might be different from a “chair” while “curry” might be considered an opposite. Participants were asked to make these comparisons until no more constructs could be identified. Participants were then encouraged to repeat this process for a new pair of individuals. While a sequential process was encouraged, in practice a more organic comparison schedule was employed to prevent interrupting participants thought processes.

As constructs were presented participants were asked the meaning of each construct pole (“*Could you tell me what you mean by X?*”) and asked to provide a behavioural examples of each (“*Could you give me an example of X?*”). This method was utilised by Blundell et al. (2012) who reported the valuableness of this information in understanding the meanings underlying participants’ constructs and provided an additional richness to the data.

A total of 717 constructs were elicited from the sample, an average of 20 per participant.

4.3.3.2. Analysis.

Following data collection from each individual participant, the participant received a copy of the grid to assess its accuracy as a representation of their personal theory of employability. Jankowicz (2004) proposes the use of a summary of the grid content or “eyeballing analysis”, which covers the topic discussed, how they have represented the topic, the nature and number of constructs elicited, patterns of rating and comparison of supplied elements, constructs and ratings. However, it was believed this would add an additional, unneeded interpretation of the grid, which may lead to distortion. All participants reported satisfaction with the data collected and no alterations to concepts, elements or ratings, were made following the participants review of the grid.

Following this process, to address the study aims of identifying how employability is construed by relevant stakeholders, analysis of the sample as a whole was also required. A content analysis was utilised to aggregate the results of the various participants grids. This method of analysis is an accepted way of combining data from multiple grids, as communicated by experts within the area of repertory grids (Jankowicz, 2004) and represents current practices, for example, Kawaf and Tagg (2017).

A bootstrapping analysis was used, where no pre-existing theory or structure was used to categorise the content. This method allowed for a wholly data-driven approach to this analysis and therefore reduced any bias presented by the existing frameworks. During analysis, each construct (for example, hardworking-Lazy) was taken as a basic unit for analysis and followed the content analysis process outlined in Jankowicz (2004). This process involved considering the first construct from participant one, and comparing this with the second construct from participant one. If the constructs were perceived as representing the same meaning, these constructs were placed together and a category name was formulated to reflect this shared meaning. If they were deemed to differ in meaning, these constructs were put into separate categories. The initial category name reflected the initial pole provided by the individual (for example, hardworking, as opposed to the opposite elicited - lazy). With each new construct identified as reflecting the same underlying meaning, the category name was revised to reflect the current content of that category. With the introduction of a new category, the content of existing categories was reviewed to confirm their alignment with their current category compared to the new category. This process continued until all constructs were categorised. Those constructs which did not reflect a shared meaning with another construct, or which could not be clearly aligned with a single category, were placed within the miscellaneous category.

4.3.3.1. Piloting the procedure.

To minimise the impact of the researcher's novice status with regards to RGT a number of pilot studies were performed. Firstly, familiarity with the procedure was established, following this several informal interviews were conducted with a convenience sample

not derived from the target population. These interviews were aimed at developing skills relevant to applying the RGT. Comparisons between dyad and triad approaches to data collection were also considered here. Responses indicated increased difficulty of participants to respond to the triad approach, often replacing this with a dyad approach. For this reason a dyad approach was maintained for the population sample. Following these practice interviews, two initial interviews were arranged with employers. These pilots adopted the procedures outlined within the above method section.

4.3.3.1.1. Pilot one.

The first interview was conducted face-to-face. Outcomes of this interview in which a sequential approach to element comparisons was employed, showed that the participant presented a tendency to raise multiple constructs at once, leading to a need to make regular notes. Observations suggested that note-taking interrupted the flow of participants as there was a pause for these to be completed. However, this note-taking was necessary to log additional constructs raised during the discussion of initial constructs, with this participant reflecting the first in a pattern of participants raising multiple constructs simultaneously. In addition, while this sequential approach was utilised as a basis for the procedure, as reflected in this participant, a much more organic approach was taken, with participants occasionally bringing in additional comparisons, and choosing to swap between pairings. Furthermore, the time taken in identifying relevant elements for discussing during the interview alerted the researcher to the importance of this as part of the pre-interview briefing, thus subsequent interviewees were asked in advance of the meeting to consider the individuals they would use for the discussion.

4.3.3.1.2. Pilot two.

A second pilot interview was arranged to take place over the telephone, at the interviewee's request. This request alerted the researcher to the value of this method in reducing the interruption caused by notetaking, following this telephone interviews

were encouraged alongside face-to-face options rather than being presented as an alternative to a default face-to-face approach. The majority of participants opted for a telephone interview. In response to the initial pilot, in which recording of constructs was complicated by individuals noting multiple constructs at once, a separate sheet was utilised for recording of responses, and laddering of these constructs was performed prior to entering the final constructs into the grid. For example, when the participant raised being reliable as an important aspect of distinguishing two individuals, the participant was asked to elaborate on what this meant for them, prior to coming to a final recorded construct being entered into the grid.

4.3.3.2. Inter-rater agreement process.

Reliability in this setting is not considered synonymous with “verification”, which would imply one ultimate truth (see discussion of epistemological stance which indicates misalignment with the perspective of one truth). Reliability here is focusing on consistency of observation, for the purposes of supporting an extension and generalisability of this research through stage three of this research, to other employers and potential employees (Boyatzis 1998).

The reliability of the classification system was assessed through the triangulation of a number of reliability processes (see figure 3.1.). During the initial classification process informal discussions took place between members of the research team, as well as an external professional with knowledge and experience within qualitative research. These discussions related to the meaning of produced categories, overlaps in the meaning of categories, and the placement of constructs within these categories. This process allowed for a fresh perspective during the analysis, enabling the identification of ambiguous terms and alternative meanings. Initial categories included; truthful, how to work with a team, collaborative, coping, can challenge, appropriate appearance, interview and application, problem management, reliable, receptive to change, flexible, willing to develop, hardworking, application of knowledge, commitment to role, Engagement in role, Knowledge and Skills possessed, something extra, Awareness, communication skills, interpersonal competence, team fit, outgoing, self-interest vs

alternative interest, independence, time management, perspective /prioritising, self-awareness, professionalism, focused, standards, being self, attitude to work, and business awareness. These categories then evolved, following the identification of a number of areas of overlap between these categories. An illustrative example of earlier category definitions, and discussions with internal researchers, is presented in appendix E1.

The classification system was deemed ready for the next stage of investigation when no significant developments in category meanings or construct categorisation resulted from these informal discussions. Categorise and their definitions and constructs at this initial stage, can be seen in appendix E2. At this point a subsample of the dataset was selected. This was based on its inclusion of instances of all categories produced by the first researcher, while maintaining the lowest possible sample size to reduce the time and effort required by the external researcher. The subsample consisted of participants 3, 8, 10, 16, 17, 18, 19, 20, H5, H7, H9, and H12. A total of 320 constructs, representing 48% of the total sample. It has been suggested that fewer occurrences available for coding can result in instability in the reliability assessment (Boyatzis, 1998).

Figure 4.1. Inter-rater reliability process

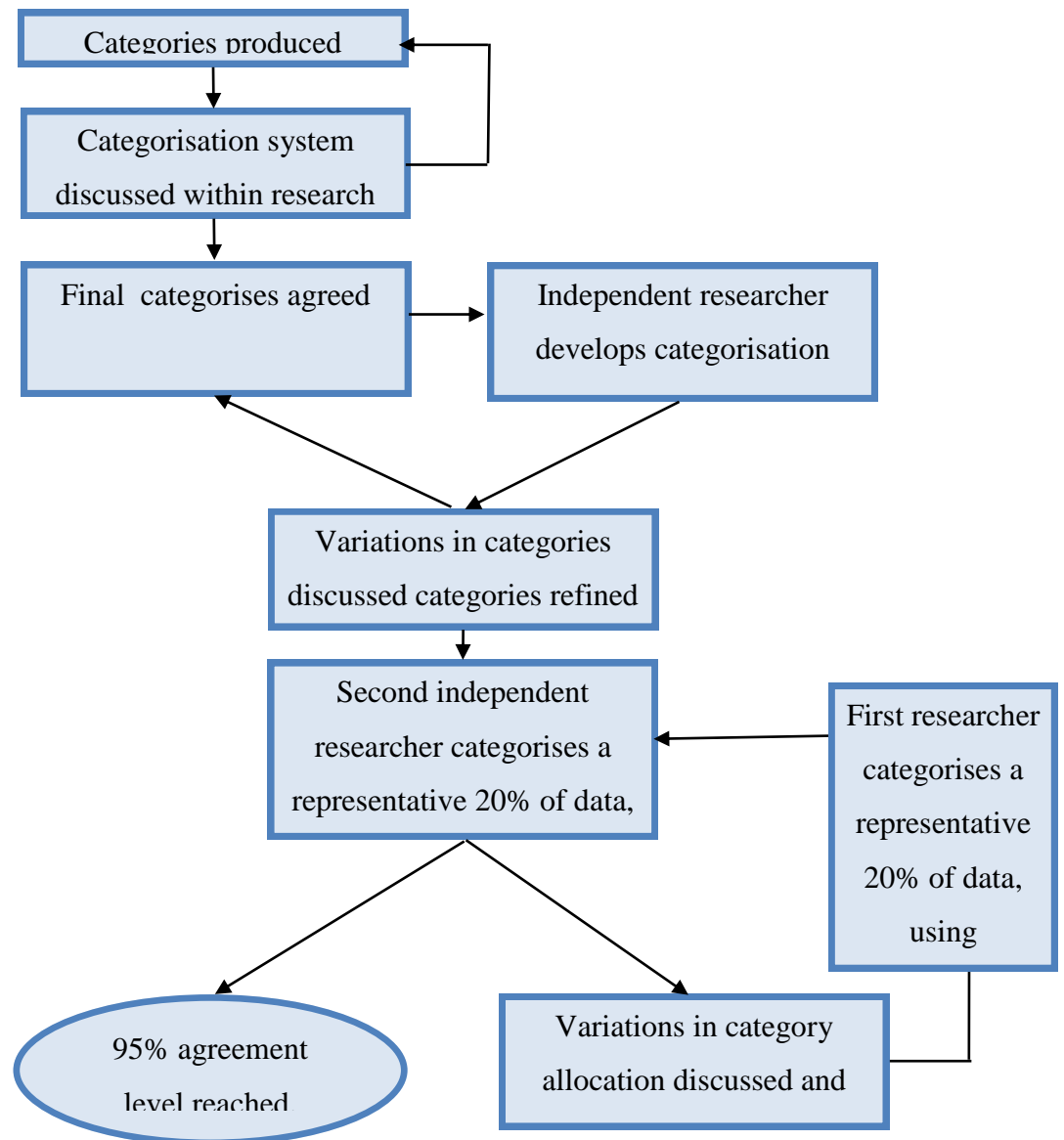


Figure 4.1. Flowchart representing the inter rater agreement process

Following the selection of a representative subsample independent researcher one, previously uninvolved in the research, repeated the categorisation process. Categories produced by each rater (myself and independent researcher one) were compared to identify similarities in categorisation. These categories and the allocation of the subsample were then tabulated (see appendix E3 for independent researcher one's categorising). Discussions between raters resulted in support by the second researcher for the appropriateness of the current classification system, with agreed changes to five

of the categories definitions, and recategorizing of several of the individual constructs (see appendix E4 for report of discussion between researchers).

The third stage of this reliability assessment was the categorisation of the subsample using the agreed categorisation system from stage two. This was conducted by both the first researcher and a second independent researcher who had until this point been uninvolved in the research. Once this process had taken place a comparison of the constructs assigned to the categories, was made (See appendix E5). The two researchers then discussed any conflicts in categorisation and final minor refinements were made to the category definitions, following which the process was repeated with independent researcher two.

Finally, results of this second independent researchers rating were compared with those of the first researcher to develop a similarity percentage. The formula used for percentage similarity was number of times both coders agreed on the coding, divided by the number of times coding was possible. A resulting agreement level of 95% was achieved after a single re-categorisation following discussions. This is in line with the 90% benchmark agreement level proposed by Jancowicz (2004).

Analysis began with a consideration of employer's data. Following an analysis of these participants, and the initial category structure produced from this sample, additional analysis was performed with the instructor sample. This approach was designed to keep employer viewpoints at the forefront of results, given their pivotal role in the allocation and distribution of employment outcomes. However, recruitment of those involved in the development of employability in HE was conducted to allow for a comparison of these stakeholders views with employers (see chapter five). The present analysis reflects a combination of these stakeholders' data, offering the most comprehensive account of the categories.

4.4. Results

Sixteen superordinate, and thirty subordinate categories were produced through the content analysis, to represent the content of the RG data (see table 5.1.).

A total of 30 constructs (5%) were categorised as miscellaneous, either reflecting a clearly distinct meaning that was not replicated within the dataset (for instance, “to grips with the culture – language and cultural barriers”) or which offered insufficient clarity to align to one specific category (“realness about themselves – lacks maturity”).

The present chapter excludes a discussion of those categories which represented either quantitative or qualitative differences between the subgroups. These excluded categories are highlighted in table 4.1., in which all categories are presented in order, from the category presenting the highest frequency count, to that representing the lowest frequency count. As such the first row reflects the category most frequently connected to a constructs meaning, while the last row reflects the category with the least constructs associated with it.

Table 4.1. Definitions and frequencies of final categories.

Superordinate categories	Subordinate categories	Definition	Whole sample frequency (%)	
			Frequency (%)	Participants (%)
Commitment - Directed, pledged or bound to engage with the role.	Hard worker	Engagement with work rather than avoiding aspects or focusing attention elsewhere.	50 (7.0)	21 (58)
	Passion	Show a passion or interest in the area.	25 (3.5)	16 (44)
	Conscientiousness	A desire to perform at a high standard. Hold a consideration for quality in their output.	15 (2.1)	9 (25)
	Interest in company	Possesses an interest in the company leading to commitment to a specific job.	15 (2.1)	10 (28)
	Longevity	Committed to the role or company for the long term, rather than a temporary destination.	8 (1.1)	6 (17)
	Persistence	Committed to the completion of work activities.	7 (1.0)	6 (17)
	Shared company values	Considers the goals and ethos of the company above their own needs or expectations, or represents a match between their values and that of the company.	7 (1.0)	7 (19)
	Total		129 (18.0)	30 (83)
Interpersonal competence - The competence to interact with others appropriately.	Rapport building	Possesses a pleasant appearance and manner, allowing for a relationship between them and other individuals or groups. Where those concerned understand each other's feelings or ideas and communicate well.	58 (8.1)	27 (75)
	Collaboration	Joins in with others, has a positive influence on the pursuit of a common purpose, providing an open and informed whole.	44 (6.1)	19 (53)
	Honesty	Truthful in their communications and actions.	11(1.5)	13 (36)
	Total		113 (15.8)	31 (86)

Table 4.1. continued

Superordinate categories	Subordinate categories	Definition	Whole sample Frequency (%)	
			Frequency (%)	Participants (%)
Self-development - Attitude towards personal growth characterised by a propensity to learn which accurately reflects ones' current situation	Openness	Openness to consider opportunities and alternative values, skills, and behaviours.	51 (7.1)	29 (81)
	Self-awareness	Aware of the reality of their own skills, knowledge, character, motives and desires, and utilises an understanding of their strengths and weaknesses in these to select appropriate roles, and function optimally within their limits.	23 (3.2)	15 (42)
	Professional development	Displays an engagement with professional development opportunities.	21 (2.9)	16 (44)
	Total		95 (13.2)	32 (89)
Experience and Knowledge - Knowledge and experience relevance to the attainment of and/or functioning in the role.	Relevance to the job	Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, which fill an existing need or add additional value.	34 (4.7)	18 (50)
	Signalling know-how	Acts in a way that suggests an understanding of expectations within the recruitment process and the appropriate communication of signals.	29 (4.0)	18 (50)
	Evidence-based practice	An ability to apply knowledge to relevant settings.	12 (1.7)	10 (28)
	Business awareness	An awareness of the context in which they find themselves applying for the role.	10 (1.4)	9 (25)
	General ability level	Possesses the basic cognitive ability expected of the role. Not specific to particular skills but rather a general level of intelligence.	6 (.8)	6 (17)
	Total		91 (12.7)	31 (86)

Table 4.1. continued.

Superordinate categories	Subordinate categories	Definition	Whole sample Frequency (%)	
			Frequency (%)	Participants (%)
Taking responsibility - a level of ownership which induces a feeling of accountability for something. Can be left to work on tasks without external monitoring.			40 (5.6)	21 (58)
	Proactivity	A tendency towards action, to creating or controlling a situation for themselves, rather than requiring other people or circumstances to direct their behaviour.	25 (3.5)	19 (53)
	Total		65 (9.1)	28 (78)
Strategic thinking - Can manage time effectively, prioritise tasks to achieve their goals, has a vision and effective planning skills.	Vision	The ability to think about or plan the future with imagination or wisdom.	19 (2.6)	13 (36)
	Prioritising	Perceptions around the appropriate allocation of mental and other resources to a task, when considered in relation to the wider responsibilities and duties within that role.	10 (1.4)	7 (19)
	Time management	Perceptions around the appropriate allocation of time to a task, when considered in relation to the wider responsibilities and duties within that role.	8 (1.1)	6 (17)
	Planning	Consider a task or activity alongside others and arrange in a manner that its goal can be achieved.	6 (.8)	5 (14)
	Total		43 (6.0)	16 (44)

Table 4.1. continued.

Superordinate categories	Subordinate categories	Definition	Whole sample Frequency (%)	
			Frequency (%)	Participants (%)
Confidence - A belief in one's general abilities and in relation to specific behaviours, which leads to confident behaviour.	Confident behaviour	Display a realistic/accurate level of confidence in their role related behaviours.	25 (3.5)	19 (53)
	Self Confidence	Express a realistic belief in themselves and their abilities.	14 (2.0)	11 (31)
	Total		39 (5.4)	22 (61)
Emotional management		The ability to control one's emotions to present a calm, consistent, rational, relaxed response within the workplace which reflects the organisations expectations of them.	28 (3.9)	15 (42)
Professionalism - Adhering to organisational regulations, goals, and expectations regarding work presentation and behaviour.	Presentation	Appropriate communication style and appearance that communicates an engagement with the role and values of the role.	16 (2.2)	14 (39)
	Organisational compliance	Adhering to systems, and codes of practice expected of employees.	10 (1.4)	8 (22)
	Total		26 (3.6)	19 (53)
Adaptive - Have adapted their behaviours to meet external demand.	Adaptive behaviours	Engage in behaviours evident of an adaptive nature.	12 (1.7)	4 (11)
	Relevant know-how	The relevant skills to extend above and beyond a specific job description.	8 (1.1)	7 (19)
	Flexible learner	Can learn new skills or information quickly.	4 (.5)	9 (25)
	Total		24 (3.3)	16 (44)

Table 4.1. continued.

Superordinate categories	Definition	Whole sample Frequency (%)	
		Frequency (%)	Participants (%)
Preparation for interview	An illustration that they have researched the role for which they are applying	9 (1.3)	8 (22)
Distinctiveness	Communicates a "wow factor" within the pool of candidates.	6 (.8)	5 (14)
Optimism	Positive about the future.	6 (.8)	4 (11)
Creativity	The propensity to come up with novel ideas or solutions.	5 (.7)	5 (14)
Recruitment Risk	The degree to which the outcome of recruiting the individual is known.	3 (.4)	3 (6)
Parental support	The role of parents within the actions of individuals.	2 (.3)	2 (6)
Subtotal		687 (95.8)	36(100)
Miscellaneous		30(4.2)	17 (47)
Total		717	36

Within this commentary data extracts are accompanied by a construct number. The first number represents the participant, with employers represented as 1-22, and instructors represented by H1-H14. The second number denotes the order in which this construct was presented within the individual's repertory grid, for example, 8.1 represents employer eight's first construct, while H3.6 represents the sixth construct provided by instructor three. This information was utilised for tracking of constructs. While it may be argued that later constructs may reflect those less salient in the individuals construing systems, it is possible that later constructs reflect the introduction of new important aspects of employability which were only clearly brought to mind when considering pairs of individuals discussed later in the interview. For this reason no link between the order of presentation and saliency is made here, rather this data is kept to offer context to the reader should later developments regarding construct elicitation deem this information of significance.

While parallels can be, and are, drawn between the presented categories and existing conceptual investigations, theories, and skills lists. Caution must be displayed in any comparison between these categories and external research. The present categories are named based on the content of their comprising constructs, however, the completeness with which the concept is referred to by the sample will vary. For example, while the category of shared company values is represented, the degree to which coverage refers to all possible company values is unclear. Thus, certain company values may be completely absent. Furthermore, while rapport building is identified. This rapport building is described purely in terms of the content of the constructs for example, empathy, communication skills, extraversion, etc., while other investigations may have explored quite different components of rapport building such as emotional intelligence, openness. Furthermore, categories might also be encapsulated within larger constructs for example strategic aligns with the concept of time personality (see section 5.5.1.); as discussed within chapter two, self-efficacy can be incorporated within discussions of PsyCap and Core Self Evaluations (see section 2.3.7.9.). Therefore, any consideration of surrounding literature must align with the definition of the category presented within the

present categorisation system, and not the dominant definition of the term presented within the external literature.

4.4.1. Commitment.

Constructs placed under the “commitment” categories were defined as “directed, pledged or bound to engage with the role”. As such participants reported employability as reflected in part by a continuum of “dedicated – doing basics” (2.2), to seeing the role as “just a job – committed to the job” (17.16). Within these categories emphasis is placed on the value of the job, as something that can be disregarded in favour of alternative commitments. A distinction is made between completing the job description for which one is hired and investing time and energy into the development of that role, seeing value in contributing to its effectiveness.

This commitment existed within the data in the form of seven subcategories; “hard worker – just enough”, “passion – not interested”, “conscientious-don’t care”, “interest in company – need a job”, “longevity – stop gap”, “persistent – give up”, and “share company values”.

4.4.1.1. Commitment: hard worker.

This category was defined as “*engages with work rather than avoiding aspects or focusing attention elsewhere*”. As such these constructs reflect a behavioural outcome of an underlying commitment to the role. This spectrum of accountability for the behaviours individuals did or did not perform extended from desirable behaviours of observing needs within the work environment which the individual felt driven to address, compared to disregarded contractual obligations of the role if one could not find personal incentive to engage in them “mucks in with any job needed – leaves crappy jobs” (13.8). As such the implications of this commitment for the rest of the team can be seen “let their colleagues take the slack – do the job fully and correctly” (22.13). A lack of commitment results here in others being disproportionately relied on to complete tasks which might be construed as the less fulfilling aspects of the role.

An enhanced display of commitment was described as going beyond what was expected; “going above the role: just can’t stop – not engaging just turning up” (2.14). The implication of this extract is that this hardworking behaviour is something the individual cannot switch off; it reflected part of their identity, implying an attribution of this behaviour to an internalised value system which benefited the employer/team.

Within this category the potential reasons for the desired behaviour were presented as variable. For some participants this commitment was linked to work ethic; “work ethic – the world owes them a living” (H5.11) and work-life prioritising/ work centrality “work priority (at work) – too busy sorting everything else out” (19.35). As such it was the value place on how one performs at work, which was attributed to these outcomes; seeing hard work as necessary or important. This compares to the next categories in which an interest in the type of work, or context of work, is clearly attributed to the commitment expressed by the employee.

4.4.1.2. Commitment: passion- not interested.

Those constructs placed within the “passion” category were defined as “*showing a passion or interest in the area*”. Passion constructs related to a personal interest in the role which resulted in a commitment to the roles required actions “committed and interested – don’t see the point” (H8.18). As with the “hardworking” category, value was placed on an individual putting part of themselves into the role, seeing the role as something aligned with their personal values, identity, interest “hearts not in it – enthusiastic” (2.6). This was linked to strength and sources of motivation or drive ‘interest in the job – not motivated (16.17), as such in addition to identifying the impact of passion on someone’s work satisfaction “enjoys what they’re doing – miserable” (8.19), there was also an acknowledgement that this connection with the role would drive positive performance behaviours.

4.4.1.3. Commitment: conscientiousness-don't care.

The “conscientiousness” category offered insights to another form of commitment, not to the role but rather to high performance. This category was defined as “*a desire to perform at a high standard. Hold a consideration for quality in their output.*” This category offered an additional attribute expected to lead to the positive behaviour outcomes of a committed individual. Commitment did not necessarily reflect a personal interest in the role or context, or the valuing of work and good performance within the workplace, but the quality of one’s output was seen as a reflection of one’s self, and what is important to one’s self. Constructs within this category referred to whether the individual was interested in performing well or not. Similar to constructs within the previous commitment categories, the drive of appropriate behaviour is compared between a commitment to the job, context or outcome, and external rewards “wanting to do a good job – not bothered, just want the money” (18.14). Thus, the value of external rewards for encouraging high quality outcomes or performance is seen as secondary to an internal drive to perform well.

References were made to holding a high standard “have a high standard – standards slip” (20.42) or excelling the employer’s standards of work “excels above my standards – disappointment” (16.18). A comparison is made between the employee’s performance and the aspirations the employer has for that role. The subjective nature of such standards, and the dependence on team culture/ leader expectations, offers a contextual component to understanding this category. Again, the outcome of not meeting these standards, having work returned to them, illustrates the cost of not possessing this quality. Checking, taking time, and effort were all linked to this category.

Nevertheless, emphasis was given by several participants, on this not meaning they give 100% to everything “quality (not a 100%er) – not caring” (3.11). This perfectionist tendency was viewed as potentially detrimental to both the health of the individual, and the efficiency of the worker to produce the range of outcomes expected of them.

4.4.1.4. Commitment: persistence vs. giving up.

Persistence vs. giving up represented another behavioural outcome linked to this commitment. Persistent was defined as “*committed to the completion of work activities.*” Constructs within this category illustrated the value placed on committing to a task. Reference was made to maintaining engagement “follow[ing] through – gets bored” (10.31), and resilience in the face of failure “give up after one or two tries – persistence and accepting rejection” (H4.16). A dominance of personal effort over easier alternatives to leave a task, illustrated a specific aspect of hardworking. Persistence was not only linked to the value of the task and/or its result, but also to personal qualities that allowed someone to overcome or manage obstacles. As such a connection between “commitment” categories and external categories such as emotional management are illustrated here. A connection was made between this construct and previous experience “have had life experiences – head strong fed up quickly” (8.9) which suggested a possible age factor within this employability aspect. Connections were also made between the role of persistence and the job seeking process “persistence, accepting rejection – give up after one or two tries” (H4.16).

4.4.2. Self-development.

This category reflected the third largest frequency of constructs. This may suggest a high level of relevance within the sample. Self-development was defined as an “*attitude towards personal growth characterised by a propensity to learn which accurately reflects one’s current situation*”. The category was made up of three subordinate categories; “openness” (see section 5.4.5.1.), “self-awareness”, and “professional development”.

4.4.2.1. Self-development: self-awareness.

Self-awareness was defined as constructs evidencing that the individual “*aware of the reality of their own skills, knowledge, character, motives and desires, and utilises an understanding of their strengths and weaknesses in these to select appropriate roles and function optimally within their limits*”. Self-awareness was presented as pivotal to effective self-development, as this allowed developmental opportunities to be both sort out, and seen as relevant to the needs of the individual and the team they were in.

Constructs within this category discussed being self-aware “self-awareness – Blind spots about strengths and weaknesses” (5.9). This construct illustrates the importance of both strengths and limitations awareness. Each of these has been linked to performance outcomes. An identification of parameters to an individual optimal performance was important “try to be the person who can walk on water – can hold their own” (11.16). Reviewing of one’s competencies were reported to have implications for when someone chose to inform others when something was not their area, and as a result impacted effective collaboration, and reduced the outcomes of negative results produced through not seeking support which would be beneficial “happy to say this isn’t their area – take on work beyond their capabilities” (10.7) “recognise and seek help – don’t recognise when in trouble” (H12.12).

Similarly, the value of being aware of one’s strengths was also outlined and linked to optimal functioning within a role “always something they can contribute – arrogant” (10.24). Making the best of the resources they had available to them “I can cram more into my day if... – I can only do what I can do” (12.17).

References to arrogance reflected the impact of self-awareness on interpersonal relationships, providing an off-putting demeanour which links self-awareness to issues of collaboration and rapport building. The importance of awareness of how they come across to others “think about how they come across – lack of self-awareness” (3.5), who they are “self-aware – no idea who are” (H2.12) and what they possess “aware of their competence – unrealistic review of competence” (21.11), were all noted by participants. The results of this awareness were linked to identifying an appropriate position “found

their calling in life – doesn't know what their strengths and weakness are" (9.3), as well as an appropriate engagement with tasks "take on work beyond their capabilities - happy to say this isn't their area" (10.7). Therefore, the importance of both the practices of reflecting "can reflect – no self-awareness" (H8.14), but also the success of individuals in producing an accurate account of themselves "is this a job suitable to me – not realistic about how personality links to job" (H8.13), were linked to behavioural outcomes during recruitment and optimal performance within job roles.

4.4.2.2. Self-development: professional development.

The final subordinate category within "self-development" was "professional development". The category was defined as "*displays engagement with professional development opportunities*", and reflected behavioural outcomes resulting from self-awareness and openness "make effort to develop – can't identify or rectify weaknesses" (20.16). Professional development links these competencies (Openness and Self-awareness) to engagement with learning/development "sound off about personal development but can't be bothered – push themselves" (20.28). Importance was placed on doing more than the minimum, on a journey of constant self-improvement "job and nothing else – tries to better self" (16.21). These discussions reflected a comparison between what was offered to employers by individuals during the recruitment stage, and compatible actions following recruitment. There was an acknowledgement that different types of people would exist within the work environment, and this was acceptable. This further reinforces the importance of compatibility between the way the individual promoted themselves during recruitment, and the type of person they are "can demonstrate an intention to learn – can't demonstrate learning" (17.12) as a desire for professional development per se was not always deemed necessary. References to professional development did not suggest that this aspect of employability was needed to complete a job, but that it reflects doing more than this job description, or an enhancement of job performance. However, professional development was discussed as part of the employability story linked to standing out "watch how they stand out from everyone – career has become stagnant" (11.7). This presents employability as

something which cannot be passively achieved “watch their employability – take their foot of the gas” (11.6).

4.4.3. Experience and knowledge.

The second largest proportion of constructs constitutes the superordinate category of “experience and knowledge”; this category was defined as possessing “*knowledge and experience relevant to the attainment of and/or functioning in the role*”. The category encompassed five subordinate categories. In order of dominance, these were; “relevance to the job”, “signalling know-how”, “evidence-based practice”, “business awareness”, and “general ability level”. All these subordinate themes reflect knowledge and or experience which indicate the ability of the individual to meet the present or predicted needs of the job role/company. As such it offers a distinct explanation as to the important elements of employability. “Relevance to the job” reflected variations in the presentation of employability meaning within the two samples and thus is discussed within chapter 5.

4.4.3.1. Experience and knowledge: signalling know-how.

The “experience and knowledge” subordinate category with the second largest number of constructs tied to it was “signalling know-how”. This category of constructs was defined as “*acts in a way that suggests an understanding of expectations within the recruitment process and the appropriate communication of signals*”. Signals are understood as experience and/or other externally verifiable possessions which are taken as a proxy of desirable internal possessions. Constructs within this category made specific reference to signalling processes. This category was defined as know-how so to reflect the discrete contribution knowledge about how to communicate signals, and what the best signals would be, made to the signalling process. A consideration of these constructs as purely reflecting communication skills would be inappropriate. Nevertheless, the value of communication in this process is a dominant feature of these constructs.

These constructs referred to the applicant's ability to communicate well in interview "articulate – roundabout way of answering questions" (12.3). This was linked to meeting expectations around the detailed but concise nature of communications "elaborate – sketchy on the details" (19.26), "concise – gives you war and peace" (11.23), offering relevant examples "good examples – don't offer examples" (19.40). It was recognised as important for individuals to offer evidence of their unique value "shine out/wow factor – just waving a piece of paper" (H9.6), and to be aware of their need to sell themselves, "realise CV is a sales document – poorly written CV" (11.21). Thus, while some constructs reflect the appropriate communication of signals with or without awareness of this, others emphasis the value of knowing how to present these signals appropriately.

4.4.3.1. Experience and knowledge: evidence-based practice vs. theorist.

Further references to experience and knowledge were made in the form of comparisons between "evidence-based practice" and being a 'theorist' "able to apply their knowledge – theorist" (11.13). This category was defined as "*an ability to apply knowledge to relevant settings*". As such this category not only illustrated the value of knowledge or experience that is relevant to a setting, but the ability to see connections between this knowledge and experience and the context it is to be applied. It was suggested that someone could be highly academic, but ill equipped to apply this knowledge to a real-world context. Reference was made to putting knowledge into practice "put qualifications into practice – can't use the qualifications they have in day to day working environment" (13.1), and specifically to apply evidence-based practice "keen on evidence-based practice – tries random stuff" (10.23). This construct indicates how this content could be construed as going beyond applying knowledge one has, to seeking out relevant knowledge to inform practice. A connection was inferred between this approach and a level of maturity "mentally mature – cannot apply information to new context" (H11.5), replicating references to maturity made within self-awareness "mature attitude – immature in behaviour" (H3.1), openness "mature about what want –

won't explore options" (H7.7), professionalism "professional – immature" (19.12), prioritising "mature – see petty things as a big issue" (16.14), and relevance to the job "life skills and experience- not very mature" (16.10). It is unclear whether this is a reference to age or the broad impact of experience on various aspects of employability.

4.4.3.1. Experience and knowledge: business awareness.

The penultimate subcategory of "experience and knowledge" is "business awareness". This was defined as "*an awareness of the context in which they find themselves applying for the role*". This content was broader than the Signalling know-how category which focused on knowledge of the application/recruitment process. These constructs referred to business acumen "business acumen – no commercial awareness" (3.17), an understanding of the labour/job market "know what to expect in the job market – fail to recognise the environment in which they compete with others" (18.21), and where they fit into this setting "don't see where your place is within business – business acumen" (H1.13).

4.4.3.2. Experience and knowledge: general ability level.

The smallest subcategory of "experience and knowledge" is "general ability level", defined as "*possesses the basic cognitive ability expected of the role. Not specific to particular skills but rather a general level of intelligence*". These categories reflected knowledge or ability at a more general level and as a result could not be aligned with references of "evidence-based practice" or "signalling know-how" but were similarly representative of a discrete group that did not conflate with the "experience and knowledge" category of constructs.

Content cited common sense "common sense – doesn't know what common sense is" (10.35) and general intelligence "less intelligent – competent and capable" (H11.13), reasoning skills "think and reason – shallow level of thinking" (H6.5), and an academic nature necessary for achieving relevant qualification "finding getting required qualification hard – academic" (7.10).

4.4.4. **Taking responsibility.**

The “taking responsibility” grouping included constructs which fitted within the following definition *“a level of ownership which induces a feeling of accountability for something. Can be left to work on tasks without external monitoring.”* Two differing levels of responsibility were noted, firstly responsibility to engage in a task expected of them, and secondly, responsibility to plan forward (“pro-activity – no initiative”). Thus, while taking responsibility is necessary to be proactive, one did not have to be proactive to take responsibility, illustrating the distinct nature of these two categories. Reasons for these feelings of responsibility or responsible behaviour were not cited within these constructs, however, links between commitment constructs are expected to exist, with both leading to dedication to tasks, either willingly or out of a sense of duty.

“Taking responsibility” constructs included references to responsibility “will take responsibility – palm stuff off on others” (10.8) or ownership “not taking ownership – a safe pair of hands” (3.12). This category is characterised by an ability to work autonomously “can be autonomous – has to be directed” (19.41). This was compared to a need for constant or frequent support “can get on with it – have to hold hand” (13.8) “can leave to it – need to be on them” (12.26). As with persistence, there was reference to the impact of past expectations placed on them to act in this way “has not been expected to contribute – independent and active” (H4.11) “handed things – takes ownership of career” (1.4).

Outcomes of this aspect of employability included an increase in complaints handled and subsequent involvement of the manager and others in the completion of the task “fire and forget – get complaints” (6.6).

4.4.5. **Strategic thinking.**

Constructs fitting within the “strategic thinking” category reflected the definition *“can manage time effectively, prioritise tasks to achieve their goals, has a vision and effective planning skills”*. As such these categories all relate to a plan of action, how work

behaviours are organised so to achieve ultimate goals relating to career and other long-term plans, completing a range of tasks, within a given time. Constructs within this category were previously considered in terms of a broader definition of considering the wider context, however, this broader definition led to constructs noted by participants in relation to collaboration (considering other practices and the impact of our actions on others) and business awareness (considering the wider workings of the business world), providing conflict between how certain constructs would be categorised. Hence, while this category does consider the wider context, it reflects the goals of the individual rather than the group or company. That is not to say that a consideration of the wider context is not important for an understanding of employability, but such a wide context is incorporated into broader issues of collaboration and business awareness.

The present “strategic thinking” category was made up of four subordinate categories; “vision”, “prioritising”, “time management”, and “planning”. All these categories reflect management skills to meet set goals. These categories are presented below, with the exception of “vision” which reflected a category presented within a single subsample of the participants and thus is presented within chapter six.

4.4.5.1. Strategic thinking: prioritising.

The “prioritising” category was defined as “*perceptions around the appropriate allocation of mental and other resources to a task, when considered in relation to the wider responsibilities and duties within that role*”. These constructs related to placing present responsibilities within a wider context to accurately identify the tasks *importance* “very aware of the big picture – get wrapped up in things that don’t concern them” (6.3) “see petty things as a big issue – mature” (16.14), and the *level of effort required* “recognise need for effort – doing everything last minute” (H8.2). Several references were made to identifying when to stop “knows when to draw the line – not knowing where to stop” (6.1) illustrating the imposing of boundaries to effort.

Within these constructs reference was given to the negative implications of perfectionism “perfection doesn’t mean 100% – totally focused on perfection” (H9.12) this illustrates a constraining factor of prioritising on conscientiousness mirroring

content aligned to conscientiousness “not caring – quality (not a 100%er)” (3.11), which also express concern around the negative impacts of perfectionism on an individual’s employability. However, the contrasting poles illustrate the relevance of this point to the two categories.

4.4.5.2. Strategic thinking: time management.

“Time management” constructs related to “*perceptions around the appropriate allocation of time to a task, when considered in relation to the wider responsibilities and duties within that role*”. Constructs within this “strategic thinking” subcategory referred to issues of time management “good time keeping – unreliable” (21.1), working quickly “delivers later or not at all – deliver at a pace” (5.7), meeting deadlines “hands in on time – not doing what supposed to by deadline” (H13.3), and time expectations “respond to correspondents quite quickly – two or three times before get a response” (8.12). As such a time element is added to a consideration of how individuals met their goals.

4.4.5.1. Strategic thinking: planning.

“Planning” constructs were defined as “*considering a task or activity alongside others and arrange in a manner that its goal can be achieved*”. Within these constructs no mention of time, career goals or ordering tasks received, was given. As such it is perhaps the most general of these categories. Constructs illustrated the need for considering multiple task and duties alongside one another “can work on multiple things at once – single track kind of work” (17.17) and managing these effectively, “methodical – scatty” (17.20), showing good planning skills “good planning and organisation skills – disorganised and poor planning” (H5.6).

4.4.6. Confidence.

The superordinate category “confidence” was defined as *“a belief in one’s general abilities and in relation to specific behaviours, which leads to confident behaviour”*. This category was further subdivided into “confident behaviour” and “self-confidence”.

4.4.6.1. Confidence: confident behaviour.

“Confident behaviour” referred to confident action in the workplace. These constructs were defined as constructs which *“display a realistic/accurate level of confidence in their role related behaviours.”* This definition illustrates the important role of self-awareness on confident behaviour, while allowing this category to remain distinct and thus not implying any connection to professional development as an associate of self-awareness within this data.

Constructs included general references to confidence to perform the job “confident to do the job – doing the job for them” (6.2) confident communication “confident in how communicate – wobbling and floundering” (11.25), confident interactions “confident – didn’t interact” (16.7), confidence to endure “have the confidence and staying power – will get eaten alive” (11.15), confidence to make decisions “confident and secure in what to do – won’t make decisions” (18.20), and confident presentation skills “presents confidently – can’t speak in front of others” (H8.16). The confidence to ask for help was also alluded to “question if not sure – not confident to speak out” (20.41) “happy to ask for help and clarify – over or under confident” (H5.7). Confidence was also contrasted with a lack of sufficient emotional management “overcome with nerves – confidence” (4.9) implying that without emotional management, displays of confidence might not be possible. Although connections can be seen between confidence and external categories such as emotional management, interpersonal competence, self-awareness, taking responsibility, longevity, none of these categories fully encompass the range of confidence issues; nor does confidence fully account for these associated categories, nevertheless, confidence appears to have a wide-reaching impact on the presentation of employability as understood by several other construct categories.

4.4.6.2. Confidence: self-confidence.

The “self-confidence” category expressed “*a realistic belief in themselves and their abilities*”. “Self-confidence” constructs referred to justified levels of confidence in their abilities “misplaced confidence – confident with the ability to back it up” (6.8) “inflated sense of confidence – competent” (21.10), themselves “confident in who they are – no self-confidence” (H5.19), and their role “happy in their position – seek confirmation of what good at” (H7.5). Although there are clear links between “confidence” and “self-awareness”, this category is distinct from “self-awareness”. This outcome results from the strong overlap between “self-awareness” and “professional development” in which weaknesses were identified and acted on, which could not be linked to confidence within this data, and thus while self-awareness is acknowledged to influence confidence, “confidence” is identified as distinct from “self-development”. Other connections can be seen between “confidence” and “interpersonal constructs” (see section 5.4.3.).

4.4.7. Emotional management.

“Emotional management” was defined as “*the ability to control one’s emotions to present a calm, consistent, rational, relaxed response within the workplace, which reflects the organisational expectations of them*”. This category was originally classed under “resilience”, and this is how the category was taken forward within stage three. In its resilience form the now free-standing category of “parental support” (section 6.4.7.) was also included within this category; however, subsequent enquiry within the resilience literature and comparison with these constructs identified the appropriate renaming of this category into “emotional management” which can be identified as a narrower focus of resilience literature.

Links were made between emotional management and professionalism “professional – can’t control emotions” (H11.7) and coping with emotions in times of pressure “nerves get to them – comfortable and relaxed” (19.22) and uncertainty “confident about their ability to cope with change – immobile with fear of change” (2.2). While

professionalism is provided as a standalone category, the overlap between emotional management and professionalism did not account for all aspects of emotional management, and for this reason these categories remain separate. Connections can also be predicted between the content of this category and interpersonal constructs as these reflect the management of one's own emotions in response to others, management of others' emotions, as well as the impact of emotional stability on how one is perceived by others. Exclusion of emotional management from the interpersonal category reflects an acknowledgement within the data of personal outcomes of emotional management which go beyond interaction outcomes, for example stress "resilient – can deal with stressful situations" (22.2) and mental health.

Emotional management reflected an appropriate outward response to workplace demands, in the face of internal emotional challenges. Constructs alluded to the management of other's emotions "can cope with an angry person – hide from complaints" (7.7) "can deal with cross people – couldn't cope" (19.14), in which individual manage the emotions of others in a work appropriate fashion. Also built-in to this category was a consideration of the appropriate way to respond to others "tak[ing] stuff to heart – rational" (10.28) "take things personally – have a professional identity" (H11.8). Finally, the management of internal emotions in general was discussed in reflecting emotional stability "swings hot and cold- consistent in way approach people" (14.10) "stable – changeable" (17.3).

4.4.8. Professionalism.

The constructs within the "professionalism" category reflected "*adhering to organisational regulations, goals, and expectations regarding work presentation and behaviour*". This was a small but widespread category. This superordinate category was presented within the data by two distinct subordinate categories; "presentation", and "organisational compliance". The role of managing emotions was considered as part of this category; however, reference to emotional management did not always reflect a discussion of how one functioned in the workplace. This category looks at impact on

work behaviour and thus is distinct in definition, but likely impacted by emotional management in some instances.

4.4.8.1. Professionalism: presentation.

“Presentation” constructs were defined as *“appropriate communication style and appearance that communicates an engagement with the role and values of the role”*. This appropriate communication included communication during interview, however, these constructs differed from those of signalling know-how as they referred to the nature in which communications occurred or the impressions communication gave in terms of general appropriateness in how one presents themselves, rather than the content for example elaboration, examples, relevant content.

These constructs referred to visual appearance “dirty – clean” (21.13), behaviour “walk with purpose – slouched” (H13.6), and communication “articulate – laid back speak” (H5.18). This appearance communicated the appropriateness of the person for the job “looks as if they could do the job – sloppily dressed” (14.3). Moderating their presentation to that expected of the role was important “has a work face-understanding of professionalism” (9.2) “there’s a time and a place for enthusiasm – loud constantly” (8.20) to present a good impression “adept at managing the impression they give – presenting a negative impression” (H14.11) “good first impression – poorly turned out” (14.12).

4.4.8.2. Professionalism: organisational compliance.

Supplementing this presentation focus, was “organisational compliance”, defined as *“adhering to systems, and codes of practice expected of employees”*. These constructs did not imply that adherence to these codes and practices should represent a shared agreement in their value, or a long-term view of their relevance, as might be expected from the “commitment” constructs outlined earlier. Instead the adherence to these systems was expected within day to day operations was communicated. This category suggests that in addition to requiring a level of passion there is an expectation that any

passion relating to the inappropriateness of organisational procedure should be appropriately channelled. Such behaviour is likely to require a degree of emotional management.

Here employability was linked to adhering to systems “won’t stick to, or defend, the system – professional” (7.13), expected practices “communicate an issue – go away and talk about it somewhere else” (16.25), and codes of practice “not adhering to code of conduct – professional” (22.11) rather than a commitment to the company per say. Engaging in appropriate relationships with colleagues/subordinates “too much one of the guys – detached” (20.17) “detached rationality – less serious minded” (5.3) was also highlighted. Again, connections with emotional management might be assumed given the focus on “taking things personally” within this past category, compared to the current focus on being detached. However, there appears to be more of an indication that power relations between individuals are important, rather than the ability to influence or cope with one’s own or others emotions. Similarly, the impact of this detachment on effective rapport building or collaborative learning is unknown.

4.4.9. Adaptive.

“Adaptive” was defined as “*have adapted their behaviours to meet external demand*”. In this way “adaptive” differed from “openness” as it reflected a more passive response to demands placed on the individual, rather than an openness to engage in activities, opportunities etc. seen to be occurring in the future. This adaption was presented within three subordinate categories; “adaptive behaviour”, “relevant know-how”, and “flexible learner”. Two of these categories encapsulated varying experiences of employers and instructors and are consequently presented within chapter 5. “Relevant know-how” is discussed below.

4.4.9.1. Adaptive: relevant know-how.

“Relevant know-how” constructs related to the definition “*has the relevant skills to extend above and beyond a specific job description*”. This content focused on the

possession of a broader range of skills and abilities rather than a restriction in their skills set: “well-rounded – no evidence of other skills” (11.1) “can only do one thing – can move across contexts” (H11.9). “Relevant know-how” was linked to flexibility “flexibility – master of one trade” (14.5), suggesting such individuals could move to where they were needed. Specific skills of working alone or with groups, and communicating with different individuals, were noted. However, beyond these two more specific references relevance was linked to a breadth of previously demonstrated skills.

4.4.10. Preparation for interview.

This category of constructs was defined as “*an illustration that they have researched the role for which they are applying*”. While “preparation for interview” includes research into the company, these constructs were distinct from the interest in the company category as they did not illustrate an interest in the content they were seeking, rather the gathering of knowledge for the purposes of application and thus staying informed of relevant information. Furthermore, it is not stated whether this preparation was independently sought or resulted from encouragement or assistance of others and as such this category is also distinct from “taking responsibility” or “proactivity”.

Reference was made herein to doing research on the company and role “done their research – turn up with no research (sic)” (11.9), thinking about what would be required from them in the application process “thought ahead – unprepared” (4.3), and taking action to prepare for that requirement “made an effort – unprepared” (18.33) “done their homework – rabbit in head lights” (H9.4). This would allow them to have more information about the role and their suitability to it “clear on what job involves – mismatch between job and person” (19.10). Such content reflects awareness on the part of the other, or individuals supporting them, of the importance of such preparation, as well as a consideration of how this fits with current employability possessions.

4.4.11. Creativity.

The last category to be discussed here is “creativity”, which was defined as “*the propensity to come up with novel ideas or solutions*”. This category reflects an additional reference to problem solving, echoed within the previous “optimism” category (i.e. seeing solutions v problems), “taking responsibility” constructs in which responses to problems are discussed in terms of avoidance, or blaming others, and the “collaboration” category, which alludes to assisting others with their problems. Specifically, “creativity” relates to innovation and imagination being applied to these problems.

Constructs in this category were connected to doing things differently “likes coming up with ideas that are practical – just follows others” (10.12) questioning the status quo “creative – happy to keep the status quo” (19.45), and instead being innovative or progressive “being innovative – not as creative” (H1.7) “progressive – don’t come up with a solution” (18.9). Again, it is expected that confidence may be connected to this aspect of employability, with questioning the status quo potentially reflecting going outside their comfort zone.

4.5. Discussion

The present study aimed to develop an understanding of employability which utilised stakeholder’s implicit theories via a clear and systematic research method, allowing for a consideration of the comprehensiveness and representativeness of the framework presented within the literature review for the real-world context of employability.

Results of this RGT identified 46 categories of meaning, as well as important variations between the two stakeholders viewpoints (see chapter five). This discussion will seek to consider the positioning of these categories within the initial framework adopted from the Williams et al. (2016) review of existing employability conceptualisations (see table 4.2), while also considering comparisons between these categories and findings within external literature.

Table 4.2. Williams et al. (2016) employability framework

Superordinate category	Superordinate category definition	Subordinate category	Subordinate category definition
Capital	Anything an individual possesses that can lead to an increased probability of positive economic outcomes, or other personal outcomes relating to the area of work	Human capital	Information and skills that the individual possesses that are perceived as contributing to the production process
		Social capital	Social connections that can be utilised to enhance their functionality in the workplace
		Cultural capital	situations which the individual has experienced that are perceived as enhancing the properties of the individual, which lead to functionality in the workplace
		Psychological Capital	Psychological capacities offering strengths within the job market
Career Management	An individual's competence in navigating the labour market to achieve their personal career goals through accessing relevant training and employment opportunities	Self-management	The individual's perception and appraisal of themselves in terms of values, abilities, interests and goals.
		Signal-management	An individual's ability to navigate and engage with selection and recruitment opportunities, which will lead them closer to their desired career goals
Context	The fit between the individual and the employer's current requirements, compared to the fit of other individuals applying for this role		

Figure 4.2. Thematic map of employability constructs



Key: Red = superordinate categories; Blue = Subordinate categories.

4.5.1. **Capital based constructs.**

Capital was defined within Williams et al. (2016) as *“anything an individual possesses that can lead to an increased probability of positive economic outcomes, or other personal outcomes relating to the area of work”*. There appears to be overwhelming support for the role of Capital within the present content analysis categories of “flexible learner”, “creativity”, “self-awareness”, “evidence-based practice”, “business awareness” and the broader categories of “relevant know-how” and “general ability”. These categories align with previously identified employability skills including those presented by Chhinzer and Russo (2018); Finch, Hamilton, Baldwin, and Zehner, (2013); Robles (2012); Suleman (2018). Furthermore, categories of “conscientiousness”, “openness”, “honesty”, “optimism”, “passion”, “taking responsibility” “proactivity”, and “self-confidence” are all aligned with the PC sub-dimension of the initial framework.

The assessment of all these aspects, in an effort to assess employability development would be unwieldy, and likely unstable. Focus therefore turned to those meta-capital which were integrated within the employability processes outlined in the framework (signal and self-management). As outlined within section 2.3.7.2. previous advocates of the role played by meta focus (i.e. higher order constructs), including De Grip et al. (2004), Bridgstock (2009) and career competency researchers, identify the role of overseeing knowledge, cognitions, abilities, which influence the application of other capital. Such meta-capital was expected to reflect capital with involvement/links to multiple aspects of employability independent of the nature of the job role. Meta-capital were defined as *“abilities or dispositions which enhance the functioning of self-management and signal-management processes”*.

4.5.2. **Framework modifications.**

In attempting to organise this meta-capital into the sub-dimensions of Williams et al., the distinction between HC and PC became challenging. Meta-capital was considered to

encompass both a skill, in the sense of HC, but also PC. As such this distinction felt artificial. Due to the blurred features between PC and HC, it was proposed that these sub-dimensions were collapsed and brought together to reflect the single dimension, “Strengths”. It is proposed that a consideration of “Strengths”, as opposed to “Capital”, would offer a more positive outlook which focuses on what individuals bring, rather than a deficit model so commonly employed within the literature (Cummings 2010). Furthermore, a move from the word “Capital” would provide distance between the present theory and capitalism agenda, which it is hoped; do not reflect the values or ethos of universities and their development of students. Furthermore, this terminology does not align with any previously known employability theory, offering a reduced tendency to be falsely aligned with previous theories. Given this focus on meta-strengths versus strengths which may align with specific job roles or points in time, it is necessary to adapt the framework presented within the literature review chapter, to reflect this distinction (see table 4.3.).

Whilst HC and PC presented issues of distinctiveness, SC in the form of social obligations or connections seen as convertible to economic capital, while distinctive, was limited within the present research findings. A single reference to external links was given by participant 19. It is plausible that this aspect of employability is represented within other constructs referring to the presence of previous experience; however, support for this is limited to a single reference. The category of “recruitment risk” however, illustrates the role of experience with an individual, with the assessment of their suitability for a role. This offers support for the value of SC in the form of information channels (Colman, 1998) and a source of signal-management. Consequently, SC as presented within this data would be better aligned with signal-management processes.

Despite the lack of broader content linked to SC, several factors expected to impact on the development of SC are included within the content analysis superordinate category of interpersonal competence (Rapport building and Cooperativeness to work with others). These factors are likely to be linked to the potential for developing SC and may perhaps be more relevant to students, and graduates who are early in their career, due to

age or career change, than a consideration of network size and strength discussed by Fugate and Kinicki (2008).

Finally, no references were made within the data, to CC. For this reason, the collapsing of this subcategory within a general strengths' category, was not considered contrary to the current evidence base.

The strengths definition was then revised to present a more streamlined description. As such the following definition was created to reflect reconsideration of this definition following data collected from stage two:

“Individual properties such as skills, competencies, relationships, and traits that can lead to an increased probability of positive work-related outcomes”

Within the literature review, the expansion of employability beyond strengths highlighted the limited scope of a skills focus in respect to employability. This conclusion is supported within the present data in which the diversity of categories produced, supports the multifaceted nature of employability beyond this skills-based attention.

4.5.3. Career management constructs.

Career management was defined within Williams et al.'s integrative synthesis as *“an individual's competence in navigating the labour market to achieve their personal career goals through accessing relevant training and employment opportunities”*. Upon reflection, this definition presents overlap with the strengths dimension in so far as it refers to an individual's competence. Furthermore, appraisal aspects of this management are not emphasised in this definition, giving a dominant focus to signal-management processes. To reflect this, as well as changes in the definition of strengths, and the process aspect of this dimension, the management definition is replaced with *“individual's self-appraisal of personal properties and demonstration of how these fit with workplace expectations and demands.”* Additionally, the word “Career” was

removed from the title to acknowledge the broader nature of these processes which can reflect daily working practices (for example, “professionalism” and “emotional management”) that have little bearing on overall career goals. Management was divided into signal and self-management.

4.5.3.1. Self-management constructs.

Defined by Williams et al. (2016) as “*The individual's perception and appraisal of themselves in terms of values, abilities, interests and goals*”. This self-appraisal and evaluation is reflected within discussions of “confidence”, “self-awareness” and “optimism” within the RGT dataset. In turn, these strengths were linked to a number of other categories, suggesting them as possible meta-strengths.

The impact of confidence could be seen in “hard worker” behavioural outcomes, “interpersonal competence”, “persistence”, “taking responsibility” (in form of decision making), and “creativity”. The value of this confidence is supportive of previous literature which placed confidence at the forefront of predictors of proxy measures of employability (see section 2.3.2.2.). Furthermore, external literature supports the value of this strength in self-management processes. Self-efficacy has been identified as an antecedent of vocational adjustment within the related self-management framework of King (2004), alongside feelings of control, which may be reflected within the “proactivity” category.

Links between “self-awareness” and “confidence”, as well as “professional development”, “interest in company”, “passion”, and signalling processes alluded to within the “signalling Know-how” category, also support the place of self-awareness as a relevant meta-strength. Indeed, self-awareness has been linked to such conceptualisations of employability as USEM (Knight & Yorke, 2004).

Within the present dataset optimism appears to connect with understandings of “taking responsibility”, “openness”, and “confidence”. This far reaching impact is also illustrated within external literature, such as the PsyCAP concept, which links optimism to confidence, and resilience (Luthans et al., 2015). “Optimism” was also linked to

adaptability by Fugate et al.'s (2004) and is viewed as an antecedent of perceived employability (Kirves, Kinnunen, & De Cuyper, 2014), which may impact employability related behaviours (Vanhercke et al., 2014). This context provides a rationale for its consideration as a third potential meta-strength.

Perhaps a lesser acknowledged factor emerging from this data is that of staying abreast of information. This behaviour is linked to “signalling know-how”, “preparation for interview”, “business awareness”, and “evidence-based practice” all of which require collecting of relevant knowledge in order to be actualised, thus awareness and staying abreast of information go hand in hand in offering benefits in these areas of employability meaning. The importance of information gathering, while less dominant, is present within the employability literature; for example, D'Andrea, and Gaughen (1998) note information gathering as an important aspect of their perceived employability scale. This content can be linked to effective adaptability by Fugate et al.'s (2004). Fugate et al.'s (2004) call for the importance of information regarding the environment, the negotiation of challenges, and willingness to change. HC and SC provide resources to this activity, identity provides direction, and personal adaptability optimise. These findings support adaptive behaviour as a continued dominant theme in understanding present day employability; evidencing the sustained value of employability themes produced by Grazia's (1998) review of the employability concept. This skill-set can also be linked to an awareness of contextual issues, linking capital constructs to the contextual dimension of employability discussed later.

4.5.3.1.1. Framework modifications.

Unlike signal-management with its consideration of navigating personal and external contexts, absent from the current self-management definition is any adjustment or moderating of the self as a result of these appraisals. The current definition is more akin to self-monitoring, than self-management. This represents a more passive engagement with information about the self, and results in several negotiation or balance practices

outlined in the present data and literature review, not fitting within the present framework.

It is therefore proposed that the self-management sub-dimension is reworded to reflect the importance of negotiation and fit within the career management dimensions, and its role as the private management process that sits behind the public signalling process. This is reflected in the revised definition;

“The individual's perception and appraisal of themselves in terms of values, abilities, interests and goals possessed, and how they balance these with workplace expectations and demand.”

This proposed alteration accounts for both internal management and a consideration of the external world. In this way, self-management mirrors the component of “Balance” within Heijde and Van Der Heijden (2006), defined as *“compromising between opposing employers’ interests as well as own opposing work, career, and personal interests (employee) and employers’ and employees’ interests”* (Heijde & Van Der Heijden, 2006, pp.455-6). The current definition expands to include differences in ability expectations, this can account for such activities as ‘exaggerating’ or ‘honesty’, covered within the “honesty” category of the RGT data. Also included are differences in values, representing the importance placed on “shared company values” by RGT participants.

Data from this study illustrates the important role of the continued management of the personal, within the demands of a role. This takes the form of moderating daily behaviour (“organisational compliance”) emotions (“emotional management”) and overall presentation (“professionalism”), to provide the most ‘appropriate’ self. This information reinforced views put forward by Hogan et al. (2013) of employability as a socially desirable behaviour. Thus, in addition to comparing, moderating and developing are also important management processes.

Categories such as “shared company values”, which represent the importance of matching personal and external value systems, emphasise a need to consider the fit between an individual’s strength and the context in which they seek to apply them,

within this dataset. Data within this category mirrors the concept of “corporate Sense”, proposed by Heijde and Van Der Heijden (2006) who saw identifying with corporate goals and sharing company values as important for working as part of a team. Other areas of balance/ negotiation include professionalism. A construct linked to employability by a number of previous researchers (Ashton, 2011; Cable & Judge, 1996; Chhinzer & Russo, 2018; Mat & Zabidi, 2010; Robles, 2012; Shafer et al., 2010). It was proposed that professionalism required the management of one’s values, abilities etc. to meet external expectations. In addition, the role of long-term commitment, and negotiations between job loyalty and meeting career aspirations and personal circumstances, is raised within this dataset (see “longevity” category). Similarly, commitment in the short-term, to the job as opposed to a focus on external commitments, also illustrates the role of managing one’s own goals and interests (see “commitment” category). Finally, the role of honesty as a means of controlling external perceptions of internal possession likewise requires a consideration of both internal *and* external situations, and the match between these.

The distinction between self and signal-management is evident within this data, with self-management not expected to reflect an internal agreement, but rather an appropriate work presentation, or ‘work face’. This distinction supports the continued relevance of both of these sub-dimensions within management.

Reviewing the factors necessary for self-management activity, it is expected that for there to be an adequate fit between these two frames of reference, the individual needs to be aware of their own values, interests, beliefs and customs etc. (“self-awareness”), aware of the culture of the company in which they wish to work (linked to previous discussions of staying abreast of information) and possess the ability to make comparisons between these goals and tasks (“strategic thinking”). Furthermore, openness was linked to actions of self-development, both within the present data, and past research (see section 2.3.3.2.). Self-development reflects a desirable response to self-management needs. Openness is also linked to adaptive behaviour within the present dataset, and external research. Adaptive behaviour is expected to be a desirable behavioural response to managing these at times competing requirements.

4.5.3.2. Signal-management constructs.

Alongside self-managements aspect of personal management, there is also support within this data for the values of signal-management, defined by Williams et al. (2016) as *“an individual’s ability to navigate and engage with selection and recruitment opportunities, which will lead them closer to their desired career goals”* (section 4.4.4.7.1.).

As with some previous work (for instance Dacre-Pool and Sewell, 2007) participants used references to outward signals of internal possessions, alongside references to the possessions themselves. The presentation of an experience and knowledge category is expected to, at least in part, be symptomatic of this.

Representing the entry point to new jobs, and revised job roles, this dimension was represented through a number of categories within the data. “signalling know-how” stressed the role of understanding what was required in the signalling process; the “experience and knowledge” category illustrates the important function of signals in stakeholders understanding an individual’s employability. In addition, the “preparation for interview” category illustrated the distinct role of signalling processes in communicating positive aspects of the individual i.e. planning, staying abreast of information, and proactivity.

Taking forward a consideration of connections between strengths and this employability process, several important strengths are identified within the data. “signalling know-how”, and “preparation for interview”. “signalling know-how” constructs illustrated the important roles of communication, and staying abreast of relevant information, in signal-management. Furthermore, “preparation for interview” constructs highlight the importance of staying abreast of relevant information prior to interview, communicating this information at interview, a level of taking responsibility in preparing for this process, and conscientiousness in the way the present.

Furthermore, self-awareness leading to an acknowledgement of these signals is also stressed, and persistence has been linked to the continuation of recruitment processes in

the face of disappointment. As signal-management represents the interface between the self and others, interpersonal competence is also key to success. The ability to build rapport, cooperate with others in their pursuit of a suitable candidate, and coming across as honest, were all aligned with constructs associated with signal-management. A link can also be identified between openness to consider a range of career and learning opportunities within the instructor's "openness" construct, and signal-management behaviours (specifically identifying appropriate signalling opportunities). Finally, it is also anticipated that confidence, and associated issues of optimism, play a role in this management, with constructs linking confidence to emotion management relevant to recruitment processes.

Mirroring amendments to the self-management definition, to avoid overlap between the present process and the strengths dimension, this definition was reworded to:

“Demonstrating personal compatible properties through navigation and engagement with work-related opportunities”

4.5.4. Contextual constructs.

Another important element to consider when looking at these categories of employability meaning is the layers of context offered by these categories. The presence of these contextual elements echoes the acknowledgement of contextual factors within the literature review. Defined as *“The fit between the individual and the employer's current requirements compared to the fit of other individuals applying for this role”*. This dimension illustrates how the weights of various strengths vary within each recruitment scenario.

Following amendments to the definition of the self-management dimension, it is proposed that this dimension is also revised. With the issue of fit being added to self-management and removed from this definition of context, as this fit is aligned with negotiating one's own needs and abilities. Thus, the revised definition of this dimension is to be *“The contextual factors surrounding any given job opportunity or role*

function”. This revision allows issues of negotiation between the individual and the context to be placed firmly within the Management dimension and reflects changes to the self-management definition. Minor amendments are made to this definition, to reflect changes in wording within surrounding dimensions;

“The contextual factors of workplace related opportunities and demands.”

Within this data, four distinct arenas of context are identified. These are;

- Team context
- Organisational context
- Labour market context
- Personal context

Firstly, from the perspective of the team context, this data highlights the impact of workplace culture on assessments of employability. This is done in the form of employers and colleagues expectations of working pace (“time management” construct), and standards of work (“conscientiousness” constructs). Furthermore, successful collaboration (see section 5.4.3.1) provides a context in which employability in the form of fit, impact, and successful collaboration, is assessed.

Next, the context of the company to which one seeks to gain employment will vary the values and interests relevant to expressing a commitment to that company or role. This context will also produce varying behavioural expectations which will influence employability as understood by the individual’s ability and willingness to present a professional approach within these structures. Moreover, the nature of the job will vary, thus reflecting differing fit with individual’s passions and interests. Thus, any understanding of employability must be conducted within the context of the company being approached.

A third arena is that of the labour market. This context presents signalling opportunities and systems which will require “signalling know-how”. In addition, “distinctiveness” constructs covered in chapter five also allude to distinctiveness against others, which places one’s employability in the context of the complete applicant pool. This supports

positional issues presented with Brown et al. (2003) PCT, specifically the value of absolute and relative employability contexts in employability.

Lastly, contextual factors were linked to the adaptability constructs presented within this data. Reference to family responsibilities limiting flexibility with location and hours of work are cited by participants. This aspect of employability appears to again bring to the forefront issues of balance within employability. But also the issue of personal contexts, that is personal responsibilities and constraints outside of the workplace, which impact on workplace engagement and flexibility. This is further evidenced in chapter five discussion of the parental support category. As such, this content relates to literature around work-life balance.

In all these categories, an understanding of the context in which someone is functioning, allows for a consideration of the fit between this context and the individuals strengths, goals, interests, values, and behaviours. This reintroduces the role of staying abreast of relevant information, as a meta-strength.

4.6. Summary of Chapter

The aim of the research presented within this chapter was to explore the perspective of those involved in assessing and/or developing the employability of individuals. This original approach to the development of an employability theory was targeted at enhancing the comprehensive nature of employability as viewed from these two perspectives.

This data was utilised to evaluate the relevance and comprehensiveness of the original framework presented within the literature review. These findings identified a total of 46 categories of meaning. Resulting from a comparison between Williams et al.'s (2016) framework, and stage two data, adjustments were made to the framework (see table 4.3). These adjustments were based on observations within the content analysis corpus. Furthermore, four arenas of context were added to the contextual dimension, to reflect

expanding circles of contextual issues ranging from personal context; team context, company context, to labour market context.

Table 4.3. Framework developments

Williams et al. (2016) framework		Stage two modification	
Capital: Anything an individual possesses that can lead to an increased probability of positive economic outcomes, or other personal outcomes relating to the area of work	Human capital: Information and skills that the individual possesses that are perceived as contributing to the production process.	Strengths: Individual properties such as skills, competencies, relationships, and traits that can lead to an increased probability of positive work-related outcomes *Revised name and sub-dimensions*	Job specific: Strengths relevant to the requirements of a specific job.
	Social capital: Social connections that can be utilised to enhance their functionality in the workplace.		Meta-strengths: Strengths underpinning the employability processes within the management arena.
	Cultural capital: Situations which the individual has experiences that are perceived as enhancing the properties of the individual, which lead to functionality in the workplace.		
	Psychological capital: Psychological capacities offering strengths within the job market.		

Table 4.3. continued.

Career Management: An individual's competence in navigating the labour market to achieve their personal career goals through accessing relevant training and employment opportunities.	Self-management: The individual's perception and appraisal of themselves in terms of values, abilities, interests and goals.	Management: An individual's self-appraisal of personal properties and demonstration of how these fit with workplace expectations and demands. *Revised name and definition*	Self-management: The individual's perception and appraisal of themselves in terms of values, abilities, interests and goals possessed, and how they balance these with the workplace expectations and demands. *Revised definition*
	Signal-management: An individual's ability to navigate and engage with selection and recruitment opportunities, which will lead them closer to their desired career goals.		Signal-management: Navigation of the labour market in pursuit of personal career goals through access and engagement with relevant training and employment opportunities. *Revised definition*
Context: The fit between the individual and the employer's current requirements, compared to the fit of other individuals applying for this role.		<i>The contextual factors of workplace related opportunities and demands.</i> *Revised definition and new subdimensions*	Team context: The needs and culture of the team in which someone is (to be) placed.
			Organisational context: The values, nature, policies, and practices of the company.
			Personal context: External demands placed on, and support available, to the individual.
			Labour market context: Labour market occurrences.

To assess the development of these constructs within HE, as well as to explore any overlap between these constructs, it is necessary to form a measurement tool for further investigation. A consideration of data produced within stage two highlighted 14 meta-strengths which may offer consistent value in our understanding of employability (see table 4.4.).

Table 4.4. Summary list of meta-strengths taken forward from management

Dimension	Meta-strengths
Self-Management	Self-awareness; staying abreast of information; strategic thinking; openness.
Signal-management:	Collaboration; communication; confidence; conscientiousness; emotional management; honesty; openness; optimism; persistence; rapport building; self-awareness; staying abreast of relevant information; strategic thinking; taking responsibility.

Chapter 5

Stage 2b – Differential Analysis of Employers and Instructors Understanding of Employability

“Any serious answer to this question [what are the psychological determinants of employability] should begin by considering what employers actually want in their new employees”

(Hogan et al., 2013, p.7)

Content from this chapter has been resubmitted for review following minor amendments. Williams, S., Karyipidou, A., Steele, C., & Dodd, L. (2018). A personal construct approach to employability: Comparing stakeholders’ implicit theories. *In review at the “Education + Training” journal.*

5.1. Introduction

It was previously stated (see section 2.4.) that there is little stakeholder input into employability theory development within the present literature. While the evidence for a skills gap is debated (see section 2.3.2.2.), it is clear that many employers purport dissatisfaction with the capabilities of current graduates (AGR, 2016; Atkins, 1999; Cotton, 1993; Chartered Institute of Personnel and Development (CIPD), 2012; Chartered Management Institute, 2002; Confederation of British Industry 2008, 2016; Davies, 2000; Davis, Buckley, Hogarth, & Shackleton, 2000; Leitch, 2006; Ray et al., 2012; Jagger et al., 2001). Such dissatisfaction denotes a necessity to survey these stakeholders around their understanding of the components which comprise employability. Similarly, the potential presence of a skills gap brings into question, the relevance of an employability framework devised from academic/ researcher's perspectives. Claims by employers that universities are failing to provide employable graduates could result from variations in the personal nature of implicit theories (Hogan et al., 2013). Thus, an exploration of any divergence in the way employers and instructors perceive employability, may explain perceptions that employability is not being developed within HE settings (Williams et al., in review).

Research such as that by Ayoubi et al. (2017) has indicated a contrast between the views of employers and other stakeholders in the employability dialogue. To date, investigations into the common thinking of employers and those within HE has found mixed results. In 2010, Wickramasinghe and Perera's research in Sri Lanka identified that although differing in the order in which they presented the most important skills, both employers and lecturers of computer science students reported the importance of working as a team member; problem solving; self-confidence; and positive attitude towards work. Further to these similarities, employers highlighted the value of learning skills, while lecturers stressed the role of oral communication. This research supports the potential divisions in these stakeholders' complete understandings of employability, and thus their expectations of graduates they seek to recruit.

In comparison, research comparing business academics and Human Resource managers illustrated agreement regarding the value of communication skills but significant variation in the importance placed by these two groups on such aspects as IT, group synergy and demonstrating respect (Conrad & Newberry, 2011). In contrast, Singh et al.'s (2014) investigation of a range of employers found that employers and instructors agreed on the top three generic skills for employability (communication skills, integrity and professional ethics, and teamwork). However, they disagreed on the value of other skills such as critical thinking and problem solving. This research offers contrasting perspectives on what areas agreement exists in.

Variations in these findings could result from several factors. Firstly, the variations in the professional aspects surveyed, ranging in nature, and breadth. To illustrate, skills investigations range from the specific such as Wike and Fagin (2015) consideration of geographic information systems skills, to the general, for instance Palmer, Montaña, and Palou, (2009) comparison of views on generic skills. Current skills list investigations extend from 15 (Wickramasinghe, & Perera, 2010), to 24 skills (Conrad & Newberry, 2011).

Table 5.1. Summary of key papers comparing employers and educators perspective on the value of skills

Reference	Skills explored	sample	Comparisons in valued skills
Chhinzer and Russo (2018)	<ul style="list-style-type: none"> • Written and verbal communication • Interpersonal skills • Problem solving skills • Creative thinking • Leadership skills • Adaptability • The quality and quantity of work the employee completed, • Employee level of interest and initiative, • Demonstrated organisation and planning skills • Dependability • Response to supervision, demonstrated judgment • Employees demonstrated aptitude for learning. (p.109) 	“122 employers (direct supervisors) of Canadian graduate students after completion of a work-term” (p 108)	<p>Original skills were combined into the high order constructs of “professional maturity”, “soft skills & problem solving”, and “continuous learning”.</p> <p>Employers added to the original skills list provided by the HEI – identifying 62 weaknesses and 1strengths of employees. These were collated into the following themes “Generic skills (Time management, Attention to detail, and Team-working); General mental ability, Subject-specific knowledge, Willingness to work”, “Professional attitude and behaviours”, and “Responsiveness to feedback”</p>
Ayoubi et al. (2017)	<p>“Cognitive and creative skills, such as problem-solving techniques and developing and evaluating work plans and projects, developing the ability to express oneself, linking creativity to work and team working techniques.</p> <p>Technical skills relating to work such as:</p> <ul style="list-style-type: none"> • Career choices and how to develop the entrepreneur’s character • The way to improve a private business and to expand investments • To be aware of local and export markets and to be able to use information and data. <p>Personal and creative skills such as:</p> <ul style="list-style-type: none"> • Negotiation skills, • Problem-solving skills, • Public relation skills • General management skills. 	Syrian business degree policy makers and employers	<p>Skills believed that business graduates should acquire:</p> <p>Senior managers:</p> <ul style="list-style-type: none"> • Computer Internet and technology skills • Educational qualifications • Language capacities • Leadership skills within their own directorates • Previous experience in the sector • Professional skills. <p>HE policy makers identified:</p> <ul style="list-style-type: none"> • Ability to practice planning • Analytical thinking • Communication • Entrepreneurial skills • Imaginative thinking • Innovative and critical thinking • Objectivity • Social thinking • Team work.

	<p>Civic and citizenship skills such as:</p> <ul style="list-style-type: none"> • Social responsibility about working in both the private and the public sector • Knowing about one's rights, duties and responsibilities • Diagnosing and analysing social and local economic problems and citizenship rights; • Learning about responsibilities towards the community and society. <p>Functional skills such as:</p> <ul style="list-style-type: none"> • The ability to handle legal procedures • Establishing and releasing businesses and private investments • Knowledge about local and international investment rules" (p.66) 		
El Mansour and Dean (2016)	<ul style="list-style-type: none"> • Knowing how to learn • Communication skills • Creativity • Problem solving • Interpersonal skills • Leadership • Presentation skills • Use of technology • Ability to function as part of a team • Strategic planning • Managing customers • Change management • Communication in a foreign language • Digital competency • Cultural awareness and expression • Initiative and enterprise • Planning and organising • Self-management 	USA and Morocco and European Employers and Educators in Human Resource Development	A significant relationship was found between employers and educators' ratings of the skills, except for the use of technology and communication skills
Wikle and Fagin (2015)	<p>Soft skills</p> <ul style="list-style-type: none"> • Critical thinking • Verbal/presentation • Writing • Time management/multitasking • Flexibility/adaptability • Creativity • Ability to work 	USA geographic information systems employers and educators	<p>Employers and educators' top hard skills</p> <ul style="list-style-type: none"> • Data editing • GIS analysis • Ability to create and edit tables/charts/reports • Working with projections and georeferencing • Cartography and graphic design.

	<p>independently</p> <ul style="list-style-type: none"> • Problem solving/trouble shooting • Working in a team environment <p>Hard Skills</p> <ul style="list-style-type: none"> • Skill involving data queries (SQL knowledge) • Cartography and graphic design • GPS data collection • Programming/scripting • Working with aerial photography or imagery • Legal and ethical issues surrounding GIS • Working with projections and georeferencing • Ability to create and edit tables, charts and reports • Digitizing, scanning and data entry • Database management project management or leadership • Understanding spatial algorithms • Data editing (i.e. joining or relating data) • GIS model building • Maintaining computers, servers and software • GIS analysis 		<p>Employers and educators' top soft skills</p> <ul style="list-style-type: none"> • Problem solving/trouble shooting; • Critical thinking • Flexibility/adaptability • Ability to work independently • Working in a team environment • Time management and multi-tasking. <p>Only minor variations in ordering were present in these top skills, except for "ability to work independently" ranked joint first for educators, but joint fifth for employers.</p>
Singh et al. (2014)	<ul style="list-style-type: none"> • Communication skills • Integrity & professional ethics • Teamwork • Leadership • Entrepreneurship • Lifelong Learning & Information Management • Problem solving and critical thinking 	employers and instructors in the Klang Valley, Malaysia	<p>Rankings for the importance of skills were identical for all but:</p> <ul style="list-style-type: none"> • Lifelong Learning & Information Management (ranked higher by employers) • Problem solving and critical thinking (ranked higher by educators)
Conrad and Newberry (2011)	<p>"Organizational Communication Skills</p> <ul style="list-style-type: none"> • Initiating open discussion • Resolving conflict • Creating information networks • Teaching important skills • Using information technology • Providing performance 	45 Business leaders and 45 business professors	<p>Significant differences were identified in importance placed on:</p> <ul style="list-style-type: none"> • Using IT • Writing business correspondence • Creating group synergy • Demonstrating respect (more valued by businesses in all cases)

	<p>feedback</p> <ul style="list-style-type: none"> • Negotiating • Writing business correspondence • Making convincing presentations. <p>Leadership Communication Skills</p> <ul style="list-style-type: none"> • Arousing enthusiasm • Being a change catalyst • Creating group synergy • Building team bonds • Expressing encouragement • Providing motivation • Being persuasive • Building optimism. <p>Interpersonal Communication Skills</p> <ul style="list-style-type: none"> • Active listening • Building rapport • Demonstrating emotion self-control • Building trust • Relating to people of diverse backgrounds • Demonstrating respect • Building relationships” (pp11-12) 		
Wickramasinghe and Perera (2010)	<p>Basic skills</p> <ul style="list-style-type: none"> • Oral communication • Reading • basic arithmetic • writing <p>Higher-order thinking skills</p> <ul style="list-style-type: none"> • problem solving • learning skills • creative and innovative thinking • decision making <p>Affective skills and traits</p> <ul style="list-style-type: none"> • positive attitude towards work • punctuality • self confidence • working as a team member • responsibility/dependability • ability to work without supervision • adaptability/flexibility 	26 graduate employers and 22 university lecturers.	<p>Significant differences in the importance of the skills were identified for learning skills, with employers rating these as more important.</p> <p>Similar views were shared for self-confidence, problem solving, positive attitude towards work, and working as a team member.</p> <p>Oral communication was only identified as important by lecturers.</p>

Variations could also result from the frequent focus on specific subject areas or vocational pursuits by such studies, i.e. El Mansour and Dean (2016) - Human Resource Development (HRD); Wikle, and Fagin (2015) – Geographic Information System professionals, Wickramasinghe and Perera (2010) – Computer science professions. Despite these subject specific investigations recent reports from graduate employers suggest only 20% of jobs are concerned with the subject area studied (AGR, 2016). This situation raises questions around the value of such restricted employer assessment, in addition to existing concerns around the potentially evolving requirements of specific vocational contexts.

Furthermore, it is unclear to what extent this geographically diverse research spanning Syria (Ayoubi et al., 2017); USA (Conrad & Newberry, 2011; El Mansour & Dean, 2016); Malaysia (Singh et al., 2014); Sri Lanka (Wickramasinghe and Perera, 2010), and Spain (Palmer, Montaña, & Palou, 2009) reflects trends within UK thinking.

A final concern directed at present research is the constrained nature of this data collection. Investigations employing predetermined employability factors, selected by the researchers themselves, does not allow for a consideration of the way in which these stakeholders' perspective of employability might deviate from that of those in education. Such discrepancies are indicated in investigations by Chhinzer and Russo (2018), who afforded employers an opportunity to expand on evaluation criteria for work placement students beyond the prescribed university-based template.

Results indicated additional content was utilised in those employers' assessments of postgraduate students, which was not encapsulated within the factors reviewed in the predetermined scales. The findings corroborate the potential benefit supplied by a less hampered investigation of employability understandings, allowing for a more comprehensive assessment of discrepancies between these two stakeholder's viewpoints.

5.2. Study Objectives

The aim of the present study is to allow a less restricted understanding of any consensus or divergence in employability thinking across these two groups. Within the present chapter, several potentially significant variations between employers and instructors' understandings of employability, will be uncovered. This chapter first seeks to outline the differential analysis performed with data elicited from stage two. Following this, information relating to these stakeholder comparisons will be presented, and discussion of those categories for which the starkest variations exist, will be outlined. As such, this analysis informs the continued relevance of any literature-based researcher/academic understanding of employability for the workplace.

5.3. Method

An initial content analysis was performed with data derived from interviews with 22 employers. Subsequent to this, additional data from 14 instructors supplemented this analysis (see section 4.3. for full procedure). Following a completion of the content analysis process, the frequency of constructs reflecting each of the categories was compiled for employers and instructors (see table 5.2.). A Chi-square analysis was performed to identify any statistically significant variations in these frequencies. This process resulted in the identification of six differences significant at the level of .05 and below. A further seven categories were exclusively presented within one of the samples (see section 5.4.4.).

Extending this statistical analysis, a qualitative analysis was performed, mirroring that performed in the initial formulation of category names, to identify any qualitative variations in how the categories were applied within the two samples. In three instances (openness, adaptive behaviour, and experience and knowledge), it was deemed necessary to provide alternative category definitions to reflect these variations. Variations in category definitions are presented within table 5.3.

5.4. Results

In exploring differences across the employer and HE samples, five categories (interest in company; rapport building, collaboration, proactivity, vision) presented a significantly different construct frequency count across the two subsamples. A further eight categories (longevity, shared company values, honesty, flexible learner, distinctiveness, optimism, recruitment risk, parental support) appeared solely within one subsamples constructs (see table 5.2. for frequency count comparisons).

In addition to these frequency variations, distinction in how the category was presented within these constructs was present for a further three categories (openness, relevance to the job, adaptive behaviour). See table 5.3. for a breakdown of category definitions reflecting the variation in content across the two groups. These categories will now be discussed.

Figure 5.1: Thematic map illustrating location of variations in experiences reported by stakeholder groups



Key: yellow = quantitatively significant differences in proportional representation; green = perceived qualitative data variations linked to this category by the two samples.

Table 5.2. Definitions and comparisons of frequencies for two subsamples

Superordinate categories	Subordinate categories	Definition	Employer (n= 22)		Instructors (n=14)		Significance
			Frequency (%)	Participants (%)	Frequency (%)	Participants	
Commitment - directed, pledged or bound to engage with the role.	Hard worker	Engagement with work rather than avoiding aspects or focusing attention elsewhere.	36 (7.42)	13 (59)	14 (6.03)	8 (57)	$\chi^2= 2.543, p = .11$
	Passion	Show a passion or interest in the area.	16 (3.29)	9 (41)	9 (3.88)	7 (50)	$\chi^2=.102, p = .75$
	Conscientiousness	A desire to perform at a high standard. Holds a consideration for quality in their output.	13 (2.68)	7 (32)	2 (.86)	2 (14)	$\chi^2= 2.624, p = .11$
	Interest in company	Possesses an interest in the company leading to commitment to a specific job.	14 (2.89)	9 (41)	1 (0.43)	1 (7)	$\chi^2= 4.705, p = .03$
	Longevity	Committed to the role or company for the long term, rather than a temporary destination.	8 (1.65)	6 (27)	-	-	Na
	Persistence	Committed to the completion of work activities.	5 (1.03)	4 (18)	2 (.86)	2 (14)	$\chi^2= .062, p = .80$
	Shared company values	Considers the goals and ethos of the company above their own needs or expectations, or represents a match between their values and that of the company.	7 (1.44)	7 (32)	-	-	Na
	Total		99 (2.04)	19 (86)	30 (12.93)	11 (79)	$\chi^2= 1.699, p = .19$

Table 5.2. continued

Superordinate categories	Subordinate categories	Definition	Employer		Instructors		Significance
			Frequency (%)	Participants (%)	Frequency (%)	Participants (%)	
Interpersonal competence - the capability to interact with others appropriately.	Rapport building	Possesses a pleasant appearance and manner, allowing for a relationship between them and other individuals or groups. Where those concerned understand each other's feelings or ideas and communicate well.	47 (9.70)	19 (91)	11 (4.74)	8 (57)	$\chi^2 = 5.167$, p = .02
	Collaboration	Joins in with others, has a positive influence on the pursuit of a common purpose, providing an open and informed whole.	36 (7.42)	14 (64)	8 (3.45)	5 (36)	$\chi^2 = 4.370$, p = .04
	Honesty	Truthful in their communications and actions.	11 (2.27)	13 (59)	-	-	na
	Total		94 (19.38)	22 (100)	19 (8.19)	9 (64)	$\chi^2 = 15.240$, p < .0001
Self-development - attitude towards personal growth characterised by a propensity to learn which accurately reflects one's current situation	Openness	Openness to consider opportunities and alternative values, skills and behaviours.	26 (5.36)	17 (77)	25 (10.78)	12 (86)	$\chi^2 = 2.152$, p = .14
	Self-awareness	Aware of the reality of their own skills, knowledge, character, motives and desires, and utilises an understanding of their strengths and weaknesses in these to select appropriate roles, and function optimally within their limits.	12 (2.47)	9 (41)	11 (4.74)	6 (43)	$\chi^2 = 2.287$, p = .13
	Professional development	Displays an engagement with professional development opportunities.	13 (2.68)	9 (41)	8 (3.45)	7 (50)	$\chi^2 = .247$, p = .62
	Total		51 (10.51)	18 (82)	44 (18.97)	14 (100)	$\chi^2 = 2.137$, p = .14

Table 5.2. continued

Superordinate categories	Subordinate categories	Definition	Employer		Instructors		Significance
			Frequency (%)	Participants (%)	Frequency (%)	Participants (%)	
Experience and Knowledge - knowledge and experience relevance to the attainment of and/or functioning in the role.	Relevance to the job	Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, which fill an existing need or add additional value.	26 (5.36)	13 (59)	8 (3.45)	5 (36)	$\chi^2 = 3.421$, $p = .06$
	Signalling know-how	Acts in a way that suggests an understanding of expectations within the recruitment process and the appropriate communication of signals.	17 (3.51)	10 (45)	12 (5.17)	8 (57)	$\chi^2 = .069$, $p = .79$
	Evidence- based practice	Has an ability to apply knowledge to relevant settings.	8 (1.65)	6 (27)	4 (1.72)	4 (28)	$\chi^2 = .001$, $p = .98$
	Business awareness	Is aware of the context in which they find themselves applying for the role.	4 (.82)	4 (18)	6 (2.59)	5 (36)	$\chi^2 = 3.297$, $p = .07$
	General ability level	Possesses the basic cognitive ability expected of the role. Not specific to particular skills but rather a general level of intelligence.	3 (.62)	3 (14)	3 (1.29)	3 (21)	$\chi^2 = .784$, $p = .38$
	Total		58 (11.96)	18 (82)	33 (14.22)	13 (93)	$\chi^2 = .286$, $p = .59$

Table 5.2. continued

Superordinate categories	Subordinate categories	Definition	Employer		Instructors		Significance
			Frequency (%)	Participants (%)	Frequency (%)	Participants (%)	
Taking responsibility -		A level of ownership which induces a feeling of accountability for something. Can be left to work on tasks without external monitoring.	30 (6.19)	14 (64)	10 (4.31)	7 (50)	$\chi^2 = 3.296$, $p = .07$
	Proactivity	A tendency towards action, to creating or controlling a situation for themselves, rather than requiring other people or circumstances to direct their behaviour.	10 (2.06)	8 (41)	15 (6.47)	11 (79)	$\chi^2 = 4.634$, $p = .03$
	Total		40 (8.25)	16 (73)	25 (10.78)	12 (86)	$\chi^2 = .008$, $p = .93$
Strategic thinking- can manage time effectively, prioritise tasks to achieve their goals, has a vision and effective planning skills.	Vision	The ability to think about or plan the future with imagination or wisdom.	4 (.83)	4 (18)	15 (6.47)	9 (64)	$\chi^2 = 12.745$, $p < .0004$
	Prioritising	Perceptions around the appropriate allocation of mental and other resources to a task, when considered in relation to the wider responsibilities and duties within that role.	7 (1.44)	4 (18)	3 (1.29)	3 (21)	$\chi^2 = .340$, $p = .56$
	Time management	Perceptions around the appropriate allocation of time to a task, when considered in relation to the wider responsibilities and duties within that role.	7 (1.44)	5 (27)	1 (.43)	1 (7)	$\chi^2 = 2.361$, $p = .12$
	Planning	Considering a task or activity alongside others and arrange in a manner that its goal can be achieved.	2 (.41)	1 (5)	4 (1.72)	4 (28)	$\chi^2 = 3.076$, $p = .08$
	Total		20 (4.12)	6 (27)	23 (9.91)	10 (71)	$\chi^2 = 3.794$, $p = .05$

Table 5.2. continued

Superordinate categories	Subordinate categories	Definition	Employer		Instructors		Significance
			Frequency (%)	Participants (%)	Frequency (%)	Participants (%)	
Confidence - a belief in one's general abilities and in relation to specific behaviours, which leads to confident behaviour.	Confident behaviour	Display a realistic/accurate level of confidence in their role related behaviours.	14 (2.89)	10 (45)	11 (4.74)	9 (64)	$\chi^2 = .263$, $p = .61$
	Self Confidence	A realistic belief in themselves and their abilities.	6 (1.24)	6 (27)	8 (3.45)	5 (36)	$\chi^2 = 1.937$, $p = .16$
	Total		20 (4.12)	12 (55)	19 (8.19)	10 (71)	$\chi^2 = 1.548$, $p = .21$
Emotional management		The ability to control one's emotions to present a calm, consistent, rational, relaxed response within the workplace, which reflects the organisations expectations of them.	22 (4.54)	11 (50)	6 (2.59)	4 (28)	$\chi^2 = 3.634$, $p = .06$
Professionalism - adhering to organisational regulations, goals, and expectations regarding work presentation and behaviour.	Presentation	Appropriate communication style and appearance that communicates an engagement with the role and values of the role.	9 (1.89)	7 (32)	7 (3.02)	7 (50)	$\chi^2 = .836$, $p = .36$
	Organisational compliance	Adhering to systems and codes of practice expected of employees.	8 (1.65)	6 (27)	2 (.86)	2 (14)	$\chi^2 = .764$, $p = .38$
	Total		17 (4.51)	11 (50)	9 (3.88)	8 (57)	$\chi^2 = .210$, $p = .65$

Table 5.2. *continued*

Superordinate categories	Subordinate categories	Definition	Employer		Instructors		Significance
			Frequency (%)	Participants (%)	Frequency (%)	Participants (%)	
Adaptive - has adapted their behaviours to meet external demand.	Adaptive behaviours	Engage in behaviours evident of an adaptive nature.	6 (1.24)	4 (18)	6 (2.59)	6 (21)	$\chi^2 = 1.854, p = .17$
	Relevant know-how	The relevant skills to extend above and beyond a specific job description.	5 (1.03)	4 (18)	3 (1.29)	3 (21)	$\chi^2 = .073, p = .79$
	Flexible learner	Can learn new skills or information quickly.	4 (.83)	3 (14)	-	-	Na
	Total		15 (3.09)	9 (41)	9 (3.88)	7 (50)	$\chi^2 = .023, p = .88$
Preparation for interview	An illustration that they have researched the role for which they are applying		8 (1.65)	7 (32)	1 (.43)	1 (7)	$\chi^2 = 2.942, p = .09$
Distinctiveness	Communicates a "wow factor" within the pool of candidates.		6 (1.24)	5 (27)	-	-	na
Optimism	Positive about the future.		6 (1.24)	4 (18)	-	-	na
Creativity	The propensity to come up with novel ideas or solutions.		3 (.62)	3 (14)	2 (.86)	2 (14)	$\chi^2 = .002, p = .96$
Recruitment risk	The degree to which the outcome of recruiting the individual is known.		3 (.62)	3 (14)	-	-	na
Parental support	The role of parents within the actions of individuals.		-	-	2 (.86)	2 (14)	na
Subtotal			462 (95.26)	22	222 (94.69)	14	
Miscellaneous			23 (4.74)	10 (45)	10 (4.31)	7 (50)	$\chi^2 = .1049, p = .31$
Total			485	22	232	14	

5.4.1. Statistically significant proportional representation.

Presented below are those categories (“interest in company”; “rapport building”, “collaboration”, “proactivity”, and “vision”) which reflected a statistically significant difference between subsamples frequency counts. This situation may suggest divergence in their fit with employability theories held by employers and HE instructors. These categories are presented in order of the category with the highest frequency count across the whole dataset.

5.4.1.1. Commitment: interest in company - need a job.

Constructs falling under “interest in the company” reflected a commitment category almost exclusively presented within the employer sample. Constructs labelled as representing interest in the company illustrated that it was the company itself which led to an interest in engaging with the role. This subordinate category was defined as “*an interest in the company leading to a commitment to a specific job*”. These constructs identified an interest in the company guiding their application “no interest in the company – know why that job or sector’ (11.8). This category varied from “passion” constructs, as it was the company that was explicitly identified as offering an incentive to the employee. This was compared to perceptions that the company did not factor into individual’s views of the suitability of the role “interested in *that* job and company – don’t mind what job have” (19.30). Those not interested in that specific company were not expected to show a commitment to high performance. Less effort was identified in their application process, resulting in employers disregarding them as someone who did not stand out.

5.4.2. Interpersonal competence.

Constructs within these categories referred to competence to interact with others appropriately. The superordinate category was made up of three subordinate categories; “rapport building vs. egocentric”; “collaborative vs. lone worker”; and “honesty”, within all interpersonal competencies’ categories, a significant difference in the

proportion of constructs being represented in these categories, is shown. Instructors in each case report substantially less interpersonal constructs. Nevertheless, differences in the quality of these constructs were limited.

5.4.3. Interpersonal competence: rapport building vs. egocentric.

Rapport building vs. egocentric, was defined as *“possesses a pleasant appearance and manner, allowing for a relationship between them and other individuals or groups. Where those concerned understand each other’s feelings or ideas and communicate well”*.

Rapport building was the largest subordinate category within the data and was significantly better presented within the employers sample- who reported four times more rapport building constructs.

Originally this content was divided into more discrete categories representing named issues of empathy “caring – lack of empathy and understanding of others” (14.11) (only present within employers sampled), compassion “compassionate – judgmental” (10.32), rapport building “can build rapport – concerned with only themselves” (H14.1), and extroversion- introversion “inclusive of others – shy, introvert” (H4.8). However, all these categories, and surrounding constructs which did not fit neatly into these narrower groupings, for example “can’t express themselves clearly – personable” (H6.11), appeared to reflect a goal of interaction.

Furthermore, some of these narrower definitions did not adequately distinguish the variation presented by the opposite pole, which crossed categories for example “extravert – not confident to speak out” (20.41) while still related to extraversion- introversion, linked this to the value of confidence, as opposed to “can get interactions with people – introvert” (H9.14) which clearly links this lack of extraversion to interaction. Thus, the value of extraversion - introversion was linked to different benefits/ employability related behaviours. Although personable was also considered as a possible category definition given the prevalence of this broader term within constructs, this concept overlooks the relevance of this pleasant nature for the purpose of building relationships.

Within these constructs, an egocentric view was opposed to a personable nature “selfish – willing to be personable” (21.12), impacting those around them “less personal impact – being able to build relationships” (5.6), and leading to others positive feelings “things are about them – makes others feel good and shine” (10.15). Such a demeanour also impacted perceptions of the individual’s availability “warm and inviting – aloof” (12.4).

Variation in this component was linked to communication skills, “can’t express themselves clearly – personable” (H6.11), as well as social skills “no social skills – can engage well with people” (H12.19), and an extroverted disposition “introvert – can get interactions with people” (H9.14), “timid – can build a relationship with people” (14.21).

5.4.3.1. Interpersonal competence: collaboration vs. lone worker.

The second subcategory related to interpersonal competence was collaboration – lone worker, defined as “*joins in with others, has a positive influence on the pursuit of a common purpose, providing an open and informed whole*”. Again, employers had a significantly higher frequency count for this category of construct, reporting more than four times the number of collaboration constructs compared to the HE sample. The constructs compiling this category were identified as distinct from those of rapport building, as they moved beyond building relationships or making interactions, to a consideration of how they influenced team behaviour.

Other constructs in this category specifically focused on working relationships which would imply a long-standing interaction which required cooperative working practices.

This category compared those who could and could not, or who would not, work in a team “team player – solo operator” (H9.15) “engaged with staff – not working as a cohesive team” (20.33). Mirroring the rapport building category, the role of social skills “a loner/hard to mix – good in a team” (8.15) was linked with collaboration, as were personality traits “introvert – works well with others” (H4.8), and communication “communicate with those involved – not good at forming working relationships” (H6.10).

This category of constructs incorporated the importance of compromise, “achieving only your goals – willing to compromise” (3.8), prioritising a team’s needs or approaches over one’s own preferences and desires “out for themselves – a team player” (3.1), openness to others views “know better than everyone else – will get views and discuss with people” (18.32), and avoidance of conflict “good team player – clash with others” (20.26).

5.4.3.2. Taking responsibility: proactivity-no initiative.

Also present within both samples, but in this case exhibiting a significantly higher frequency count for the *instructor* sample, was proactivity. Constructs in this category were defined as showing “*a tendency towards action, to creating or controlling a situation for themselves, rather than requiring other people or circumstances to direct their behaviour*”. Extending beyond “taking responsibility” for tasks it was viewed that an individual could take responsibility for tasks, within their set role, however, they need not be proactive to do this. In contrast, constructs within this category attributed value to those who did take this extra initiative.

The terms “proactivity” and “initiative” were frequently cited within these constructs. As stated, proactivity illustrated an extension of taking responsibility of current activities and a focus on moving things forward “take Initiative – only doing things when asked” (15.10). Proactivity was contrasted with passivity “passive – go getter” (H4.7), “reactive-proactive” (H13.10), even avoidance “proactive – avoid tough bits” (22.14).

5.4.3.1. Strategic thinking: vision.

A final significant difference was identified between the frequency counts for the vision constructs. Here significantly more constructs were presented by HE instructors, compared to employers. A subcategory of strategic thinking, “Vision” constructs were defined as evidencing “*the ability to think about the future with imagination or wisdom*”. This category focused on the future “thinking of the future – no forward

planning” (18.40) “future-focused – focus on self and pleasures” (H8.9). The contrast to this was giving no consideration to the future “doesn’t know what to do – focused on what want to achieve” (H8.10), “exploring options left till last minute – thought about what they want to do” (H5.12).

5.4.4. Categories presented within a single subsample.

In addition to those categories which were present within both subsamples, but displaying a significantly higher presentation within one subsample, there were also eight categories (“longevity”, “shared company values”, “honesty”, “flexible learner”, “distinctiveness”, “optimism”, “recruitment risk”, “parental support”), which were exclusive to one subsample. The “parental support” category was the only unique category within the instructor sample. These categories are presented in frequency count order, “longevity” reflects the largest number of constructs, and “recruitment risk”, the smallest.

5.4.4.1. Commitment: longevity vs. stop gap.

Longevity vs. stop gap represented a behavioural outcome resulting from commitment. This category was defined as “*committed to the role or company for the long term, rather than a temporary destination*”. These constructs referred to consistency “consistency of service – bouncing around” (11.11) in which the value of previous experience in indicating future intentions to commit to a company is implied. Longevity was compared to seeing a role as a temporary solution to an employees need for money, or experience. In other cases, individuals were described as embodying a real interest in the role compared to a desire to explore the role as an option “choosing to stay within the field – a means of testing the role out” (2.12).

Those potential employees perceived as over-skilled were interpreted as a potential flight risk, perceived as needing more stimulation than the job could offer “reliability – over skilled/will leave soon” (20.5). A distinction was made between more confidence around the employee being recruited and concern that employment would be short lived “you know what you get – will come and go” (13.21). This would raise concerns for

individuals perhaps looking to identify a role that would provide less cognitive or emotional burden, or who were eager for a career change.

5.4.4.2. Commitment: shared company values vs. poor fit.

This second commitment category exclusive to the employer sample was defined as “*considers the goals and ethos of the company above their own personal needs or expectations, or represents a match between their values and that of the company*”. This category relates to a person-organisation match at the level of values. Constructs in this category referred to the organisations ethos “fit into the ethos of the group – exaggerates” (7.5), or values “display correct value set – not the right fit” (22.12), describing a fit “Display correct value set – not the right fit” (22.12), compared to a detrimental impact “may ruffle people’s feathers – fit in with organisation” (14.14).

5.4.4.3. Interpersonal competence: honesty.

Honesty constructs solely resided in the employer sample: it was defined as “*truthful in their communications and actions*”. While connections with the “openness” category were considered, as relevant constructs were linked to being open “open – dishonest” (16.26), the opposite pole of dishonest, as opposed to synonyms of closed minded, suggest a distinction from openness. Likewise, these constructs were not comparable with “taking responsibility” which while leading to trust in the individual, was focused on individual motivation and ability to proceed with tasks, as opposed to *how* they proceeded with these tasks.

“Honesty” constructs referred to the approach taken to mistakes “hide mistakes – honest about mistakes” (21.5). Other constructs referred to how one presented themselves ‘[they] are really the person they put forward – over-exaggerate’ (19.36), thus reflected the role of honesty in recruitment and day to day functioning within the workplace.

5.4.4.4. Adaptive: flexible learner.

This category of “flexible learner” was defined as “*can learn new skills or information quickly*”. Here the context of discussions lies in adapting to long term requirements/ permanent adjustments to work. Content focused on the speed “quicker on the up take – have to ask” (12.11) and ease “struggles to learn new things – can’t adapt” (13.2) with which new skills and knowledge could be acquired. As such this category was primarily focused on the experience of gaining new employees requiring job specific training. The cost to others time was noted for those unable to pick content up quickly “don’t need telling six times – can learn quickly” (21.2). This content was not discussed by HE instructors.

5.4.4.5. Distinctiveness.

Distinctiveness was defined as “*Communicates a “wow factor” within the pool of candidates*”. This content referred to an undefinable quality “personality”, “flare”, “vibe” that “something” that made a candidate stand out from others “has got something others haven’t – has not done enough to set themselves apart” (11.5). This category involved the consideration of the individual within the total pool of candidates and illustrated the variation in what would be classed as standing out “first in a good field – best out of a poor bunch” (19.4). The expectation that the candidate utilises what they have was key here “uses their personality - nothing about them” (1.10).

5.4.4.6. Optimism.

An additional category of constructs which reflected a contrast between employers and instructor’s employability understanding was “optimism”. Constructs within this category reflected being “*hopeful about the future*”. This contrasts with “openness” constructs which focused on a consideration of a variety of opportunities. There is a clear positive outlook on these opportunities within this category “positive – doesn’t have right attitude” (10.2). Constructs do not always relate to opportunities, but rather responses to events. Nevertheless, the relationship between this category and that of openness is illustrated within the following construct “will engage and be open-minded

– cynical attitude” (17.10) which while relating to openness has an equally strong connection to this category and was placed within this given the lack of an opposing pole reflecting a closing down of options specifically.

Constructs aligned with this definition referred to a “problem solving mentality – I can’t do anything about that” (22.7), which can also link optimism to proactivity or general taking responsibility, which also discusses issues of problem solving or addressing problems. Optimism constructs also address taking risks “I’ll give it a try” – it’s not going to work” (18.10) “give self a chance – prepare for disappointment” (18.24), these constructs may also reflect aspects of confidence, reflecting the potential impact of optimism on confidence.

5.4.4.7. Recruitment risk.

A final category presented by employers was a “recruitment risk”. In this category constructs reflected the definition “*The degree to which the outcome of recruiting the individual is known*”. As such no instructors alluded to these constructs. Constructs referred to proof of the quality of the applicant “proof within the pudding – being a disappointment” (15.13), indicating the value placed on previous experience within a company or with an employer “seen them work – take a chance” (16.24). This category reinforces constructs within the “honesty” category which were understood in part as a symptom of the signalling process within recruitment and the need to make accurate employment decisions.

Here the emphasis is not on honesty, but rather confidence on the side of the employer in the assessment of the applicant’s honesty, and the associated accuracy of the information presented. This category illustrates the role of SC within signal-management, as existing relationships with the employer, or those close to them, is seen as a less risky recruitment than someone with whom they have no past relationship.

5.4.4.8. Parental support.

The only category of constructs to appear exclusively within the HE sample was “parental support”. It was a small but distinct set of constructs relating to the definition

“the role of parents within the actions of individuals”. They compared supportive encouraging contexts with that of parents which may limit the opportunities of their children “family support – parents a hindrance” (H4.6) “supportive parents – helicopter parents” (H11.15) thus these constructs reflect a parent’s role in encouraging independence. Identified solely by instructors, this sample may represent frequent contact with younger individuals, and the parents who often fund the student’s education.

5.4.5. Categories with divergent quality of representations.

A consideration of constructs presented by employers and HE instructors found that while the definitions outlined in table 5.2. equally represented both samples communications, more discrete definitions of these construct categories could be achieved for three categories, when focusing on the representation of these categories by each sub sample in turn (see table 5.3. below for a summary).

Table 5.3. Variations in subsamples category definitions

Common constructs with distinct representation	Category definitions	
	Employers	HE Instructors
Self-development> Openness:	Open to fitting within the current, and changing needs of the organisation, through changing practices, and considering alternative approaches and viewpoints.	Open to consider a range of career and learning opportunities. Open to alternative thinking and environments.
Experience and Knowledge > Relevance to the job:	Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, which fill an existing need or add additional value.	Possess a breadth of experience that can utilise to evidence required skills.
Adaptive> Adaptive behaviours:	Engage in behaviours evident of an adaptive approach to the content and hours of the role.	Willingness or ability to adapt to various geographical locations for work opportunities.

5.4.5.1. Self-development: openness.

Constructs within the “openness” category were defined as displaying “*openness to consider opportunities and alternative values, skills, and behaviours*”. Within this category, a personal preference for trying new things “likes the stimulation of new stuff – likes to stick to what know” (12.24), and potentially an enjoyment in such stimulation was included. As with the “passion” category outlined in chapter five, this group of constructs again links personal interests to employability. However, in this case the interest lies in development in general rather than engagement in specific types of work. An openness to learn, “willing to learn – “I know everything” (18.3) ties this category to that of “self-awareness”.

In addition to being open to opportunities, individuals described as reflecting a high level of employability were more engaged with feedback from others “willingness to take advice on board – keeping going at a lost cause” (17.8), compared to working to rule “receptive – dogmatic” (18.34). Such constructs support the role of openness in effective collaboration.

Considering “openness” constructs, while instructors had a strong focus on considering engagement with a range of opportunities, employer’s responses were more focused on openness to adapt to the opportunity they were offering, as well as to the evolving requirements of that position. As such a consideration of these samples content in isolation presents two alternative definitions of openness

Firstly, instructor’s “openness” constructs reflected openness “*to consider a range of career and learning opportunities. To alternative thinking and environments*”. Instructors were focused on the application process and widening the parameters of job searches “more concentrated in applications – applied for a variety of jobs” (H12.23). While this behaviour would need to illustrate the added value of seeking employment within a given company (see section 6.4.2.1.) for employers to view this as reflecting high levels of employability, an increased reference within HE sample is given to keeping career options open and engaging in opportunities.

An openness to opportunities outside of the degree, and outside of their local area, was pressed upon by participants “will go anywhere for opportunities – want to stay local” (H10.10). Related to this point was the vital role of opportunity awareness

“opportunities used to their advantage – don’t make or find their own opportunities” (H12.9). Thus, content included an openness to identify, and pursue opportunities beyond what was easily accessible within their current location/ circumstances.

Openness content provided by employers can be more accurately defined as “*open to fitting within the current and changing needs of the organisation, through changing practices, and considering alternative approaches and viewpoints*”. For employers, it was important that individuals saw the pivotal role of being open to change, and as such individuals understanding of this expectation was viewed as relevant to an assessment of their employability “understand that they have to jump through hoops – won’t modify self to fit with mould of organisation” (20.43).

The value of openness was linked to the management of individuals, for example, to move individuals to different locations or sectors, and different teams “willingness to change skills or sectors – work to rule” (15.7) “can buddy up with someone new – that’s not my job” (20.2).

Employers wanted to see individuals express openness to engage in activities beyond their job description. As such, a link between openness and hardworking constructs can be made as while hardworking was linked to engaging in tasks beyond the role, if an individual was not open to these additional tasks, they may continue to perform well within the role but not display a level of hard work perceived of someone who went beyond this description.

5.4.5.1. Experience and knowledge: relevance to the job.

This category was defined as “*job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, which fill an existing need or add additional value*”. As such, it is expected that this aspect of employability will vary from job to job. Nevertheless, this definition exposes the consistent importance of fitting the requirements of the job. Such an action illustrates the need for awareness on the part of the individual, or individuals supporting them, of the importance of such experience or knowledge, as well as a consideration of how this would fit with the job specifications. These requirements for possessing a breadth of knowledge to be well informed, and a self-awareness level that allows for

comparisons between this role and the individuals possessions, mirrors that seen within the “reparation for interview” category. In contrast, this category refers to the possessions, or evidence indicating possessions, necessary to function in the role, beyond the application process.

Content placed under this category referred to the possession of strengths relevant to the job specification “nailed the job spec – couldn’t brag it” (14.1) and their predicted functioning within the role as a result of signals provided through experience “can demonstrate leadership – not involved in extracurricular activities” (1.3), and qualifications “hasn’t studied something related – holds specific technical knowledge” (4.8). Accordingly, the indicators of internal possessions are included within this category. This inclusion reflects the interlocking of references to possession/ability/knowledge and indicators of this. It was not therefore possible to distinguish these for the purposes of reliable categorisation. Those constructs which made specific reference to signalling processes, are included in the “signalling know-how” category

Links have been made between experience and development of specific skills within persistence “have had life experiences – give up quickly” (8.9) and self-awareness “self-awareness – less experience relating to others” (H1.1) In contrast this category does not identify specific skills or knowledge. Instead, it stresses the possession of a variety/breadth of abilities “novice – variety of experience” (21.3) relevant to the role “has a skill/knowledge valuable to the role/company – doesn’t meet job description” (14.19) “had experience that was highly relevant/useful – not relevant to what role involves” (15.6). A single but potentially important construct also alluded to the value of experience for external links “offer external links – no experience elsewhere” (19.44), although this was offered late in the interview perhaps indicating the level of interest given to this aspect of employability.

Having experience in the area for which they were applying was considered important “experience in the field – new starter” (10.18), as was possession of real-world experience “marrying personal experience with the job – theoretical knowledge” (2.15). This was linked to the burden on resources to train them “fit level of experience team needs – there are not enough resources to train them” (19.20), as well as confirmation

that they would suit such a role “used to working in that environment – doesn’t fit in that environment” (19.5).

Consequently, the relevance to the job category illustrates the importance of a breadth of relevant experience as a means of illustrating possessions linked to job role suitability.

5.4.5.2. Adaptive: adaptive behaviour.

Adaptive behaviour constructs reflected the definition “*engages in behaviours evident of an adaptive nature*”. Thus, constructs refer to behaviours that need to occur, rather than an adaptive stance on new experiences or alternative viewpoints. This category referred to having the capacity to adapt to different audiences “can communicate with different types – incapable of adapting message for different people” (17.5).

The term flexible, although referenced here was not employed as a category label as flexible was suggested as a more short-term arrangement, while discussions of most constructs in this category alluded to more permanent changes. Interestingly, there also appears to be a merging of willingness and capacity within these constructs “willing to move around – have commitments” (H3.11) as if external commitments represent personal choices to put work after external commitments, rather than any legitimacy in expectations that working life could be made to accommodate external circumstances. This is likely particularly relevant of discussions of parents returning to work, or older populations who are more likely to have caring responsibilities for parents, or restrictive health issues.

Comparisons of employers and instructors adaptive behaviour constructs show a preoccupation with adapting to different locations by instructors “prepared to move – family/friend orientated” (H5.13), and different hours for employers “limits to working hours – flexible” (12.9) “can’t, or wont, do more hours – flexible” (7.14).

5.5. Discussion

The present study intended to explore the level of consensus in understanding of employability across two stakeholders in HE employability development; employers and HE instructors. Such a task enabled a clearer indication of the relevance of an employability framework rooted in academic scholarship (i.e. Williams et al., 2016).

While the framework in general appears to fit instructor and employer data, results of this investigation shed light on several potentially important variations in employability understanding. A consideration of the proportionate representation of construct categories found employers provided significantly more interpersonal constructs while also providing construct categories uniquely present within this sample; “flexible learner”, “optimistic”, “distinctiveness”, “recruitment risk”, “honesty”, “longevity”, “shared company values”. Likewise, a single category was more dominant within the instructor sample; “vision”, and a single category, “parental support”, was unique to this sample.

A consideration of the meanings communicated within these constructs indicated variation in how “openness”, “relevance to the job”, and the “adaptive behaviour” categories were presented by the two groups as reflecting employability. This discussion will examine these divergent categories and the possible explanations and implications of these distinct aspects of understanding.

Several meta-strengths were identified which were disproportionally presented within the employer sample. These strengths reflect overarching elements connecting to employability processes outlined within the management dimension of the original framework. The first of these was openness, linked to content reflecting signal-management. Data suggested openness to consider a wider range of signalling opportunities to be relevant to understandings of employability.

Moreover, openness was contained within the “interest in the company” category, suggesting an openness to fit or adapt to the company, which can be linked to self-management processes. Openness has been previously linked to employability by Nofle and Robins (2007) who found openness to be associated with SAT verbal scores. More recent support for the value of these individual differences in understanding employability was provided by a 15-year longitudinal study by Wille, De Fruyt and

Feys (2013), which showed correlations between openness, and perceived employability. In each instance openness was a targeted variable; however, the current research supports the perceived relevance of openness as viewed by stakeholder's implicit employability theories.

Another meta-strength identified was collaboration. It was again linked to both employability processes. Connections to the signal-management dimensions were identified in the form of constructs linking interpersonal competence within signalling know-how. Likewise, an association to self-management was presented in the form of balancing personal interests with those of the team, to pursue team goals and interests, as well as more generally, considering others, within the rapport building category. The importance of this factor replicates numerous previous investigations with pre-established skills lists (AGR, 2016; Ayoubi et al., 2017; CBI, 2016; Conrad & Newberry, 2011; El Mansour & Dean, 2016; Singh et al., 2014; Suarta et al., 2017; Tsitskari, Goudas, Tsalouchou, & Michalopoulou, 2017; Wickramasinghe & Perera, 201) including employers of engineering and technical graduates, who ranked collaboration as a top skill, compared to interpersonal competence ranked 17th. This distinction lends support for the division of these two categories within the present data.

Connections between interpersonal interactions and an array of discrete skills as well as external categories, suggests that possible variations in the proportional representation of these categories may be explained by the contextualising of generic and job-specific skills within this context. Interpersonal interactions were alluded to within constructs connected to “emotional management”, “openness”, and “confidence”, implying a connection between these aspects of employability and the role of interpersonal interaction. Similarly, in considering the content of the interpersonal categories these were further linked to communication and social skills, as well as personal disposition. In 2010, Cumming emphasises the role of others around us in the enactment of skills present within taxonomies of skills. Viewing interpersonal interaction as a contextualiser potentially explains variations in the presentation of interpersonal constructs across the samples.

Views of the value of teamwork/collaboration within HE, as a context for skills development, are less than favourable. Research by Krause (2014) explored perceptions of generic skills development across eight disciplines. Academics responses referred to

connections between teamwork and plagiarism, viewing this skill as potentially detrimental to individual progression. Krause's data further identified views by academics of institutional level "talk" around the importance of student learning to work in teams being irrelevant to certain disciplines, and impractical. This work highlighted some academics views of the lack of relevance or importance regarding teamwork skills in the disciplines examined. Volkov and Volkov (2007) suggested that teamwork goes against the competitive and independent nature of learning and assessment in HE, suggesting the teaching and assessment of collaboration raises several challenges. In more recent publications teaching collaboration continues to be referred to as a pedagogical conundrum (Riebe, Girardi & Whitsed, 2017). Such a background would support the potential for instructors to fail to contextualise generic skills within a collaborative environment.

Whether variations in the value placed on collaboration within the present sample is a consequence of the specific disciplines sampled or not, collaboration should arguably be a concern in all subject areas. Surveying of graduate jobs emphasis on the importance of degree subject (AGR, 2016) supports that students from diverse disciplines, some of which are supported as having negative views of the value of teamwork, are eligible for the same graduate opportunities. This would suggest at the very least discipline level failings in the emphasis placed on teamwork, or development, and assessment of these skills within employability development interventions.

The team in which one is to be recruited also acted as a contextual element in the employability understandings of this sample; independent of the application of generic skills within collaborative environments. The skills make-up of the team impacted job specific requirements outlines within "relevance to the job". Sharing the values of the company reflected an alignment with workplace culture which might otherwise negatively influence the team. Indeed, the impact of employability failings on a range of construct categories was linked to the cost and benefit to the team (cited within "hard worker", "conscientious", "self-awareness", "taking responsibility", "confident behaviour", "openness", and "relevance to the job"). Thus, further to the team environment offering a context for the application of skills, it also presented a means of assessing employability through fit and successful collaboration as an end goal.

A final point to note about the constructs presented herein is the frequently cited issue of maturity. Maturity was linked to “evidence-based practices”, “persistence”, “self-awareness”, “openness”, “professionalism”, “prioritising”, and “relevance to the job”. It is unclear whether this maturity is linked to age, or to an accumulation of experience, previously identified as valued (for example, Andrews & Higson, 2008; Dacre-Pool & Sewell, 2007; Gault, Leach, & Duey, 2010). Nevertheless, additional constructs around family involvement (“parental support”), family commitments (“adaptive behaviours”), and testing out as opposed to a history of stability (“longevity”) suggest a possible impact of career and life stage on employability assessment, which frequently correlate with age. This would suggest that any evaluation of employability development should control for this age/career development stage factor.

A single reference to maturity can be found in the reviewed skills lists. Chhinzer and Russo (2018), who grouped skills into overarching higher order constructs, produced a construct labelled “professional maturity”. This construct was linked to quality of work, interest and initiative, organisation and planning, dependability and response to supervisor. No maturity references were made within the present “conscientiousness”, “taking responsibility”, or “planning” categories, however, reference within “prioritising”, “longevity”, “professionalism”, and “persistence”, have some meaningful overlap with the description offered by Chhinzer and Russo (2018). The present research suggests further work into the conceptualising of professionalism is needed.

5.5.1. Range of convenience.

While investigations of differences in the proportional representation of these stages across the two stakeholders identified statistically significant differences, they operate within a differing range of convenience. Thus, the context (educational and work settings) needs consideration when understanding how employability is perceived. Instructors are likely to have access to different information about a student, from which to make inferences about their employability i.e. attendance, assessments, rather than references and background information present in application forms. Furthermore, face-to-face interactions may be perceived differently based on issues of student accountability, and behavioural expectations resulting in the shift in power relationship between employer - employee compared to consumer – staff, or teacher - learner.

The representation of commitment categories “interest in the company”, “shared company values” and “longevity”, may reflect the availability of information regarding job applications. Instructors focus on proactivity and forward planning could encompass an emphasis on identifying the company one seeks to work with. Nevertheless, it is important to stress that this emphasis within the instructor sample is speculative, and with an absence of these constructs within the implicit theories of the instructors sampled, it is possible that this focus is being neglected in communications with students regarding their future employability.

Furthermore, the focus of employers and instructors regarding to employability and its development, differ. Employers focusing on longevity may represent the full extent of their future interest in employees. It is expected that employers’ interest in employees careers is unlikely to span beyond that of their involvement in the company for which the employers are recruiting. On the other hand, instructors may have a broader long-term view of students’ employability, helping students to consider their ultimate career goal and the pathways available to reach this. Given this contextual variation, one might expect instructors to show an increased focus on “vision”, which refers to thinking to the future, as well as “proactivity”, as it is expected that to be proactive, one is required to consider future goals and contexts. Both “vision” and “proactivity” constructs showed significantly higher frequency counts within the HE instructor sample. Thus, emphasis on the future may reflect the increased demand on instructors to prepare students for the world of work, which formed the impetus for this research.

Alternatively, the differing perspectives of instructors and employers may reflect the importance of variances in time personality in assessing employability. Literature into the effect of approaches to time on socialisation into new work environments suggests that our view of time can have implications for how well we integrate into a team. Many categories of constructs, especially strategic thinking categories, illustrate parallels with the construct of time personality. Time personality, as presented by Francis-Smyth and Robertson (1999) includes attitudes towards planning tasks illustrated within the present data’s “planning”, “vision”, and possible “proactivity” categories. Furthermore, connections can be drawn between content within the “Prioritising” category of constructs and the time personality factor of polychronicity or “a preference for doing more than one thing at a time” (p.280). Likewise, discussions of being a quick starter,

within the “flexible learner” category similarly highlights the role of time in these employability perceptions.

Thus, there is overlap between “strategic thinking” constructs and aspects of this larger time-related discussion. However, it should be noted that discussions of punctuality, impatience, and leisure time awareness, also identified as components of time personality (Francis-Smyth & Robertson, 1999) did not arise within this research. Nevertheless, discussions of working hours were highlighted in adaptive behaviours by employers, suggesting further investigations may identify matches in employers and potential/actual employers of leisure time awareness as of relevance in employability assessments.

While the impact of time congruity on an employee’s wellbeing is documented within previous research (Francis-Smyth & Robertson, 2003), its role in employability assessment is less clear. No reference to such concepts has been made within employability theories identified in the literature review (see chapter two). Considering this potential impact of time perspective, proactivity may not reflect a significant variation, but rather an effect of time style/personality on the presentation of the meta-strength “taking responsibility”. The frequency difference between the presences of “taking responsibility” constructs within each sample data was not statistically significant, however, employers referred to these constructs three times more than HE instructors. Taking variations in the “taking responsibility” category, alongside variations in reference to “proactivity”, removes any significant variation between the two groups. For this reason, it is unclear whether variations within “proactivity” reflect a practically significant change in focus.

In this sense, these variations could arguably represent a variation in the focus of these stakeholders, rather than a significant difference in what they view employability as. Nonetheless, it should not be assumed that such contextual differences preclude any value to these statistically different variations. What is certainly concerning is the potential translation of these personal theories into employability development initiatives which systematically neglect important aspects of employability development.

5.6. Summary of Chapter

The aim of the present investigation was to identify any discrepancy between these two stakeholders' implicit theories of employability. Results indicated a correspondence between these populations' personal theories and the broader definition and framework provided for employability development, with minor amendments to the framework definitions presented within table 4.3. Several variations in the proportional representation of categories, as well as unique categories, were identified (see table 5.4.). The correspondence between these categories of understanding and Williams et al.'s (2016) dimensions are presented in figure 5.2. Following this investigation, work is now needed to assess the impact of identified meta-strengths (see table 4.4.) on employability-related outcomes.

Table 5.4. Comparisons of employer and instructors implicit theories within the context of the synthesised framework of Williams et al. (2016)

Employability dimensions	Employers	HE Instructors
Strengths: Individual properties such as skills, competencies, relationships, and traits that can lead to an increased probability of positive work-related outcomes.	<u>Distinct constructs</u> Adaptive > Flexible learner: Can learn new skills or information quickly. Interpersonal competence > Honesty: Truthful in their communications and actions. Optimism: Positive about the future. <u>Common constructs with distinct representation</u> Self-development > Openness: Open to fitting within the current, and changing needs of the organisation, through changing practices, and considering alternative approaches and viewpoints.	<u>Common constructs with distinct representation</u> Self-development > Openness: Open to consider a range of career and learning opportunities. Open to alternative thinking and environments.
	<u>Common constructs</u> Commitment > Passion: Show a passion or interest in the area – renamed from “role”. Commitment > Conscientiousness: A desire to perform at a high standard. Hold a consideration for quality in their output. Takes Responsibility: Take a level of ownership which induces a feeling of accountability for something. Can be left to work on tasks independently without external monitoring. Leading them being someone that can be relied on. Takes Responsibility > Proactivity: A tendency towards action, to creating or controlling a situation for themselves, rather than requiring other people or circumstances to direct their behaviour. Creative: The propensity to come up with novel ideas or solutions. Confidence > Self-confidence: Express a realistic belief in themselves and their abilities. Adaptive > Relevant know-how: The relevant skills to extend above and beyond a specific job description. Self-development > Self-awareness: aware of the reality of their own skills, knowledge, character, motives and desires, and utilises an understanding of their strengths and weaknesses in these to select appropriate roles, and function optimally within their limits.	

Table 5.4. continued

Employability dimensions		Employers	HE Instructors
Strengths continued.		<p>Experience and Knowledge > Evidence-based practice: An ability to apply knowledge to relevant settings.</p> <p>Experience and Knowledge > Business awareness: An awareness of the context in which they find themselves applying for the role.</p> <p>Experience and Knowledge > General Ability: Possesses the basic cognitive ability expected of the role. Not specific to particular skills but rather a general level of intelligence.</p> <p>Strategic thinking > Vision: The ability to think about or plan the future with imagination or wisdom.</p> <p>Interpersonal competence > Rapport building: Possesses a pleasant appearance and manner, allowing for a relationship between them and other individuals or groups. Where those concerned understand each other's feelings or ideas and communicates well.</p> <p>Interpersonal competence > Collaboration: Joins in with others, has a positive influence on the pursuit of a common purpose, providing an open and informed whole.</p>	
Management: An individual's self-appraisal of personal properties and demonstration of how these fit with workplace expectations and demands.	Signal-management: Navigation of the labour market in pursuit of personal career goals through access and engagement with relevant training and employment opportunities.	<u>Common constructs with distinct representation</u> Experience and Knowledge > Relevance to the job: Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, which fill an existing need or add additional value.	<u>Common constructs with distinct representation</u> Experience and Knowledge > Experience and Knowledge: Possess a breadth of experience that can utilise to evidence required skills.
		<u>Common constructs</u> Experience and Knowledge > Signalling know-how: Acts in a way that suggests an understanding of expectations within the recruitment process and the appropriate communication of signals. Preparation for interview: The signalling of proactivity through an illustration that they have researched the role for which they are applying Professionalism > Presentation: Appropriate communication style and appearance that communicates an engagement with the role and values of the role.	

Table 5.4. continued

Employability dimensions		Employers	HE Instructors
Management continued.	Self-management: The individual's perception and appraisal of themselves in terms of values, abilities, interests and goals possessed, and how they balance these with the workplace expectations and demands.	<u>Distinct constructs</u> Commitment > Shared company values: Considers the goals and ethos of the company above their own needs or expectations, or represents a match between their values and that of the company.	
		<u>Common constructs</u> Professionalism > Organisational compliance: Adhering to systems and codes of practice expected of employees. Emotional management: The ability to control one's emotions in order to present a calm, consistent, rational, relaxed response within the workplace, which reflects the organisational expectations of them. Allowing them to engage fully with demands of the job and cope with new or uncertain situations. Commitment > Interest in company: Possesses an interest in the company leading to commitment to a specific job. Strategic thinking > Planning: Consider a task or activity alongside others and arrange in a manner that its goal can be achieved. Strategic thinking > Time management: Perceptions around the appropriate allocation of time to a task, when considered in relation to the wider responsibilities and duties within that role. Strategic thinking > Prioritising: Perceptions around the appropriate allocation of mental and other resources to a task, when considered in relation to the wider responsibilities and duties within that role.	

Table 5.4. continued

Employability dimensions	Employers	HE Instructors
Contextual components: <i>The contextual factors of workplace related opportunities and demands.</i>	<u>Distinct constructs</u> Distinctiveness: Communicates a “wow factor” within the pool of candidates. Recruitment risk: The degree to which the outcome of recruiting the individual is known.	<u>Distinct constructs</u> Parental support: The role of parents within the actions of individuals.
Behavioural outcomes – Behaviours that result from the negotiation of strengths in the workplace.	<u>Distinct constructs</u> Commitment> Longevity: Committed to the role or company for the long term, rather than a temporary destination <u>Common constructs with distinct representation</u> Adaptive> Adaptive behaviours: Engage in behaviours evident of an adaptive approach to the content and hours of the role.	<u>Common constructs with distinct representation</u> Adaptive> Adaptive behaviours: Willingness or ability to adapt to various geographical locations for work opportunities.
	<u>Common constructs</u> Commitment > Hardworking: Engagement with work rather than avoiding aspects or focusing attention elsewhere. Commitment > Persistence: Committed to the completion of work activities Confidence > Confident behaviour: Display a realistic/accurate level of confidence in their role related behaviours. Self-development > Professional development: Displays an engagement with professional development opportunities.	

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graph TD
    CE([What is employability?])
    CE --> P[Professionalism]
    CE --> O[Optimism]
    CE --> EK[Experience & Knowledge]
    CE --> C[Creativity]
    CE --> Conf[Confidence]
    CE --> PS[Parental support]
    CE --> ST[Strategic thinking]
    CE --> EM[Emotional management]
    CE --> V[Vision]
    CE --> SD[Self-development]
    CE --> Dist[Distinctiveness]
    CE --> Com[Commitment]
    CE --> RR[Recruitment risk]
    CE --> Adp[Adaptiveness]
    CE --> PI[Preparation for interview]
    CE --> IC[Interpersonal competence]
    CE --> TR[Taking responsibility]

    P --> OC[Organisational compliance]
    P --> Pres[Presentation]

    O --> EBP[Evidence-based practice]
    O --> SKH[Signalling know-how]

    EK --> GAL[General ability level]
    EK --> BA[Business awareness]
    EK --> EK1[Experience/knowledge]

    C --> SC[Self confidence]
    C --> CB[Confident behaviour]

    Conf --> ST
    Conf --> EM
    Conf --> V

    PS --> Plan[Planning]
    PS --> TM[Time management]
    PS --> Pri[Prioritising]

    SD --> SA[Self-awareness]
    SD --> Open[Openness]
    SD --> PD[Professional development]

    Com --> HW[Hard worker]
    Com --> Pass[Passion]
    Com --> Con[Conscientiousness]
    Com --> Int[Interest in company]
    Com --> Pers[Persistence]
    Com --> SCV[Shared company values]
    Com --> Long[Longevity]

    Adp --> AB[Adaptive behaviour]
    Adp --> FL[Flexible learner]
    Adp --> RKH[Relevant know-how]

    IC --> Pro[Proactivity]
    IC --> Col[Collaboration]
    IC --> Hon[Honesty]
    IC --> RB[Rapport building]

    TR --> TR1[Taking responsibility]
  
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Chapter 6

Stage 3a – Scale Construction

“Pragmatic, policy-driven approaches to measuring ‘employability’, such as using statistics on employment rates, subvert the operationalisation process at the heart of any good quantitative research. They begin with measurement methods (or even a convenient ready-made measure) rather than with conceptual specification”

(Harvey, 2001, p.99).

6.1. Introduction

The overall research question aimed to be addressed by this thesis is, “*What is the current understanding surrounding factors making up the construct of employability?*”. In the preceeding chapter’s, data was collected from existing publications and key stakeholder’s current implicit theories, to inform a conceptual framework of employability. This framework identified the need to explore meta-strengths which underpinned the two negotiating processes of self-management and signal-management. Meta-strengths are defined as *abilities or dispositions which enhance the functioning of self-management and signal-management processes*. This framework offers direction around the nature of HEIs involvement in developing individuals’ relative employability. However, it is not possible to assess the impact of HEIs involvement on the development of these combined strengths, as many of the strengths identified by stage two lack an adequate measurement tool. For this reason, the goal of stage three was to develop, and offer an initial validation of, an appropriate measurement tool. It is hoped this measure can be utilised as a tool for evaluating the validity of the present model, and subsequently, in the context of assessing individual HE student’s employability development. The present chapter outlines the construction of a measure of these common employability meta-strengths. The chapter will begin by outlining the key aspects of evaluating a scale, with reference to employability.

The current scale was founded on classical measurement theory. As such it is assumed that each subscale developed measured one latent variable, which is a single employability meta-strength. Variations in this meta-strength are the anticipated cause of variation in item values. In addition, error is expected to exist within each item value. These errors are accepted as being uncorrelated with each other and the true score. Due to the random nature of this error it is implicit that this cancels out over multiple observations (DeVellis, 2016). Discussions of reliability and validity, within this theoretical context, will now be given.

6.2. Exploring Reliability

Reliability relates to the degree to which a test can be relied on to produce the same result if no intervening action has occurred which would have altered the value of the

construct being measured. Shultz, Whitney, and Zickar (2013) identify two sources of error in relation to test reliability: a change in examinees and content sampling. For the purposes of exploring the first source of error, Shultz et al. (2013) recommend a test-retest in which a scale is administered twice with a time interval long enough to prevent recall of initial responses, but prevent the likelihood that a significant event could have occurred that would affect results. However, such an approach has implications for test fatigue, potentially reducing the number of available testee's for initial test development analysis (see section 6.5.3.3.). Alternatively, comparisons of individuals self-ratings and ratings of significant others, has been conducted by Heijde and Van Der Heijdens (2006) in their assessment of an employability scale. However, in the assessment of a wide variety of individuals spanning employed, unemployed, and retired individuals, the range of significant others able to offer accurate assessments of employability meta-strengths (for example, tutors, current employer, past employers) introduces an avenue of non-systematic bias which may cancel out any benefit of exploring these assessments. Thus to assess test reliability a test-retest approach was employed.

Furthermore, to test for content sampling, the internal consistency of a scale will be accessed via a Cronbach Alpha test. Cronbach Alpha assessments have been made within related scales validation processes (Daniels, D'Andrea, & Gaughen, 1998; Rothwell, Herbert, & Rothwell, 2008; Heijde & Van Der Heijdens, 2006) supporting the appropriateness of this assessment. Parallel forms checks, and split-half analysis, are alternative forms of reliability assessment for accessing content sampling bias. The downfall of these approaches is the increased burden placed on testees via the inclusion of additional items for parallel forms. This consideration corresponds with discussions of test fatigue within section 6.5.3.3. of this document. Furthermore, the requirement to develop additional items to allow for a split-half analysis with sufficient coverage of the employability strengths would further add to the timescale for scale development as well as to concerns around attainment of sufficient sample size. For these reasons, these alternative approaches were disregarded in the present case.

The benefit of conducting these two approaches (test-retest and internal consistency tests) to reliability assessment is that they are also processes advised by Cronbach and Meehl (1955) (see section 6.3.) for the purposes of construct validity (i.e. studies of internal structure and change over occasions), offering a secondary argument for their inclusion in the initial stages of scale development.

6.3. Exploring Validity

When considering the validity of the present scale, the aim is to identify whether “*the inferences and conclusions based on test scores’ are defensible*” (Shultz et al., 2013, p.95). This scale is aimed at offering conclusions regarding an individual’s development of employability meta-strengths, and thus validation methods will ultimately seek to explore whether these inferences are accurate - that they are measuring meta-strengths influencing employability.

There are several approaches to validation. A consideration of face validity has been identified by some researchers as an absolute minimum requirement for validation processes (Hardesty & Bearden, 2004). It has been argued that face validity can affect a participant’s motivation to engage with a scale (Nevo, 1985). This point was re-emphasised by Dornyei (1994) in his discussions of motivation, and was subsequently supported within research by Chan, Schmitt, DeShon, Clause, and Delbridge (1997). As such, the measurement of this element is of relevance. Face validity is quantified by Nevo (1985) as being made up of a rating of very suitable (or relevant) to unsuitable (or irrelevant) by a rater. It is suggested, however, that when ratings are given by experts rather than individuals using their “*intuition and experience to judge whether a given test or test item has high probability of being empirically valid*” (Nevo, 1985, p.289), this should be classed as content validity. Such a distinction perpetuates the blurred lines between the taxonomy of validity. Therefore, “rater” in this context refers to a testee/non-professional/interested individual who rates a test, test item, or battery of tests by employing an absolute/relative technique (Nevo, 1985). This technique requires the rater to indicate the degree of relevance of the test results, for testing the proposed construct. Specifically, views of those within the population sought to be tested would give a more accurate indication of their perceptions, and thus motivation to engage in the task. See section 6.5.5. for face validity checks.

Work conducted by the APA committee on psychological testing, in 1950-4 identified four additional qualities in need of investigation prior to a scales publication. These were criterion validity (predictive and concurrent validity), content validity, and

construct validity (Cronbach & Meehl, 1955). Consideration of parallels with the European Federation of Psychologists Association (EFPA) review criteria from which the British Psychological Society (BPS) review tests (EPFA, 2013), supported the continued relevance of this taxonomy for the assessment of scales. Literature pertaining to these validity categories was therefore explored to identify their relevance to the present investigation.

Firstly, a review of the nature of content validity suggested its limited value in isolation from other forms of validity assessment. It has been argued that content validity is only relevant when the items and behaviour under investigation are at the “observation” end of the abstract-observable continuum (Lawshe, 1975). More abstract content such as deductive reasoning, calls for a consideration of construct validation. As the present model of employability ranges from the more (communication skills) to less (taking responsibility) observable, it would not be appropriate to consider this evidence as sufficient for ensuring the validity of this scale. However, it will be illustrated later in this section that information relating to “content validity” can act as an aspect of construct validation when combined with other validation information. This view was later reinforced by Fitzpatrick (1983) who proposes that while the representativeness of items and behavioural responses (the behaviour items are assessing) to the content domain, should be considered, this is linked to the overall validity of the scale rather than specifically to an issue of content validity.

Considering the additional value of criterion-related validity, various forms of criterion-related validity were pondered. Each form looks at the relationship between the scores on the proposed meta-strength test and criterion of interest, via a correlation coefficient. The point at which this additional data is collected varies: predictive (collected after the test scores), concurrent (collected alongside the test scores), postdictive (collected prior to test scores). The value of this form of validity is disputed within the classic paper by Cronbach and Meehl (1955). It is suggested that if no suitable criterion is available for this purpose, a focus on construct validity is more appropriate. In the case of employability, only indirect measures such as employment status are available as criterion measures. This lends support for the appropriateness of construct validation in this case. Indeed, Cronbach and Meehl (1995) argue that had an accepted criterion variable indicating the construct been identified, there would be little use for the development of a measure to assess it.

This research originated from dissatisfaction with the use of employment as an indicator of employability. However, a consideration of current validation practices in relation to measures of employability illustrates the use of employment-related criteria, i.e. income, promotions, unemployment, as criteria on which to evaluate such scales (Heijde & Van Der Heijdens, 2006). The present framework would expect such a relationship to be small but significant, reflecting the contextual issues influencing the translation of individual strengths and management into employment outcomes.

The above critiques of both content and criterion validity support the value of construct validity in the present case. Construct validity uses matrices which display correlations between test scores and constructs which are hypothesised to be related to the test variable. These relationships are examined for evidence for or against the possible validity of the scale score as a measure of the construct. As such, rather than relying on a single questionable criterion, alternative explanations for individual patterns of behaviour can be investigated to provide a stronger argument for the validity of the test scores. Positive and negative relationships between several variables are investigated to identify patterns which may represent the construct under investigation. These relationships represent evidence of convergent validity and discriminate/divergent validity. Convergent validity explores the presence of theoretical relationships between the employability strength test scores and measures of associated variables, such as age. Discriminate or divergent validity explores the presence, or otherwise, of relationships between the test scores and measures of constructs theorised as having no significant relationship. Cronbach and Meehl (1955) identify five validation procedures relating to the construct validity of a scale. These include; 1) studies of group differences, in which a moderate relationship is observed between scores and group membership expected to be influenced by these scores such as unemployed/employed; 2) studies of correlation matrices and FA; 3) studies of homogeneity within the test, where items are expected to tap into the same latent variable correlate with one another; 4) studies of change over occasions, such as across years of study, and; 5) studies of process, examining completion of the assessment to identify contributing factors to test score variance. These practices reflect those utilised within the current validation of employability and similar test variables (for example, Daniels, D'Andrea, & Gaughen, 1998; Rothwell et al., 2008 - *Perceived Employability Scale*; Heijde & Van Der Heijden, 2006 - *Employability Scale*; Hou, Leung, Li, Li, & Xu, 2012 - *Career Adapt-abilities Scale*;

Praskova, Creed, & Hood, 2015 - *Career Calling Scale*; Hirschi, Freund, & Herrmann, 2014 - *Career Engagement Scale*; and Baruch, 2014 - *Protean Career Orientation Scale*). The validation procedures utilised in the present study are outlined within sections 6.5.4. to 7.3.4.3.

6.4. Study Objectives

The aim of the present investigation is to develop a measurement tool appropriate for the effective assessment of employability meta-strengths. The purpose of the tool is two-fold: 1) to further inform conceptual work around employability, 2) to assess the relative contribution of employability development interventions to individual's employability. The current thesis will contribute to the initial conceptual development and validation of the tool allowing for further investigations and ultimately the application of the tool for assessing employability development initiatives.

While the framework is multifaceted and is not fully represented within the proposed scale, the accurate measurement of the meta-strengths outlined, and their relationship to increased employability success, would strengthen the case for this framework.

The Employability Assessment Scale was developed based on the steps outlined by DeVellis (2016);

Stage one	Determining the parameters of the concept to be measured
Stage two	Generating an item pool
Stage three	Determining the format for measurement
Stage four	Expert review of initial item pool
Stage five	Consideration of inclusion of validation items
Stage six	Administration of items to a development sample
Stage seven	Follow-up processes of modifying, retesting and confirmatory factor analysis. For consideration post PhD.

6.5. Scale Construction Procedure

6.5.1. Determining the parameters of the concept to be measured.

While a scale designed to measure signalling and self-management practices is worthy of further investigation, it was felt that in the absence of scales assessing the underpinning meta-strengths impacting these management processes, scores on these scales would not be sufficient to drive effective remedial work. Data gathered during the RGT study would suggest that a number of limitations could influence effective signal or self-management. This circumstance reflects the multifaceted nature of these procedures. Thus while interventions focusing on these processes are supported as relevant to the design and implementation of employability initiatives, assessment of the meta-strengths outlined in stage two would offer individual students, and instructors, with information regarding the strengths necessary to develop further so to enhance the success of their development programmes.

Stage two identified the following meta-strengths; Collaboration; Communication; Confidence; Conscientiousness; Emotional management; Staying abreast of relevant information; Honesty; Openness; Optimism; Persistence; Rapport building; Self-awareness; Strategic thinking; and Taking responsibility.

Due to the diversity of factors expected to impact an individuals to develop rapport, reflecting personal preferences, power relationships, context of interaction, this category was excluded from the scale in favour of a focus on collaboration, and sensitivity to others which reflected the egocentric vs. other-interested drive of this category. Furthermore, scale development commenced prior to the re-categorising of resilience content into persistence and emotional management categories. This omission means that further data collection incorporating emotional management may offer additional explanatory value.

As a result, the following 13 meta-strengths were taken forward for investigation in stage three; Collaboration; Communication; Confidence, Conscientiousness; Honesty;

Openness; Optimism; Resilience; Sensitivity to Others; Self-Awareness; Staying Abreast of Relevant Information; Strategic Thinking; and Taking Responsibility.

6.5.2. **Generating an item pool.**

A rational or deductive method of test development was followed. As such, items were selected/developed based on the pre-existing framework developed from data gathered in stages one and two. Scale development ensured that items related closely to these constructs definition. It was the aim of this approach to limit the reliance on connections between test results and existing criteria for measurement of employability (Shultz et al., 2014). That being said, comparisons with external criteria were utilised as part of the validation process.

Based on previous conceptual work (see chapters four to five) 13 meta-strengths were identified for inclusion as subscales within the tool. Prior to item development, a review of the literature surrounding each subscale construct was completed to identify whether a pre-existing scale offered sufficient alignment with construct category definitions. While considering these subscales, and the framework as a whole, a number of existing measures were explored, see table 6.1.

In assessing the appropriateness of these scales, the definition of the concept which each scale aimed to measure was compared against the construct category definition produced to fit the repertory grid dataset. In instances in which the investigated scale did not reflect the complete construct category definition, this scale was discarded, i.e. *Proactive Personality Assessment* (Bateman & Crant, 1993); *Boundaryless Mindset Scale* (Briscoe et al, 2006); *Interpersonal Sensitivity* (Chen, Chao, Choi, & Chi, 2002); Eby et al. (2003); *Self-Monitoring: Sensitivity to Others* (Flynn & Ames, 2006); *Respect for Self and Others* (Greguras & Robie, 1998); *Career Self-Efficacy Scale* (Hackett & Betz, 1981); Jae-Nam and Young-Gul (1999); Kim, Rhee, and Hankuk (2011); Kayworth and Leidner (2001); Lowry, Romano, Jenkins and Guthrie (2009); Lu, Jiang, Xie, and Yam (2013); McArdle et al. (2007); Pinsonneault and Heppel (1997); Roberts, Cheney, Sweeney, and Hightower (2004); *Perceived Employability Scale* (Rothwell et al., 2008); *LoC scale* (Rotter, 1973); *Role Breadth Self-Efficacy Scale* (Parker, 1998); Sherer et al. (1982); *Career Searching Self-Efficacy Scale* (Solberg et al., 2004); *Work*

Locus of Control Scale (Spector, 1988); *Career Decision Making Self-Efficacy Scale* (Taylor & Betz, 1983); *Job Crafting Scale* (Tims, Bakker, & Derks, 2012); Heijde and Van Der Heijdens (2006).

Once the appropriateness of the concept being measured was confirmed, the presence of sufficient validation processes was investigated. Sufficient validation processes offered both evidence of reliability and validity in the form of Cronbach alpha or equivalent internal consistency checks, and discriminatory and convergent validity checks. Presumably due to the publication of these scales within peer reviewed journals, no subscale was identified as offering insufficient initial validation findings.

Where more than one adequate measure was identified for a construct i.e. in the case of Conscientiousness and Openness, those measurement tools which offered inclusion of one or more additional strengths were selected. This preference reflected the pre-established discrimination of these strengths through FA investigations, allowing them to be taken forward as independent strengths.

In the case of Confidence, the broadest measure was deemed most appropriate, owing to the infiltrating of confidence related constructs within an array of additional construct categories in the repertory grid study. The Core Self Evaluations Scale allowed for a consideration of multiple sources that could lead to perceived confidence, i.e. self-esteem relating to self –confidence categories; self-efficacy, which could better account for confident behaviours; neuroticism, which would consider overlap between optimism and confidence; and locus of control, which would account for views around control impacting confidence. The consideration of these multiple psychological concepts would offer greater insight than a consideration of, for example, self-efficacy in isolation.

Finally, only those scales which were free from copyright were employed. This allowed for the opportunity to extract individual items for inclusion within the present scale, where a complete subscale was not identified by initial analysis, to be meaningful.

Table 6.1. Existing scales considered for inclusion in final measurement tool

Strength	Considered scales	Proposed scale
Employability as a Whole	Eby et al. (2003); McArdle et al. (2007); Heijde and Van Der Heijdens (2006); Perceived Employability Scale (Rothwell et al., 2008).	None.
Collaboration	Lowry et al. (2009); Lu and Argyle (1991); Lu, Jiang, Xie, and Yam (2013).	Lu and Argyle (1991)
Conscientiousness	The HEXACO–60: Conscientiousness Subscale (Ashton & Lee, 2009); NEO-Five Factor Inventory (Costa & McCrae, 1989); Brief Measure of BFI: Conscientiousness Subscale (Gosling, Rentfrow, & Swann, 2003).	The HEXACO–60: Conscientiousness Subscale (Ashton & Lee, 2009)
Confidence	Career Self-Efficacy Scale (Hackett & Betz, 1981); Judge (1999); Core Self-Evaluations Scale (Judge, Locke, & Durhams, 1997); Career Self-Efficacy Scale (Kossek, Roberts, & Demarr, 1998); Psychological Capital Questionnaire (Luthan, 2007); Role Breadth Self-Efficacy Scale (Parker, 1998); Parker, Williams, and Turner (2006); Perrewe et al. (2004); Sherer et al. (1982); Career Searching Self-Efficacy Scale (Solberg et al., 2004); Career Decision Making Self-Efficacy Scale (Taylor & Betz, 1983).	Core Self-Evaluations Scale (Judge, Locke, & Durhams, 1997)
Honesty	The HEXACO–60: Honesty-Humility Subscale (Ashton & Lee, 2009); The London House Personnel Selection Inventory.	The HEXACO–60: Honesty-Humility Subscale (Ashton & Lee, 2009)
Openness	The HEXACO–60: Openness to Experience Subscale (Ashton & Lee, 2009); NEO-Five Factor Inventory (Costa & McCrae, 1989); Brief measure of BFI: Openness Subscale (Gosling et al., 2003).	The HEXACO–60: Openness to Experience Subscale (Ashton & Lee, 2009)
Optimism	Psychological Capital Questionnaire (Luthan, 2007); LoC Scale (Rotter, 1973); Life Orientation Scale (Scheier, Carver, & Bridges, 1994).	Life Orientation Scale (Scheier et al., 1994)

Table 6.1. continued.

Strength	Considered scales	Proposed scale
Resilience	Eades and Iles (1998); Connor–Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003); McArdle et al. (2007).	Connor–Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003)
Communication	Jae-Nam and Young-Gul (1999); Kayworth and Leidner (2001); Kim, Rhee, and Hankuk (2011); Lowry et al. (2009); Roberts, Cheney, Sweeney, and Hightower (2004).	None. No existing scale fully matched the definition produced through stage two.
Sensitivity to Others:	Interpersonal Sensitivity (Chen, Chao, Choi, & Chi, 2002); Self-Monitoring: Sensitivity to Others (Flynn & Ames, 2006); Respect for Self and Others (Greguras & Robie, 1998).	
Staying Abreast of Information	Self-Perceived Employability (Rothwell & Arnold, 2007).	
Strategic Thinking	No self-report scales identified.	
Taking Responsibility	Proactive Personality Assessment (Bateman & Crant, 1993); Boundaryless Mindset Scale (Briscoe et al., 2006); Pinsonneault and Heppel (1997); Work Locus of Control Scale (Spector, 1988); Job Crafting Scale (Tims et al., 2012).	

6.5.2.1. Development of new items.

For those meta-strengths for which a sufficient measure was not available, an initial item pool was developed through a consideration of constructs elicited as part of stage two (see chapter five). Considering each strength the appropriate category of constructs was reviewed for examples of non-colloquial phraseology appropriate for accessing peoples' self-reports of this category of constructs. The completeness of each subscale was confirmed via a comparison between the identified constructs, and meta-strengths definition, ensuring full representativeness of the strength to be measured. During this development communication was divided into written and verbal communication, so to avoid producing a multifaceted subscale.

6.5.2.2. Item quality assessment.

Once an initial pool of new items was developed for those constructs with no appropriate existing scale, the instructions, each item, and the item response set, were considered in relation to item quality standards. These standards were informed by the Quality Appraisal System (QAS) outlined by Willis and Lessler (1999) and assessed using the QAS-99 form. The researcher underwent the recommended training processes prior to applying this framework to the assessment of the employability scale. This process enabled the assessment of item quality related to issues such as simplicity, ambiguous terms, awkward vocabulary or phrasing, double-barrelled items, double negatives, leading or emotionally loaded items (Shultz et al., 2013). In addition to the QAS-99, the recently published Evaluative Linguistic Framework (ELF) was applied. This framework has been argued to have a stronger theoretical basis than the QAS-99, and has been illustrated to offer additional value (Callaway et al., 2016).

6.5.3. Determining the format for measurement.

In determining the format of the scale, several decisions were made around presentation, i.e. including response sets, use of a mid-point, delivery mode, and survey length. Discussions of these points are presented below.

6.5.3.1. Response sets.

To retain the information given in the repertory grid data, specifically the bipolar nature of constructs received, semantic differential items were first considered. Semantic differential scales are extremely versatile (Osgood & Suci, 1957). While their primary use has been with the measurement of attitudes, these scales have also shown success in measuring competencies (Moynihan, Paakkari, Välimaa, Jourdan, & Mannix-McNamara, 2015). These scales relate to the representation of meaning, be it attitudes, values, perceptions, etc. (Osgood & Suci, 1957, pp.1-2). Nevertheless, there are several potential limitations in pursuing a semantic differentials approach. A consideration of the available constructs provided few items which offered a clear comparison of poles, which matched the category definition in which they were placed, at both ends of the

scale. It was decided that the development of bipolar items, which matched the subscale definitions clearly at both ends of the poles, was an unnecessary complication, with the novice nature of the researcher leading to concerns around multidimensionality occurring within the set items. Instead, statements and a truth scale were adopted. While contrast poles often provided a clearer understanding of constructs than existed in the absence of the contrast pole, they also resulted in very personal understandings of constructs; the general population might find it hard to reflect on employability if their own understanding of one pole was understood in terms of a different contrast. For example, someone faced with a scale of “stumble over themselves- structured answers” may find it hard to position themselves on this scale when they see the opposite of structured answers as “waffling” but see “stumbling over yourself” as the opposite of having confidence. Thus, the personal nature of RGs, which made it an ideal method of data collection for stage two, hinder its use within the more nomothetic approach of stage three. Nevertheless, the issue of personal interpretation must continue to be acknowledged as providing a potential for measurement error.

The Likert scale response set was also considered. Implementation of this would have allowed for the application of the same response set across both existing validated scales, employed to measure some strengths (see chapter seven), and the items developed for the present study. Likert scales relate to questions when a respondent is asked to agree or disagree with a statement. To complete these scales, respondents are required to comprehend the agree/disagree statement, determine their own opinion, compare their own opinion to the statement and then fit this result within the agree/disagree format. This process has been described as cognitively complex (Converse & Presser; 1986; Fowler, 1995). These questions are often written in a manner that is multidimensional, meaning there is more than one aspect to the question. This multidimensionality makes answering less well-designed items difficult to impossible. They are also prone to acquisition bias (Converse & Presser; 1986; Fowler, 1995). Furthermore, the use of the mid-point in these response sets is debated. These responses should represent a neutral response. However, when no “don’t know” response is offered, they are suggested to attract these responses (Schuman & Presser, 1981; Sturgis, Roberts & Smith, 2014).

These issues are thought to be avoided by the application of truth scales, and thus truth scales were adopted. Truth scales provide a unidimensional statement, and respondents are asked to rate how true this statement is of them/ their experience.

The range of the response set was also considered. Dichotomous items were expected to be insensitive to and unrealistic of expected variation across the variable (see Kline, 1995, p.164 for further arguments). Furthermore, a nine-point scale is arguably the largest that can be held in mind (Vernon, 1963), thus points within this range were considered. Five-point scales are noted to be impacted by response contraction bias, that is a tendency to be biased towards the middle range of responses (Fowler, 1995). Thus such a length is proposed by previous investigators of this variable, to be more indicative of an individual's tendency to select or avoid extremes (Kline, 1995). It is noted that all existing scales incorporate the same five-point Likert scale. As such they are susceptible to the bias associated with this response set. However, for the purposes of this initial assessment, existing scales were presented in their original format, so to benefit from previous validation information. A 6-9-point scale offers room for the respondent to show deviation from both extreme and neutral points on a scale. Streiner and Norman (1994) investigated the effect of the number of scale categories on reliability, investigating 2-10-point discrete scales. They conclude that a 7-point scale is most efficient, as beyond this little is added to the reliability of the scale.

In opposition to discrete scales, work by Funke and Reips (2012) suggests that a continuous scale in the form of a Visual Analogue Scale (VAS), encourages deeper consideration of responses. Funke and Reips (2012) compared the response time and number of modifications to responses, as indicators of deeper processing. They identified that the response time and number of modifications to responses increased for VAS response sets. However, the overall response time was not affected. This fact was attributed to a reduction in workload resulting from the cut off points between one interval and another. It was also noted that this continuous scale would be open to additional statistical analyses, compared to its discrete counterpart.

However, others have argued that VAS does not offer the fine level of distinction you would believe. Couper, Tourangeau, Conrad, and Singer (2006) conducted experiments which suggested that these responses were no more discrete, and in fact lead to an

increase in response time, and missing data, which, within the present lengthy scale, was a great cause for concern. Thus these scales were omitted.

Some researchers believe that the use of end labelling as opposed to full labelling can prove difficult for respondents, rather the use of anchors increases the consistency of responses (for example, Campanelli, 2016); this view is endorsed by the present research within responses from the think-a-loud investigations. The labels “completely true”, “mostly true”, “somewhat true”, “halfway” “slightly true”, and “not at all true”, were offered to enhance consistency in scores reflecting similar degrees of agreement.

6.5.3.2. Delivery mode.

Following identification of the response set, concern turned to the mode of delivery. There are strengths and weaknesses to the use of web-based data collection as opposed to paper-based administration. Funke and Reips (2012) suggested that web-based surveys allow for a more accurate collating of responses. Furthermore, the dissemination of the questionnaire may be enhanced through this administration. Several pitfalls to this mode of delivery were also noted by Funke and Reips (2012) notably;

Computer literacy: The role of computer literacy is deemed minimal, given the expectation of students entering HE to have a minimum level of IT skills. However, to reduce this impact the questionnaire was administered within semester two of the academic year, to ensure that IT levels were at a level acceptable for HE engagement, which is assumed sufficient for responding to an electronic questionnaire.

Non-standardised situation: Participation in questionnaires online gives the researcher little insight into the setting in which the questionnaire is administered. Nevertheless, it is proposed that the alternative of mass administration within a shared setting (e.g. within a lecture), does not eliminate instances of seeking input from others and distractions in the form of phones, conversation etc. This is an anecdotal account based on witnessing numerous test administrations over a 12-year period. For this consequence, this pitfall is deemed to have minimal impact on the validity of results. As a result of these considerations computer-based administration was predominantly utilised for this survey.

6.5.3.3. *Survey length*

In considering the appropriate minimum subscale length a recommendation of at least three to five items per strength was ensured as a minimum (Fabrigar, Wegener, MacCallum, & Strahan, 1999; Velicer & Fava, 1998). Furthermore, discussions by Kline (1995) suggest that a sample of 10 items is sufficient for allowing a good level of reliability. No maximum number was enforced; rather concern was given to insure the number of items necessary to fully represent the strength to be measured. Nevertheless, Kline (1995) emphasises the importance of avoiding test fatigue, outlining a one-hour maximum for adult participation. The current scale length was computed by Qualtrics software to span 22 minutes. This was considered appropriate as the hour length proposed by Kline did not take into account the cognitive load of individual items. Cognitive load refers to information processing demands placed on an individual (Block, Hancock, & Zakay, 2010).

Due to the length and expected cognitive load associated with the scale, test fatigue was a real concern. Loss of focus in completing the items could lead to distorted results when analysing responses. For this reason, three attention trap items were incorporated. Items were positioned at points felt most susceptible to attention drops, as informed by the think-a-loud process to be outlined shortly. The attention traps required respondents to respond to the statement in a specific manner: “*Please select somewhat agree for this item*”. It is recommended that responses which fail two or more of these attention traps, be considered unreliable, and be removed from the dataset (Hair, Black, Babin, & Anderson, 2010). This guideline was applied during the screening of the raw data prior to further analysis.

To tackle acquisition and non-acquisition bias, it is advised that around half of the items are reversed, while avoiding double negatives and “not/don’t” as this can be confusing for the respondents (DeVellis, 2016). DeVellis suggests that including only a few reversed items can be confusing for the respondent. However, feedback from think-a-loud processes suggested that an even split of positively and negatively worded items leads to a higher cognitive load for respondents. Feedback regarding particularly challenging reversed items led to a total of 55 of the 136 items present within the final scale, remaining reversed. Furthermore, research suggests the use of truth scales as opposed to Likert scales, which were dominant within existing validated scales, reduces

acquisition bias (Converse & Presser, 1986; Fowler, 1995). For this reason, a truth scale response set was employed for all newly developed items.

To reduce the impact of social desirability bias, the wording of instructions emphasised that there were no “preferred” responses (Shultz et al., 2014). It was also emphasised that honesty in responses was extremely important (Shultz et al., 2014). The use of optional anonymous online links, as well as self-administration, was also expected to further reduce this bias as a result of distancing the researchers from the participants response sharing (Nederhof, 1985).

Pre-tests of the devised scales took the form of two studies. Study one, an assessment of item suitability based on subject matter expert rating, aligned with assessment of content validity; and study two, a think-aloud administration with the target population, aligned with assessments of face validity. These procedures and consequent findings will now be discussed.

6.5.4. Study one: subject matter expert pre-test.

Subsequent to the selection and initial quality assessment of new scale items, a panel of Subject Matter Experts (SMEs) were sought to confirm the relevance of these items for measuring the employability meta-strengths. This is a typical progression for a rational test development stage (Shultz et al., 2014). SMEs offer an external professional judgment regarding the validity of the scale items. Once subscales were constructed for the strengths for which no pre-existing scale was identified, these scales were presented to a sample of SMEs to assess the relevance of these items to an understanding of the subscale in the context of employability.

6.5.4.1. Participants.

Thirty-six self-reported experts in employability reviewed the new items. It has been suggested that a minimum of two experts are required for rating purposes (Shultz et al., 2012). Lawshe’s critical table offers values for panels of N=5 or greater. Therefore, this sample size was deemed sufficient for the present purposes.

The sample included, but was not limited to, a developer of employability material for VLE and a university website, a project manager, a chair of an employability working group, an employer, a work-placement tutor, a developer of employability interventions, a school director of teaching and learning, an educational advisor, a career guidance officer, a work-related learning coordinator, a senior academic, an academic lead for employability, a university careers service manager, a senior careers advisor, and a PhD researcher in the field.

6.5.4.2. Procedure.

As the scale totalled 68 items (see table 6.2.), the decision was made to split the subscales evenly, and randomly assign participants to the assessment of different sets of subscales to reduce the commitment required for this exercise.

SMEs were presented with the scale statements and were asked to rate how well each item represents employability. Participants were asked, “*For each of the below items content, please indicate your view of its relevance to an understanding of an individual’s employability*”. Participants were provided with the title of the subscale, alongside a definition of this subscale’s purpose. Employers were then asked to respond with either: “Essential”, “Useful but not essential”, or “Not necessary”. During administration one, they were also offered the opportunity to explain their decision-making process for each item.

In instances where all experts agreed, confidence was placed on the relevance of this item, as relevant to the assessment of employability. Where there were differences in ratings between experts, a small variation in scores was required to enhance confidence in this item. Lawshe’s Content Validity Ratio (CVR) was considered in this situation. A CVR score of 0 would indicate that half the SME’s rated the item as essential. A figure of one suggests all participants agree on the items value, while a figure of minus one indicates all participants agree regarding its lack of value. These raw figures were then compared to critical values provided by Wilson, Pan and Schumsky (2012). Alternatives to this approach include Cohen’s Kappa; the Tinsley-Weiss T index; James, Demaree, and Wols’f r_{WG} and $r_{WG(J)}$; and Lindell and Brandt’s $r^*_{WG(J)}$ indexes – however, these are

more computationally complex while focusing on interrater agreement in general, rather than specific issues of agreement that an item is “essential” (Lindell & Brandt, 1999).

This procedure progressed through two administrations, the second following modifications to procedure and removal of negatively worded items, in line with feedback from the first administration. Comparisons of these two administrations illustrated a distortive effect of negatively-worded statements on responses.

6.5.4.3. Results.

CVR figures for the present study ranged from one to minus point eight. In 15 instances the CVR was higher than the critical value, indicating a significant level of agreement across the sample. The remaining items included responses spread across categories, giving a less clear picture of their value. See table 6.2 for a breakdown of CVR scores from both administrations on these initial items. Items with significant agreement levels are highlighted.

Table 6.2. CVR results for first and second administrations

Item	Frequencies of responses			n	Lawshe's critical value	CVR
	Essential	Useful	Not necessary			
I find it easy to structure written answers.	3	13	-	16	.49	-.62
I find it easy to communicate what I want, when restricted to putting it in...	4	9	3	16	.49	-.50
I rarely leave exploring options until the last minute.	3	7	2	12	.56	-.50
I don't like to live in the moment.	6	6	-	12	.56	0
I rarely find I am procrastinating.	2	9	1	12	.56	-.67
I often have a plan.	5	5	1	12	.56	-0.16
I find it easy to prioritise.	3	7	2	12	.56	-.50
I don't necessarily like to complete tasks in the order in which I receive...	4	8	-	12	.56	-.33
I don't get hung up on details that don't matter.	1	8	3	12	.56	-.83
I am a good organiser.	5	6	1	12	.56	-.17
I rarely find I am interrupting people while they are talking.	5	3	4	12	.56	-.17
I find it easy to communicate my point during conversations on unexpected t...	5	4	1	10	.62	0
I rarely stumble over my words, when talking to others.	4	5	3	12	.56	-.33

Table 6.2. continued

Item	Frequencies of responses			n	Lawshe's critical value	CVR
	Essential	Useful	Not necessary			
I rarely forget to include relevant information in my communications.	6	3	3	12	.56	0
I often find it easy to understand other viewpoint when they do not match m...	4	6	1	11	.59	-.27
I can frequently identify the reasons behind people's actions.	3	7	1	11	.59	-.45
I don't try to be the person that does everything.	4	5	1	10	.62	-.20
I am rarely unsure of the expectations placed on me by others.	3	7	1	11	.59	-.45
I find it easy to identify my weaknesses in a given situation.	7	3	-	10	.62	.40
I have no blind spots when it comes to my strengths and weaknesses.	6	4	-	10	.62	.20
I rarely turn away from responsibility for things at work.	5	3	1	9	.78	.11
I don't avoid taking on responsibility when I can.	4	4	1	9	.78	-.11
When at work, if left to my own devices, I will go above and beyond.	3	4	2	9	.78	-0.33
I don't like to wait to be told to do something.	1	5	3	9	.78	-.78
I rarely need a shove to get started.	3	3	2	9	.78	-.33
I think it is important to know where your role fits into the company as a...	10	1	1	12	.56	.67
I find it easy to link my experience to job vacancies.	9	1	-	10	.62	.80
I have good written communication skills.	23	5	1	30	.37-.33	.58
When writing, I can articulate my point well.	20	8	1	29	.37-.33	.38
When writing, I am concise in my points.	8	19	2	29	.37-.33	-.45
I apply English grammar rules accurately within my writing.	18	10	1	29	.37-.33	.24
I would describe myself as a good writer.	4	20	5	29	.37-.33	-.72
I make very few errors in my writing.	14	14	1	29	.37-.33	-.03
I regularly involve others in decision making.	8	13	1	23	.42-.37	-.27
I try to stay informed of developments in areas I am interested.	13	6	-	19	.45-.42	.37
I make sure I am aware of the nature and scope of a company, prior to provide...	19	-	-	19	.45-.42	1
I am aware of the latest developments in the areas I am considering working...	14	5	-	19	.45-.42	.47
I like to be sure of a company's values, or mission statement, prior to make...	14	5	-	19	.45-.42	.47
I like to know where my job role fits in relation to the team I work in.	16	3	-	19	.45-.42	.68
I like to know where my job role fits in relation to the company's function...	10	9	-	19	.45-.42	.05
I ensure I am aware of the relevant codes of conduct for any place I work.	15	4	-	19	.45-.42	.58

Table 6.2. continued

Item	Frequencies of responses			n	Lawshe's critical value	CVR
	Essential	Useful	Not necessary			
I like to focus on the future.	8	10	1	19	.45-.42	-.16
I consider my end goal before making decisions.	7	11	1	19	.45-.42	-.26
I have thought about what I want to do as a career.	8	10	1	19	.45-.42	-.16
I am good at prioritising.	13	6	-	19	.45-.42	.37
I prioritise my energy towards the most important outcomes.	12	7	7	26	.37-.33	-.08
I know when to draw the line under a task, and move on.	5	13	1	19	.45-.42	-.47
I have good verbal communication skills.	17	3	1	21	.42-.37	.62
I can articulate my point well, when talking with others.	15	5	1	21	.42-.37	.43
I am a good listener.	15	3	1	21	.42-.37	.43
When someone is talking I give my full attention.	15	5	1	21	.42-.37	.43
I like to follow up on things people have discussed previously.	6	12	3	21	.42-.37	-.43
When asked to give a verbal answer, I quickly get to my point.	8	8	5	21	.42-.37	-.24
I ensure that I communicate points in a timely manner.	13	7	1	21	.42-.37	.24
I am good at putting myself in others shoes.	9	10	1	20	.42	-.10
I regularly adapt what I am doing, to accommodate others' needs.	6	12	2	20	.42	-.40
I frequently take on board others feedback.	12	7	1	20	.42	.20
I can identify my strengths in a given situation.	13	4	9	10	.37-.33	0
I am realistic about what jobs would be suitable for me.	10	5	3	18	.49-.42	.11
I have a good level of self-awareness.	12	5	1	18	.49-.42	.33
I believe reflection is an important part of learning.	14	2	2	18	.49-.42	.56
I think reflecting on why something didn't work is important.	15	2	1	18	.49-.42	.67
I am often honest about the mistakes I make at work, to my manager.	9	4	3	9	.49-.42	.13
I can work under my own steam.	8	6	2	16	.49-.42	0
It is important to never blame others for something that is ultimately your...	11	3	2	16	.49-.42	.38
I like to take on extra responsibility.	4	10	2	16	.49-.42	-.50
I can be left to it, to complete a task.	10	3	2	16	.49	.33
I prefer to be directed in what I do.	3	7	6	16	.49-.42	-.66

Key: highlighted = items with significant agreement levels.

6.5.4.1. Discussion.

While the CVR is a good indicator of the representative nature of the content, it was felt that this data alone was insufficient grounds for excluding items developed through data collection with other SMEs. There was heavy use of “*useful*” within the SME responses. It is speculated that this useful rating may result from the request to consider employability in general, which could have lowered participants’ perception of the value of the strength as a result of trying to anticipate its employability in contexts in which the expert was not experienced. Furthermore, it is possible that some participants were excluding consideration of the strengths needed to bring individuals to the point of applying for a job role, thus disregarding the value of some strengths in effecting employability. Bartram (1990) noted that expert judgement is part of the process for the development process not “*hard evidence*”, in addition to considering this information from a construct validity approach, thus supporting the decision not to exclude items purely based on this process. This experience led to the rejection of Nevo’s face validity quantification process.

The CVR approach offers a way of quantifying the perceived validity of items. Nevertheless, its downfall is that without qualitative data the rationale for scoring an item as “*useful*” but not “*essential*” is not clear. For this reason, a follow-up investigation in the form of a think-a-loud study was performed. In contrast to CVR figures, the use of a think-a-loud process, or cognitive interview, offers rich insights into the downfalls of some of the items (Blair, Czaja, & Blair, 2013; Campanelli, Martin, & Rothgeb, 1991; Cotton & Gresty, 2006). Thus, a consideration of the results of the think-a-loud study, alongside the CVR results, provided a more complete picture of the scale. This process also allowed for the consideration of face validity reported earlier to impact motivation, to engage.

6.5.5. Study two: think –aloud approach.

6.5.5.1. Participants.

A convenience sample of 14 participants, from the scales intended audience, were recruited for this investigation. This sample size is consistent with recommendations within the literature (Czaja & Blair; 2005; Fowler, 1995) and was further supported by the occurrence of informational redundancy.

6.5.5.2. Materials

Subscales were combined with pre-validated measures of the remaining competencies, as well as additional validation and demographic questions. The final item total for this version of the scale ranged between 138-174 items, depending on responses to filter questions. All items and procedures were presented via Qualtrics online scale software. Prior to testing the complete scale procedure, the flow of the scale was assessed via an informal read-a-loud process by the main researcher, suggested by Fowler (1995).

6.5.5.3. Procedure.

Participants were briefed in person to complete the scale online, while verbalising the thought processes that led to their response. This procedure allowed for the examination of how participants interpreted directions and items, and whether these interpretations matched the scale developer's intended design. Participants were also asked to feedback on the look of the scale, and any perceptions that they were experiencing test fatigue. In addition, participants were asked about the perceived value of the scale in understanding their employability, as well as the perceived value of individual items. This open approach replaced a more quantitative approach outlined by Nevo (1985) as a method of assessing the tools face validity. This change of procedure reflected the perceived limitations of previous CVR figures in informing scale development (see section 6.5.4.1.).

Interviews were conducted both face-to-face and via telephone. Based on a participant's responses, instructions, item wording, and layout were adapted prior to administering the scale to the next participant.

6.5.5.4. Results.

As a result of the think-a-loud procedure, a total of 43 items were amended, and a further five items were removed. Most notably, changes were made to individual items, to present more specific context in which to respond. For example, written communication items were linked to the completion of CVs or application forms. These contexts were aimed at reflecting the signalling and self-management processes through which these strengths were expected to impact all employability outcomes. This reportedly enhanced the perceived value of the items in accessing employability information, as well as allowing participants to more effectively recall and evaluate this information.

No new issues with the completion of the survey were highlighted for the final two participants, and thus data collection ceased. An illustrative extract of amendments made to items as a result of this procedure are presented in table 6.3. This extract was selected at random from the available subscales investigated.

Table 6.3. Amendments made to written communication subscale following think-aloud procedures

Original wording	Participant responses	Final wording
I find it hard to structure written answers.	Participant four was unclear on what answers would relate to. Their thoughts lead them to an assignment-based response.	I frequently find it hard to structure written responses to queries or questions.
When writing, I can articulate my point well.	Unchanged.	When writing, I can articulate my point well.
When writing, I am concise in my points.	Participant four considered assignments here. Requirement to illustrate a work context aligned with an employability process.	I am concise in my points on application forms.
It can be hard to communicate what I want when restricted to putting it in writing.	Participant four asked, “When would you be restricted?” Proposed item change to: “It can be hard to communicate my point within most types of job application forms.” The phrase “most types” was added to reflect variation in the user-friendly nature of application forms. Participant seven found the negative wording confusing.	I write clearly, communicating my point well, in job application forms.
I apply English grammar rules accurately within my writing.	Participant three did not see the relevance of this. Participant six reflected on the impact of dyslexia here. These cognitions were repeated in subsequent participants.	Removed.
I would describe myself as a good writer.	Participant one stated this depended on what they were writing. Confirmed by later participants.	Removed.

These issues of contextualising the strengths reflect the importance of context communicated by Cumming (2010). Such contextualising when applied to strength development would reflect the development of these skills through signalling and self-management processes.

6.5.6. Consideration of inclusion of validation items.

In addition to the items aimed at measuring meta-strengths, participants were also asked to provide information relating to validation variables. A bivariate correlation allowed

for the assessment of relationships between the test scores and these criteria within the test administration for the development sample (see chapter 7).

6.5.6.1. Convergent validity.

CS was noted as an important proxy measure of employability. Therefore, measures of CS were employed to assess convergent validity. The use of CS measures as a criterion for employability has been illustrated in past validation procedures of Heijde and Van Der Heijden (2006) for their employability measure, as well as Rothwell and Arnold (2007) for their perceived employability scale. The importance of considering CS was also discussed within section 2.12 of this thesis.

CS can be divided between objective measures (OCS) that are verifiable career outcomes, and subjective measures (SCS) which reflect personal prioritising around what an ideal career would look like. Measures of OCS are fairly consistent across studies. For the present purposes four OCS items presented within Heijde and Van Der Heijden, (2006) were employed. These items addressed issues of promotion, employment gaps, and pay.

A variety of SCS measures exist. Therefore, in measuring SCS the following measures were considered: SCS; Rothwell et al. (2008); Nabi (1999); Gattiker and Larwood (1986); Pan and Zhou (2015); and *the Career Satisfaction Scale* (Greenhaus, Parasuraman & Wormley, 1990). The majority of these scales were identified as unidimensional in nature. This perception was supported by a review of 216 SCS publications by Ng and Feldman in 2014. Such a measure of SCS neglected the complexity of career success as discussed in section 2.3.7.5. An English translation of Pan and Zhou (2015), translated by the scales authors, was used as a base for these investigations. Modifications were made through pre-test procedures outlined above. Evidence of convergent, discriminatory, and structural validity (Pan & Zhou, 2015) supports the value of this measure in the present context. The SCS scale offered an idiosyncratic understanding of SCS, considering individual values informing perceptions of success. This allowed for an evaluation of CS outcomes prioritised by students, as well as their success in achieving these. Both OCS and SCS measures were

collated to allow for an acknowledgement of the contrasting information potentially presented by this data.

6.5.6.2. Group membership.

Several grouping variables were included within the demographic items. This allowed for an investigation into the discriminatory power of the scales results, as per validation procedures suggested within Cronbach and Meehl (1955). Grouping variables included year of study. Previous discussions around employability in HE have asserted that curriculum focusing on enhancing learning is in line with that required to develop employability (Yorke & Knight, 2006), suggesting that a progression through this learning process could have advantageous employability outcomes.

Employment status was also assessed, to investigate the predictive power of employability meta-strengths in distinguishing this employment outcome.

Demographic questions were presented to allow for a comprehensive description of the sample involved. These included; age, sex, university, subject, employment hours, and volunteering history.

6.6. Summary of Chapter

The present chapter has outlined the pre-test processes aimed at creating an employability audit scale, which represents clearly and completely the meta-strengths identified within stage one and two, as underlying the key employability processes.

Results of the SME panel identified limitations of this data for scale development. Combining the SME process with that of a think-a-loud study conducted with the target population offered a more fruitful investigation of the scales items.

Having identified relevant criteria on which to assess the quality of these subscales and its accuracy as an indicator of employability outcomes, this scale now requires administration with a larger development sample.

Chapter 7

Stage 3b – Initial Validation of an Employability Audit Tool

“Only as an abbreviation is it legitimate to speak of “the validity of a test”; a test relevant to one decision may have no value for another. So users must ask, “How valid is this test for the decision to be made?”

(Cronbach, 1984, p.125).

7.1. Study Objectives

In chapter six an initial scale was developed to measure the meta-strengths relevant to the functioning of two key employability processes. The present chapter outlines the administration and findings of this scale with a development sample, reflecting stage five of DeVellis' (2016) scale development process. These results are explored in relation to: (1) the factor structure underlying these responses, (2) homogeneity of items within subscales, (3) the relationship between scale responses and those variables hypothesised as related to employability.

7.2. Method

7.2.1. Participants.

Participants initially involved undergraduate students, to whom the scale was most likely to be applied to following validation. However, this sample was expanded, prior to data collection, to postgraduate and non-students to allow for a wider spread of scores, and a more complete picture of the relationship between employability outcomes and CS, best illustrated in those further along in their career. This range of participant experiences was expected to enhance the range of the response set used, addressing requirements of the multiple regression analysis to which these scores would later be subjected (Field, 2005).

Participants consisted of 362 adults, representing both students and non-students. The student sample was recruited via work-related learning modules, advertisement on central Virtual Learning Environment pages, social media, and research participation schemes. The non-student sample was recruited via a snowballing of the original sample approach. Participants were offered an incentive, in the form of a prize draw, to encourage participation.

Seventeen of the returned responses were incomplete, and thus removed from analysis. A further sixteen participants, exhibiting errors in two or more attention items (i.e items

in which the statement consisted of a direction regarding which response to indicate “please tick somewhat agree”, see section 6.5.3.3.), were withdrawn from the study. These omissions resulted in a sample size of 329. The distribution of these errors is displayed in figure 7.1. and 7.2.

Figure 7.1. Total number of attention trap errors made by participants

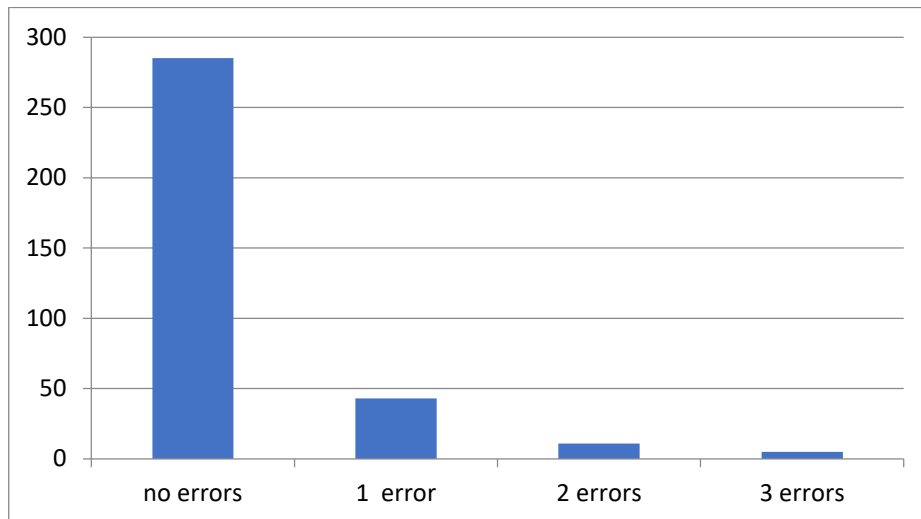
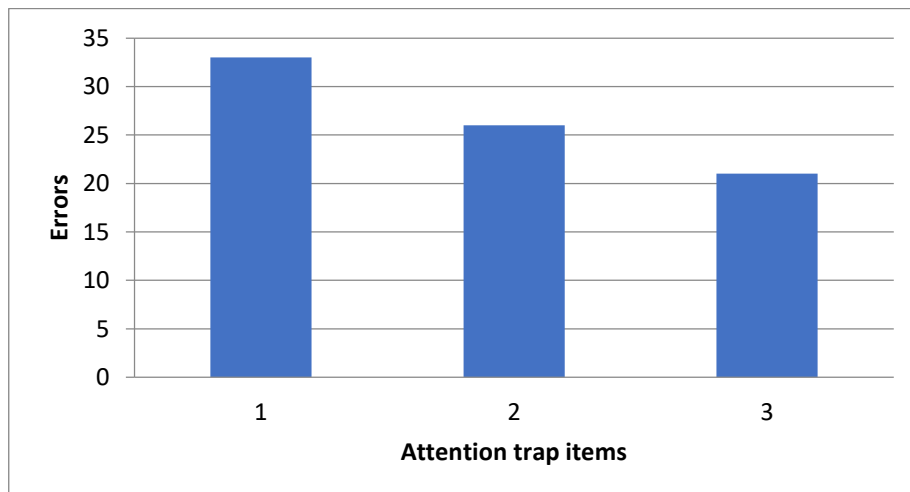


Figure 7.2. Frequency of errors for each attention trap item



A breakdown of the final sample is presented within table 7.1. This data suggests a varied sample spanning the breadth of expected variation.

Table 7.1. Breakdown of sample demographics

Current students	223	Periods of unemployment	
Study Year 1	100	Maximum	26
Study Year 2	45	Minimum	0
Study Year 3+	79	Mean average	14
Promotions in lifetime			
Graduates	83	Maximum	29
		Minimum	0
Non-attenders of HE	23	Mean average	2
Promotions in current organisation			
Sex			
Male	70	Maximum	11
Female	258	Minimum	0
Other	1	Mean average	1
Gross annual income			
Age			
Maximum	66	Maximum	135,000
Minimum	18	Minimum	200
Mean average	28	Mean average	18,829
Hours worked			
Employment status			
Employed	216	Maximum	60
Previously employed	78	Minimum	1
Yet to enter employment	35	Mean average	25

7.2.2. Materials.

Materials comprised an information sheet, outlining the purpose and nature of the study, as well as individuals' ethical rights and procedures to protect these. In addition, a consent form was presented to record informed consent.

The initial employability meta-strengths scale comprised 14 subscales, aimed at evaluating strengths introduced in chapter four. Where appropriate pre-existing scales were utilised. These existing scales were; The Core Self-Evaluation Scale (Judge, Erez, Bono, & Thoresen, 2003); HEXACO-60 Conscientiousness, Openness to Experience, and Honesty-Humility subscales (Ashton & Lee, 2009); The Brief Resilience Scale (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008); the Cooperation Scale (Lu & Argyle, 1991); and Life Orientation Scale (Scheier et al., 1994). Each of these pre-existing scales were measured via a 5-point Likert-scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). Cronbach alpha scores reported by initial published validations of these items ranged from .66-.91 (see table 7.2 for these figures for each scale employed).

Table 7.2. Cronbach alpha scores from initial validation reports

Subscale	Number of items	Previous reported figure (based on source paper)
HEXACO Conscientiousness	10	.78 (college sample) .76 (community sample)
HEXACO Honesty	10	.79 (college sample) .74 (community sample)
HEXACO Openness	10	.71 (college sample) .80 (community sample)
CSES	12	.80-.89
BRS	6	.80-.91
Cooperation	8	.66-.77 (across the facets employed here)
Life Orientation Scale	6	.82

Subscales assessing Communication skills (Verbal and Written), Strategic Thinking, Sensitivity to Others, Staying Abreast of Relevant Information, Self-Awareness, and Taking Responsibility, were developed via the procedures outlined earlier. Responses to

these items were made on a six-point truth scale (1= not at all true, 2 = slightly true, 3 = somewhat true, 4 = halfway (50/50), 5 = mostly true, 6 = completely true).

In addition, participants completed a number of demographic questions (see table 7.1.) as well as items related to SCS and OCS. The total number of items which respondents completed ranged from 133-169, depending on responses to various filter questions.

7.2.3. Analytical design.

It is argued that variants of Factor Analysis (FA) offer the most utility in the studying of internal structures of variable sets (Pedhazur & Schmelkin 1991). FA is a means by which to explore the underlying or latent variables hypothesised to explain variations in multiple behaviour responses, specifically responses to self-report scales. FA offers an opportunity to explore the underlying patterns within individuals' responses to a range of items. It is therefore a valuable means of validating the factor structure of the presented employability measure, allowing for the assessment of any overlap amongst proposed dimensions.

Five methodological issues to be addressed in the application of FA were outlined by Fabrigar et al. (1999). These are:

1. Identifying variables, and size and nature of the sample.
2. Selecting the most appropriate variant given the purpose of the investigation.
3. Specifying the procedure to be used to fit the model to the data.
4. Determining the number of factors to extract.
5. Identifying the most appropriate rotation method to apply to make the data easier to interpret.

These issues, and how they apply to the present proposed investigation, are discussed below.

7.2.3.1. Identifying variables, and size and nature of the sample.

The conceptual work conducted around employability (see chapters four and five) suggests the potential value of exploring meta-strengths underlying the processes of signal- and self-management. These meta-strengths were identified within stage two and applied to processes identified within stage one.

In determining the appropriate sample size for the purposes of Exploratory FA (EFA), there is no set rule. The required size varies depending on the strength of the data including communalities figures and factor loadings. However, this information is not available prior to analysis. Estimating a sample size based on the intended statistical test, alone results in a required sample size of $n > 200$ (Field, 2013). This is identical to Schmidt, Hunter and Urry's (1976) recommended sample size for criterion validity work, and in excess of Kline's (1995) suggested general guideline of 200 participants for test construction. A participant to item ratio of 5:1 is recommended by Gorsuch, (1983) and is consistent with most sample sizes presented within the literature (Costello & Osborne, 2005). This is supported by observations of more recent publications such as Suhartanto and Triyuni (2016); and Scanlan, Chow, Sousa, Scanlan, and Knifsend (2016), but is somewhat higher than Kline's (1995) 3:1 ratio guideline. With a survey length of 136 items (related to the FA) the present study would require a sample size of between 680 - 1360 participants to fit with Gorsuch recommendation. However, this is subject to item elimination through reliability analysis results. Furthermore, sampling adequacy is informed by Kaiser-Meyer-Olkin's measure and Bartlett's test of Sphericity, an assessment of the communalities figures and factor loadings. MacCallum, Widaman, Zhang, and Hong (1999) reports that if each factor is represented by three to four variables and communalities are $\geq .7$ a sample as small as 100 could accurately estimate population parameters, while lack of variables determining each factor, and low commonalities associated with variables can mean a sample size of 400-800 may not be sufficient for these purposes (Fabrigar et al., 1999). As a result of these discussions a minimum sample size of 200 was sought, with a maximum limit of 800. A consideration of final statistical outcomes showed these indicators of each factor to have a factor loading of .33-.89, indicating a diverse dataset. The final participant to item ratio was 3:1.

7.2.3.2. Selecting the most appropriate variant given the purpose of the investigation.

As FA applies to a wider range of tests, it was important to identify the appropriate test to conduct this investigation. While meta-strengths are identified for the purposes of this scale, the degree of overlap between these strengths is still under investigation. For this reason, exploratory as opposed to confirmatory FA is proposed (Matsunaga, 2015).

Comparisons between the value of Principle Component Analysis (PCA) and EFA, were made to further identify the most appropriate path for investigation. While it is emphasised that these types of analyses often yield similar results, they vary in their theoretical basis. Within PCA the emphasis is on explaining as much variance in scores as possible. On the other hand, EFA assumes that these correlations are the result of latent variables whose measurement is accompanied by a degree of measurement error. Thus measurement error is assumed within EFA, and only shared variance is analysed, attempting to estimate and remove variance as a result of error (Tabachnick & Fidell, 2013). As previously stated, the variation in items and correlations between the items on this scale are assumed to result from latent variables, and it is these latent variables which it is hoped the analysis will aid in identifying, thus a variant of EFA is more appropriate here.

FA is not being employed here as a means of developing a theory. Critics of the use of FA for such purposes are acknowledged (i.e. Fabrigar et al., 1999). However, it is also deemed foolish to enter an investigation of this data as if one had the answer to the question of what constitutes employability. Rather it was the intention of the researcher to utilise this data as a way of operationalising the previously mentioned framework, while utilising findings to further inform overlap between the strengths. As such, a two-way communication between the new information and existing theoretical discussion will be used to provide informed decisions around the final factor structure.

7.2.3.3. Specifying the procedure to be used to fit the model to the data.

As with FA, EFA applies to a family of analyses, and thus a decision was needed as to the most appropriate mathematical approach to take during this analysis. This decision was based on common practices within the field of research. As such, Principle Axis Factoring was initially applied. However, following this analysis an unclear solution was presented, and evidence of violations of normal distribution for some of the variables led to the application of Maximum likelihood analysis which offered a clearer solution.

7.2.3.4. Determining the number of factors to extract.

Informing the number of factors to extract from this analysis were several sources of information. According to O'Conner (2000) Parallel Analysis is one of the best tests for determining the number of factors. This is a validated procedure for determining the number of factors to extract within EFA. Parallel Analysis identifies an appropriate number of factors to extract, based on a comparison of variance explained by the factors, compared to factors derived from random data.

The strength of this approach to extracting factors is that it has an exact stopping point, at which no more factors are extracted. This is in contrast to methods such as considering percentage of variance explained, eigenvalues, or comparing patterns resulting when a varying number of factors are extracted, all of which require an element of subjective judgement which could lead to unnecessary retention or exclusion of relevant factors.

7.2.3.5. Identifying the most appropriate rotation method.

Rotation techniques were considered as a means of making the solutions proposed more interpretable, without changing the underlying mathematical property. There exist two types of rotation, Orthogonal and Oblique rotation. Orthogonal rotation assumes that all factors are uncorrelated with one another; while Oblique assumes factors are correlated.

Matsunaga (2015) suggests that Orthogonal rotation's assumption that factors are not correlated, is unrealistic. As this investigation is exploratory, choice of rotation scheme is based on a pragmatic approach, rather than a theoretical one, this approach supported by Tabachnick and Fidell (2013). Approaching the choice of rotation pragmatically, Matsunaga (2015) suggest the oblique rotation method Promax.

7.2.4. Studies of factor analysis.

Responses were first explored via Factor Analysis (FA) as a means of exploring the correlations between items as well as eliminating items uncorrelated with others.

Responses to all items were assessed for skewedness. Two and a half percent of variables showed skewedness, as represented by a standard skewedness score of <1.96 .

Descriptive statistics identified from the 328 participants, a total of 321 valid cases (i.e. participants providing all required data points for analysis to be conducted). While representing a less than satisfactory participant to item ratio of 3:1 ($< 1:5$ recommendation), Kline (1986) suggests this ratio may be satisfactory. The sample size exceeded the minimum advised for EFA of 150 (Field, 2005). Maximum likelihood analysis supported the adequacy of the sample size (Kaiser-Meyer-Olkin measure of sampling adequacy = .812 ($> .6$) and Bartlett's test of Sphericity, $\chi^2 = 19646.89$, $df = 7140$, $p < .001$).

In deciding the appropriate number of factors to extract to explain the variance within these items, a Maximum Likelihood Analysis was conducted with the full sample (Fabrigar et al., 1999). Investigating the appropriate number of factors to retain a consideration of Kaiser's criterion for extraction, known to over identify the number of factors for extraction (Tabachnick & Fidell, 2013), indicated a 34 factor solution. Parallel Analysis based on 120 variables and 321 participants, the findings of which are presented in table 7.3, reduced this number to 11. A consideration of the scree plot offered a less clear factor extraction of approximately nine factors. Given discussions of these guides within chapter three, Parallel Analysis results were employed as the ultimate director in this respect.

Table 7.3. Parallel Analysis results compared to eigenvalues from the Maximum Likelihood analysis

Factors	Actual eigenvalues	% Variance explained	Eigenvalues from Parallel Analysis
1	18.46	15.38	2.52
2	6.70	5.58	2.42
3	4.86	4.05	2.35
4	4.15	3.46	2.29
5	3.38	2.82	2.24
6	3.09	2.58	2.19
7	2.86	2.38	2.14
8	2.51	2.09	2.10
9	2.41	2.01	2.06
10	2.17	1.81	2.02
11	2.07	1.73	1.98

A Maximum Likelihood analysis was repeated with a forced extraction of 11 factors, for which the full solution, utilizing Promax rotation, is presented in tables 7.4- 7.14. The following discussions initially utilise “excellent” $<.71$ (presented in bold), “very good” $<.63$ (underlined), and “good” between $.55$ and $.62$ (italic) factor loadings, to identify the conceptual nature of the items associated with each factor. In the event that fewer than four items loaded equal or above $.55$ conceptual similarity between those items with factor loadings of “fair” $.45$ -. $.54$ inclusive (underlined italics) and “poor” $.32$ -. $.44$ inclusive items (underlined bold) (Tabachnick & Fidell, 2013) were considered in order to identify the nature of the factor.

The degree to which each item loaded onto the first factor, equating to the first scale to be taken forward for further investigation, is presented in table 7.4. The first factor includes two items loading excellently onto the factor (presented in bold), in addition to a further three items with very good factor loadings (presented in underline). Of these five items, three are drawn from the Life Orientation Scale, assessing Optimism, and a further two emerge from the Core Self Evaluations scale, specifically relating to satisfaction and confidence. As such this factor is labelled “Positive Self Evaluations”.

Table 7.4. Item factor loading onto factor one

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
Overall, I expect more good things to happen to me than bad.	0.82	-0.03	0.03	-0.04	-0.03	0.13	-0.12	0.05	-0.02	-0.21	0.08
Overall, I am satisfied with myself.	0.79	-0.11	0.04	0.06	0.10	-0.13	-0.08	-0.11	0.03	-0.06	0.23
I rarely count on good things happening to me.	<u>0.70</u>	-0.13	0.07	0.07	0.06	0.22	0.03	0.03	-0.03	0.01	-0.10
I'm always optimistic about my future.	<u>0.65</u>	0.10	-0.12	-0.05	-0.09	-0.07	0.06	0.05	0.08	0.02	-0.04
I am confident I get the success I deserve in life.	<u>0.64</u>	0.03	0.03	-0.06	-0.07	-0.11	-0.03	0.12	0.09	-0.01	0.12
I hardly ever expect things to go my way.	0.61	0.05	0.12	0.02	0.05	0.23	-0.05	0.11	-0.07	-0.11	-0.10
If something can go wrong for me, it will.	0.60	0.06	0.04	0.11	0.03	0.23	0.07	0.05	-0.09	-0.13	-0.05
There are times when things look pretty bleak and hopeless to me.	0.59	0.07	-0.13	0.19	-0.04	0.00	0.16	0.08	-0.09	0.04	-0.23
I determine what will happen in my life.	0.56	0.04	0.01	-0.08	-0.13	-0.04	-0.10	0.07	0.01	-0.01	0.16
Sometimes I feel depressed.	0.51	0.04	-0.09	0.14	0.05	-0.15	0.17	-0.08	-0.27	0.08	-0.15
Sometimes when I fail I feel worthless.	0.49	-0.10	0.08	0.02	0.18	-0.06	0.21	-0.03	-0.21	0.08	-0.07
I am filled with doubts about my competence.	0.49	-0.09	0.15	0.02	0.02	-0.03	0.18	-0.04	0.01	0.18	0.01
In uncertain times, I usually expect the best.	0.45	-0.03	-0.07	-0.19	0.13	-0.03	0.14	0.11	0.09	-0.16	0.07
I do not feel in control of my success in my career.	0.43	0.12	-0.01	0.00	0.01	0.02	0.05	0.08	0.12	0.09	-0.01
When I try, I generally succeed.	0.41	0.19	0.11	-0.06	-0.10	-0.05	0.02	-0.01	0.04	-0.16	0.16
I can frequently motivate myself to work.	0.37	0.09	-0.11	0.25	0.13	-0.03	-0.02	0.00	0.16	0.02	0.11
Sometimes, I do not feel in control of my work.	0.26	0.04	0.03	0.15	0.01	-0.04	0.12	-0.07	-0.10	0.22	-0.03
I make sure I am aware of the scope of a company (the extent of their operation), prior to providing them with a job application.	-0.04	0.83	-0.08	0.12	-0.02	0.02	-0.05	-0.01	-0.05	-0.13	-0.18

Note. Factor loadings <.71 are in bold face. <.63 are underlined.

Factor loadings for the second factor are presented in table 7.5. Correlated with the second factor was a single excellent factor loading (presented in bold), reflecting an item from the Breadth of Awareness subscale. Considering those items with a good factor loading (presented in italic), a further item from this scale, as well as an item regarding written communication, are present. In order to provide a scale with enhanced internal consistency, speculating that a single item related to Written Communication may skew this, four items of fair factor loadings were also taken forward (presented in underlined italic), reflecting more clearly the relationship between these two strengths (Breadth of Awareness and Written Communication).

Items associated with this factor appear to reflect effective signalling of fit with the organization. Thus, the factor is labelled “Signalling Fit”. As a result, the first two factors of this model map on to the two main management processes presented within the conceptual framework in chapter 6.

Table 7.5. Item factor loading onto factor two

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
I make sure I am aware of the nature of a company, prior to providing them with a job application.	0.01	0.78	-0.09	0.05	-0.01	0.10	0.00	-0.02	-0.13	-0.01	-0.12
I write clearly, communicating my point well, in job application forms.	0.05	<i>0.59</i>	0.16	0.08	-0.17	0.06	-0.08	-0.09	-0.07	0.03	0.19
I like to be sure of a company's values, or mission statement, prior to making a decision to work with them.	0.13	<i>0.59</i>	-0.18	0.00	0.19	0.04	-0.06	0.06	-0.08	-0.04	-0.03
I feel I am clear on what most application forms want me to say.	0.06	<u><i>0.53</i></u>	0.12	-0.06	-0.13	-0.07	-0.03	-0.01	0.09	0.01	0.06
I can identify if a job description relates to a potentially suitable job for me.	0.07	<u><i>0.51</i></u>	0.20	-0.06	0.03	0.03	0.03	-0.04	0.03	0.02	0.01
I am concise in my points on application forms.	-0.05	<u><i>0.47</i></u>	0.13	0.05	-0.12	0.01	0.12	-0.04	-0.11	-0.02	0.13

Table 7.5. continued

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
I try to stay informed of developments relevant to my role at work.	-0.06	<u>0.45</u>	-0.02	-0.05	0.11	0.02	0.03	0.07	-0.04	0.01	0.14
I think it is important to know where my role fits into the company as a whole.	0.05	0.43	-0.03	-0.01	0.12	-0.01	-0.01	0.07	0.16	-0.06	-0.04
I ensure that I respond to requests for information in a timely manner.	-0.14	0.39	0.00	0.20	0.01	-0.04	0.08	-0.01	0.15	0.11	0.11
I know when to draw the line under a task, and move on.	-0.06	0.35	0.05	0.10	-0.14	-0.05	0.08	0.07	-0.13	0.07	0.09
I ensure I am aware of the relevant codes of conduct for any place I work.	-0.05	0.32	0.10	-0.03	0.05	-0.02	0.11	-0.08	0.16	0.17	-0.01
I act in a way that will best achieve my goals at work.	0.19	0.28	0.08	-0.04	-0.06	-0.05	-0.02	-0.03	0.10	0.15	0.25
When writing, I can articulate my point well.	0.02	0.28	0.16	0.06	-0.17	0.17	0.06	-0.10	-0.01	-0.05	0.26
I frequently take on board others' constructive feedback.	-0.02	0.26	-0.15	0.07	0.18	0.03	0.08	0.18	0.14	0.18	0.23
I think reflecting on why something didn't work is important.	-0.03	0.25	-0.02	-0.05	0.14	0.12	0.01	0.13	0.11	0.02	0.14

Note. Factor loadings <.71 are in bold face. <.63 are underlined .55 to .62 are italic face .45-.54 are underlined italic face

Factor three presents two Verbal Communication items with an excellent factor loading (see bold text in table 7.6.) and additional similar item with a very good loading (see underlined text in table 7.6.). This content is continued within weaker loaded items on this factor. It is speculated that those items related to the application process, and

decision making reflect the impact of Verbal Communication on these processes. Thus, the factor is named “Verbal Communication”.

Table 7.6. Item factor loading onto factor three

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
I frequently stumble over my words, when talking to others.	0.08	-0.05	0.84	-0.08	0.05	-0.07	-0.11	-0.06	-0.14	0.08	0.27
I find it hard to communicate my point when put on the spot, even when the topic is familiar.	0.14	-0.01	0.75	-0.16	-0.08	0.03	-0.05	0.06	0.01	-0.05	0.31
When asked to give a verbal answer, I often take a while to get to my point.	-0.15	0.00	<u>0.70</u>	0.08	-0.18	-0.04	-0.06	-0.06	-0.15	0.09	0.17
I find it hard to talk to people within management roles.	-0.02	0.03	0.59	-0.04	-0.02	-0.09	0.13	-0.06	0.09	-0.16	0.02
I frequently forget to include relevant information in my communications.	-0.03	-0.01	0.59	0.19	-0.01	0.08	-0.04	0.18	-0.05	-0.05	0.08
I am often unsure of the expectations placed on me by others, leading me to not know what they want me to do.	0.12	0.24	0.54	-0.08	-0.06	-0.04	-0.01	0.04	0.08	-0.07	-0.08
When in a group, I prefer to leave others to take responsibility for final decisions.	0.03	-0.12	0.54	0.10	0.16	-0.02	0.04	-0.19	0.01	-0.06	0.09
I prefer to leave others to take responsibility for final decisions regarding my independent work.	-0.01	-0.08	0.51	0.11	0.09	-0.01	0.06	-0.08	0.13	-0.18	0.06
I avoid taking on responsibility when I can.	-0.03	0.11	0.44	0.14	0.12	-0.18	0.05	-0.01	0.25	-0.04	-0.18

Table 7.6. continued

	1	2	3	4	5	6	7	8	9	10	11
I find it difficult to link my experience to job vacancies.	0.11	0.14	0.42	0.08	-0.07	-0.05	0.01	0.01	0.03	-0.04	-0.04
When at work, I will do what is needed but nothing more.	-0.04	-0.05	0.40	0.14	0.16	0.02	-0.04	0.07	0.37	-0.10	-0.12
I often enter an interview, with no clear idea of what the company does.	0.02	0.14	0.35	0.10	0.09	0.10	-0.15	-0.08	0.05	0.09	-0.10
I frequently find it hard to structure written responses to queries or questions.	-0.06	0.04	0.34	0.17	-0.06	0.06	0.10	-0.05	0.12	-0.09	0.16
I find it hard to identify my weaknesses when applying for jobs.	-0.06	0.00	0.32	-0.01	0.03	-0.03	-0.12	0.05	0.16	-0.15	-0.09
I often get hung up on details.	0.13	0.05	0.31	0.02	-0.04	-0.06	0.07	0.14	-0.16	0.10	-0.06

Note. Factor loadings <.71 are in bold face. <.63 are underlined, .45-.54 are underlined italic face

The degree to which each item loaded onto the fourth factor, is presented in table 7.7. Factor four included three items loading equal or above .71 (present in bold), and an additional item loading equal or above .55 (presented in italics). These items reflected organisational issues. Weaker loading items all relate to Strategic Thinking items and reflect the future orientated nature of this factor. This factor was therefore called “Planning”.

Table 7.7. Item factor loading onto factor four

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
When working, I sometimes have difficulties due to being disorganised.	0.01	-0.07	-0.10	0.79	-0.09	-0.10	0.07	-0.05	0.03	0.16	0.07
I plan ahead and organize things, to avoid scrambling at the last minute.	0.15	0.02	-0.24	0.74	-0.10	0.04	-0.14	-0.22	0.21	-0.02	0.02
I am a poor organiser.	0.00	0.13	0.02	0.73	-0.17	-0.05	0.00	-0.15	0.06	-0.04	-0.02
I prefer to do whatever comes to mind, rather than stick to a plan.	-0.09	0.09	0.00	<i>0.56</i>	-0.07	0.02	-0.06	0.11	-0.04	-0.02	-0.07
I often need a shove to get started.	-0.02	0.03	0.19	0.53	-0.04	0.00	0.03	-0.03	0.20	0.03	-0.05
I like to live in the moment rather than plan ahead.	0.00	-0.05	0.10	0.52	-0.06	-0.10	-0.05	0.13	0.07	-0.11	-0.08
I find it hard to prioritise the things I know I should.	0.03	0.16	0.11	0.50	-0.11	-0.11	-0.01	0.03	0.01	0.10	0.11
I make decisions based on the feeling of the moment rather than on careful thought.	-0.10	-0.03	0.11	0.47	0.07	0.07	-0.04	0.17	-0.10	0.02	0.12
I often find I am procrastinating (putting things off).	0.19	-0.08	0.15	0.46	0.12	-0.07	-0.01	0.08	0.01	0.07	0.12
I make a lot of mistakes because I don't think before I act.	-0.05	0.02	0.20	0.40	0.06	0.05	0.05	0.11	-0.11	0.12	0.17
I often leave deep consideration of decisions around my work until the last minute.	0.11	0.05	0.06	0.33	0.03	0.01	-0.08	0.10	0.11	0.05	-0.09

Note. Factor loadings <.71 are in bold face.

Factor loadings for factor five are presented in table 7.8. Factor five included two items with very good factor loadings (underlined plain text), one good factor loading (presented in italics) and a further three with fair loadings 4.5 - 5.4 inclusive (presented in underlined italics). All these items come from the HEXACO Honesty-Humility subscale, which is further represented alongside items of responsibility, and a single item of self-awareness, reflecting weaker item loadings for this factor. Therefore, this factor is labelled “Honesty-Humility”.

Table 7.8. Item factor loading onto factor five

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
If I knew that I would never get caught, I would be willing to steal a million dollars.	0.06	0.01	0.00	0.01	<u>0.68</u>	-0.12	-0.07	0.03	0.10	0.06	-0.03
I'd be tempted to use counterfeit money, if I were sure I could get away with it.	0.11	0.03	0.01	-0.10	<u>0.65</u>	-0.08	-0.12	-0.08	0.12	0.20	-0.01
I would get a lot of pleasure from owning expensive luxury goods.	-0.01	0.05	-0.01	0.04	<i>0.58</i>	0.06	-0.01	-0.01	-0.21	-0.08	0.15
I would never accept a bribe, even if it were very large.	0.01	0.04	0.01	-0.19	<u>0.51</u>	-0.05	0.03	0.02	0.09	-0.05	-0.02
If I want something from someone, I will laugh at that person's worst jokes.	0.07	-0.10	0.17	-0.03	<u>0.49</u>	-0.03	-0.05	-0.18	0.05	0.25	-0.01
Having a lot of money is not especially important to me.	0.11	-0.01	-0.14	-0.04	<u>0.45</u>	0.14	0.08	0.10	-0.11	-0.06	0.06
I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.	-0.05	-0.05	-0.13	0.01	0.44	-0.08	0.05	-0.03	0.08	0.12	0.06
I wouldn't pretend to like someone just to get that person to do favours for me.	-0.12	-0.08	0.00	-0.06	0.34	0.02	0.13	-0.01	0.11	0.11	0.10
When I make a mistake at work I take responsibility for this mistake.	-0.13	0.05	0.12	-0.06	0.33	0.02	0.11	-0.04	0.30	0.11	-0.03
I believe considering my experiences to improve the way I work, is an important part of learning.	0.04	0.24	-0.02	-0.25	0.29	0.11	-0.02	-0.03	0.19	0.11	0.07
I like to consider the future impact of what I am doing now.	0.12	-0.01	0.13	-0.01	0.27	-0.02	-0.09	-0.04	0.09	0.05	0.27

Note. Factor loadings <.63 are underlined .55 to .62 are Italic face .45-.54 are underlined italic face

Moving on to factor six, factor loadings for this factor are presented in table 7.9. This factor had a single excellent (presented in bold) and single very good loading

(underlined in table 7.9.), both representing the Openness to experience subscale of the HEXACO model. A further two of these items represented a good factor loading (see italicised figures in table 7.9.). The remainder of the openness to experience subscale is presented in the remaining weak loadings for this factor. As such, this factor was labelled “Aesthetic Openness”.

Table 7.9. Item factor loading onto factor six

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
I would enjoy creating a work of art, such as a novel, a song, or a painting.	0.07	-0.10	-0.16	-0.03	-0.13	0.74	-0.01	-0.09	0.09	0.18	0.14
I would be quite bored by a visit to an art gallery.	0.05	0.06	-0.07	0.01	-0.05	<u>0.65</u>	-0.08	-0.14	0.12	0.16	0.03
If I had the opportunity, I would like to attend a classical music concert.	-0.07	0.14	-0.02	-0.13	0.08	0.57	0.01	-0.09	0.03	-0.09	0.08
I don't think of myself as the artistic or creative type.	0.07	0.00	0.00	-0.13	-0.21	0.57	-0.05	0.01	0.13	0.30	0.03
I find it boring to discuss philosophy.	-0.07	0.04	-0.01	0.01	0.05	0.47	0.04	-0.06	-0.01	-0.09	0.07
I've never really enjoyed looking through an encyclopaedia.	0.03	0.01	0.04	0.10	0.15	0.45	0.09	0.03	-0.05	-0.15	-0.06
People have often told me that I have a good imagination.	0.04	-0.06	0.02	-0.12	-0.22	0.39	0.06	-0.10	0.31	0.17	-0.06
I'm interested in learning about the history and politics of other countries.	-0.09	0.18	0.02	-0.08	0.29	0.38	0.07	-0.16	-0.24	-0.15	0.11
I like people who have unconventional views.	0.08	0.01	-0.07	-0.04	-0.15	0.29	0.05	0.13	0.14	-0.22	0.22
I think that paying attention to radical ideas is a waste of time.	0.00	-0.04	0.02	0.17	-0.16	0.20	0.07	0.10	0.14	-0.16	0.08

Note. Factor loadings <.71 are in bold face. <.63 are underlined between .55 to .62 are Italic face

Factor loadings for the seventh factor are presented in table 7.10. Factor seven had three excellent loaded items equal or above .71, all representing the Brief Resilience Scale (see loadings in bold in table below). Further items with very good (see underlined loading), and good loading (see italicised factor loading below) also reflected this scale. Indeed, the remainder of the BRS was also correlated to this factor to a weaker extent. In addition, weaker items were linked to the coping item of core self-evaluations, responses to views different to our own, and a less clearly related item reflecting Taking responsibility. This factor was labelled “Resilience”.

Table 7.10. Item factor loading onto factor seven

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
I is hard for me to snap back when something bad happens.	0.16	-0.06	0.06	-0.11	-0.03	0.08	0.80	0.05	0.03	0.07	-0.08
I tend to take a long time to get over set-backs in my life.	0.18	-0.01	0.01	-0.06	-0.03	0.03	0.78	0.00	0.09	0.07	-0.18
I have a hard time making it through stressful events.	0.16	-0.01	-0.05	0.08	-0.05	0.03	0.74	-0.03	0.03	-0.04	-0.10
It does not take me long to recover from a stressful event.	0.18	0.09	-0.13	-0.01	0.03	-0.03	<u>0.69</u>	-0.10	0.00	-0.04	0.07
I tend to bounce back quickly after hard times.	0.16	0.08	-0.05	-0.14	0.08	-0.08	0.58	-0.01	0.11	-0.06	0.16
I am capable of coping with most of my problems.	0.31	-0.12	0.03	0.07	0.04	-0.05	0.40	-0.11	0.02	-0.04	0.27
I usually come through difficult times with little trouble.	0.37	-0.06	-0.04	-0.10	0.01	0.01	0.38	-0.06	-0.03	0.03	0.18
I often find it hard to understand others viewpoints when it does not match mine.	-0.23	0.06	0.13	0.15	0.03	0.07	0.23	0.10	-0.01	0.10	0.20
I like to take the initiative, rather than wait to be told what to do.	0.03	-0.01	0.12	-0.07	0.13	-0.05	0.23	-0.07	0.21	-0.10	-0.01

Note. Factor loadings <.71 are in bold face. <.63 are underlined

Within the next factor (see accompanying factor loadings in table 7.11) a single very good (see plain underlined loading in table 7.11) and good (see italicised factor loadings) factor loading were present. Considering all items loading equal or above .45 this factor reflects Cooperation items. In fact, all items for the Cooperation subscale are present on this factor, alongside a single item related to completing tasks alone, taken from the Taking Responsibility subscale. This factor was therefore labelled “Working Cooperatively with Others”.

Table 7.11. Item factor loading onto factor eight

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
It is often more productive to work on your own.	0.01	0.00	-0.12	0.04	-0.10	0.13	0.11	<u>-0.67</u>	0.15	0.00	0.06
Teamwork is always the best way of getting results.	0.05	0.02	-0.22	-0.01	-0.09	-0.16	0.15	<i>0.61</i>	0.04	0.12	0.08
I believe If the group is slowing me down, it is better to leave it and work alone.	-0.07	0.13	-0.04	-0.10	-0.01	0.00	-0.01	<u>-0.52</u>	-0.01	0.00	0.03
It is often difficult working together with other people.	-0.14	0.09	-0.28	0.10	0.09	-0.03	0.00	<u>-0.49</u>	0.02	-0.28	-0.01
Involvement in joint projects at work is very satisfying.	0.10	0.00	-0.03	0.01	-0.03	0.04	0.01	<u>0.49</u>	0.10	0.00	0.23
It is more enjoyable to be responsible for your own efforts at work.	-0.04	-0.08	0.06	-0.06	0.03	0.07	0.11	-0.42	0.03	0.07	0.09
I believe decisions taken by groups are better than those taken by individuals.	0.04	0.13	-0.18	-0.06	-0.07	-0.08	-0.06	0.41	-0.01	0.07	-0.05
I believe team members usually pull together, rather than seeking individual glory.	0.20	0.13	-0.08	-0.03	0.00	-0.18	0.03	0.26	0.05	0.11	-0.04
I can be left alone, to complete a task.	-0.08	0.06	0.11	0.08	0.08	0.08	0.07	-0.19	0.14	0.08	-0.05

Note. Factor loadings <.63 are underlined, between .55 to .62 are Italic face

Table 7.12 offers the items loading onto factor nine. Factor nine had two items loading above .45 (see italic underlined loadings) which appear to potentially reflect conscientiousness. These items relate to the conscientiousness subscale. This conscientiousness is continued within items (bold underlined) loading between .44-.31 inclusive. Weaker items also reflect Taking responsibility items. This factor was named “Conscientiousness”.

Table 7.12. Item factor loading onto factor nine

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
I often push myself very hard when trying to achieve a goal.	0.18	-0.06	-0.13	0.24	0.17	0.00	-0.02	-0.11	<u>0.48</u>	0.02	0.17
I always try to be accurate in my work, even	-0.03	-0.01	-0.06	0.05	0.03	0.07	0.13	0.04	<u>0.46</u>	0.05	-0.03
I only do the minimum amount of work needed to get by.	-0.08	-0.08	0.15	0.27	0.19	0.05	0.10	0.10	<u>0.37</u>	-0.06	-0.02
People often call me a perfectionist.	-0.01	-0.09	0.03	0.31	0.01	0.00	-0.21	-0.10	<u>0.36</u>	-0.08	0.07
I like to take on extra responsibility, when my workload allows for this.	-0.11	0.20	0.09	0.04	0.07	-0.15	0.27	0.13	0.30	-0.16	0.03
When working on something, I don't pay much attention to small details.	-0.05	0.01	0.01	0.21	0.17	0.20	-0.02	-0.02	0.30	0.12	-0.07
I think it is important to not blame others for something that is my responsibility.	-0.09	0.18	0.03	-0.10	0.17	0.07	0.05	-0.04	0.29	0.07	0.04

Note. Factor loadings between .45 and .54 are underlined italic face .32 to .44 items are underlined bold face

The next factor (see table 7.13 for items loading on this factor) included items related to sensitivity to others, two Honesty-Humility items related to personal importance and status, and listening skills expected to reflect this sensitivity. The highest factor loading was a single good loading item at .59 (see italicised factor loading). A further six items

loaded between .32 and .45. A single item “I often complete tasks in the order in which I receive them” does not appear semantically aligned with the rest of the items loading onto this factor and thus was not taken forward.

Table 7.13. Item factor loading onto factor 10

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
I am a good listener.	-		-								
	0.08	0.10	0.06	0.04	0.04	0.03	0.03	0.08	0.09	<i>0.59</i>	0.25
I think that I am entitled to more respect than the average person is.	-	-	-								
	0.13	0.15	0.03	0.10	0.09	0.16	0.02	0.17	0.05	0.40	0.05
When someone is talking to me I give my full attention.			-	-		-	-		-		
	0.01	0.27	0.09	0.03	0.31	0.02	0.06	0.06	0.11	0.36	0.31
I often complete tasks in the order in which I receive them.	-	-			-				-	-	
	0.09	0.06	0.27	0.03	0.05	0.07	0.00	0.15	0.03	0.36	0.02
I want people to know that I am an important person of high status.	-	-					-				
	0.14	0.08	0.04	0.07	0.22	0.05	0.07	0.18	0.01	0.33	0.03
I often find I am interrupting people while they are talking.	-					-			-		
	0.09	0.03	0.20	0.04	0.12	0.05	0.01	0.02	0.16	0.33	0.12
I am frequently sensitive to the needs of others when considering how I work.	-		-				-				
	0.01	0.07	0.15	0.01	0.16	0.10	0.10	0.10	0.21	0.32	0.20
I am sensitive to others.	-		-				-				
	0.02	0.18	0.17	0.10	0.09	0.01	0.13	0.13	0.12	0.18	0.15

Note. Factor loadings of .55 to .62 are italic face

Table 7.14 presents the items loading onto the final factor. This factor had a single acceptable factor loading of .52 (see underlined italic loading in table 7.14), with an additional three item loadings above .31 (see underlined bold loadings). The two highest loading items included discussions of Verbal Communication, and as such also had loadings of above .3 for factor three (Verbal Communication). Remaining items covered

Strategic Thinking, Sensitivity to Others, Self-Awareness and Core Self-Evaluations. As such there was no clear unique value to this factor and it was disregarded from further analysis.

Table 7.14. Item factor loading onto factor 11

Items	Factors										
	1	2	3	4	5	6	7	8	9	10	11
I can articulate my point well, when talking with others.	0.09	-0.01	0.45	-0.12	0.05	0.04	-0.06	-0.10	-0.06	0.12	<u>0.52</u>
I am concise in my points, when engaged in verbal discussions at work.	0.02	0.19	0.32	-0.08	-0.10	0.00	0.06	-0.09	-0.18	0.29	<u>0.45</u>
Before I act, I consider what I will achieve from this action.	-0.08	0.12	0.08	0.17	0.05	0.12	-0.03	0.04	-0.02	0.11	<u>0.42</u>
I am good at putting myself in others shoes.	0.00	0.08	-0.09	-0.02	0.12	0.08	0.01	-0.01	0.04	0.36	<u>0.36</u>
I can frequently identify my strengths.	0.25	0.21	0.25	-0.09	-0.08	-0.04	-0.04	0.01	-0.04	-0.07	0.30
I complete tasks successfully.	0.10	-0.02	0.09	0.22	-0.05	0.07	0.21	-0.04	0.24	0.04	0.29
I have thought about what I want to do as a career.	0.04	0.17	-0.05	-0.02	0.14	-0.11	-0.13	-0.03	0.04	0.03	0.17

Note. Factor loadings of .45 to .54 are underlined italic face .44 to .32 items are underlined bold face

In total factors one (“Positive Self Evaluations” – 15.38%), two (“Signalling Fit” – 5.58%) three (“Verbal Communication” – 4.05%); four (“Planning” – 3.46%); five (“Honesty-Humility”– 2.82%); six (“Aesthetic Openness” – 2.58%), seven (“Resilience” – 2.38%); eight (“Working Cooperatively with Others” – 2.09%); nine (“Conscientiousness” – 2.01%); and ten (“Sensitivity to Others” – 1.81%) accounted for 42.16% of variance amongst these items.

Those items not loading above .3 on any of the items represented items on a range of the subscales; Strategic Thinking = two items, Self-Awareness = four items, CSE = one item, Taking Responsibility = four items, Cooperation = one item, Communication = one item, Sensitivity to Others = two items, Conscientiousness = one item, and

Openness to Experience = one item. Nevertheless, more of these items related to scales developed for the purposes of this assessment and therefore have undergone less prior investigation or refinement.

Considering all scale items, their highest loading, for the most part, reflected a factor which was conceptually similar to their item content. The exceptions to this were one item within factor one, related to Breadth of Awareness rather than Self-Evaluations, two items within factor two (Signalling Fit) related to Strategic Thinking which could impact someone's ability to show Signal Fit. Three items that were semantically different to the majority of items also present within factor three (Verbal Communication), these referred to Taking Responsibility and Conscientiousness, one item within factor four (Planning) related to Taking Responsibility, although it could be said that responsibility is necessary for planning to be seen as important and thus links to this Planning factor. In addition, two items within factor five (Honesty-Humility) related to Self-Awareness, one item within factor seven (Resilience) related to Taking Responsibility, and a final item within factor ten (Sensitivity to Others), related to Strategic Thinking.

7.2.5. Reliability analysis.

Given the variation in the number of items loading to a "good" level or above on each factor, a variable criterion for extraction of items into the final scales was used. This criterion aimed to provide a minimum of three items for each scale (Tabachnick & Fidell, 2013). Factor loading lower bounds (inclusive) for selecting items, ranged from .71 for Planning, to .63 for Self-Evaluations and Resilience, down to .55 for Verbal Communication and Openness to Experience, declining further to .45 for Signalling Fit, Honesty-Humility, and Working Cooperatively with Others, resting at .32 for Conscientiousness and Sensitivity to Others.

Results of a Cronbach Alpha analysis showed the internal consistency of these scales to vary between Poor to Good. Table 7.15 provides a summary of these Cronbach alpha scores for each of the ten scales, with their composite items, with the strongest factor identified within EFA first, and the weakest factor presented last. The highest Cronbach Alpha score resulted from the proposed four-item Resilience scale ($\alpha = .89$), followed

by the proposed five-item scale for Positive Self Evaluations ($\alpha = .83$), and the five-item measure of Verbal Communication ($\alpha = .80$), which all showed a good level of internal consistency. This dropped to an acceptable level for the six-item Signalling Fit scale ($\alpha = .77$), proposed three-item Planning scale ($\alpha = .75$) and four item Aesthetic Openness scale ($\alpha = .73$) and six-item Honesty-Humility scale ($\alpha = .73$). A further drop to questionable levels of internal reliability were seen for the later five-item Sensitivity to Others scale ($\alpha = .63$) and four item Conscientiousness scale (.62). Finally, the five-item Cooperation scale showed a dubious alpha level of -.213.

Having considered reversed items, and the impact of item removal on overall alpha score (Field, 2005), it was decided the cooperation scale should be removed from further analysis. It is hypothesised that this scales negative alpha level is the product of a broad latent variable paired with a small scale size. Based on the original FA of Lu and Argy (1991), two items taken forward in the subscale measured the cooperation factor negotiation or management of conflict, two items measured productivity, and a single item measured decision making. While covering a breadth of cooperation issues it is possible that the underlying construct of general cooperation is too weak, compared to the heterogeneous nature of the cooperation lower order constructs, to produce a strong positive correlation between items. It is argued that in cases of broad constructs an acceptable mean correlation between items may be much lower than that of a narrow construct (Neuendorf, 2011). However, this negative alpha level is expected to weaken the explanatory value of these items in further investigation of the role of cooperation. As such, development of a more expansive cooperation measure is needed before further analysis of this variables impact can take place.

Table 7.15. Final 10 scales and composite items

Factor	Cronbach alpha	Items
Positive Self-Evaluations	.828	Overall, I expect more good things to happen to me than bad.
		Overall, I am satisfied with myself.
		I rarely count on good things happening to me. *
		I'm always optimistic about my future.
		I am confident I get the success I deserve in life.
Signalling Fit	.772	I make sure I am aware of the nature of a company, prior to providing them with a job application.
		I write clearly, communicating my point well, in job application forms.
		I like to be sure of a company's values, or mission statement, prior to making a decision to work with them.
		I feel I am clear on what most application forms want me to say.
		I can identify if a job description relates to a potentially suitable job for me.
		I am concise in my points on application forms.
Verbal Communication	.797	I frequently stumble over my words, when talking to others.*
		I find it hard to communicate my point when put on the spot, even when the topic is familiar.*
		When asked to give a verbal answer, I often take a while to get to my point.*
		I find it hard to talk to people within management roles.*
		I frequently forget to include relevant information in my communications.*
Planning	.750	When working, I sometimes have difficulties due to being disorganised.*
		I plan ahead and organize things, to avoid scrambling at the last minute.
		I am a poor organiser.*

Table 7.15.continued

Factor	Cronbach alpha	Items
Honesty-Humility	.728	If I knew that I could never get caught, I would be willing to steal a million dollars.*
		I'd be tempted to use counterfeit money, if I were sure I could get away with it.*
		I would get a lot of pleasure from owning expensive luxury goods.*
		I would never accept a bribe, even if it were very large.
		If I want something from someone, I will laugh at that person's worst jokes.*
		Having a lot of money is not especially important to me.
Aesthetic Openness	.727	I would enjoy creating a work of art, such as a novel, a song, or a painting.
		I would be quite bored by a visit to an art gallery.*
		If I had the opportunity, I would like to attend a classical music concert.
		I don't think of myself as the artistic or creative type.*
Resilience	.887	It is hard for me to snap back when something bad happens.*
		I tend to take a long time to get over set-backs in my life.*
		I have a hard time making it through stressful events.*
		It does not take me long to recover from a stressful event.
Working Cooperatively with Others	-.213**	It is often more productive to work on your own.*
		Teamwork is always the best way of getting results.
		I believe If the group is slowing me down, it is better to leave it and work alone.*
		It is often difficult working together with other people.*
		Involvement in joint projects at work is very satisfying.
Conscientiousness	.609	I often push myself very hard when trying to achieve a goal.
		I always try to be accurate in my work, even at the expense of time*
		I only do the minimum amount of work needed to get by.*
		People often call me a perfectionist.
Sensitivity to Others	.626	I am a good listener.
		I think that I am entitled to more respect than the average person is.*
		When someone is talking to me I give my full attention.
		I want people to know that I am an important person of high status.
		I often find I am interrupting people while they are talking.*

*reversed item

** subscale excluded from later analysis due to low Cronbach Alpha score

7.2.6. Investigating group differences.

Given expectations that employability-related meta-strengths would vary both across employment status and study status (i.e. year of study, graduated, non-student) as a result of HE contribution, subscale scores were compared across these groups as an indicator of construct validity (see section 6.3 and 6.5.6.2.). Comparisons were aimed at identifying support or doubt regarding the validity of these scales based on their ability to discriminate in expected directions.

7.2.6.1. Comparisons across employment status.

Comparisons were made across test scores for employed and unemployed participants (see table 7.16. for related descriptive statistics). Results showed the unemployed sample to have slightly lower scores for Positive Self-Evaluations, Signalling Fit, Verbal Communication, Planning, and Conscientiousness. While they had slightly higher average scores for Honesty, Aesthetic Openness, Working Cooperatively with Others, and Sensitivity to Others.

Aesthetic Openness, Verbal Communication, Planning and Conscientiousness illustrated the largest differences between group means. These differences were further explored via independent t tests. A Bonferri correction was applied to the .05 alpha level, leading to a revised criterion for significance of .13. All Levene's tests supported the assumption of equality of error variance, except in the case of Planning in which the analysis not assuming equal variance was viewed.

Table 7.16. Mean strength scores by year of study (standard deviation within brackets)

	Unemployed	Employed	Difference between employed and unemployed means
N	113	216	
Positive Self Evaluations	3.40 (.80)	3.56 (.77)	0.16
Signalling Fit	4.65 (.81)	4.80 (.87)	0.15
Verbal Communication	4.06 (1.09)	4.42 (1.08)	0.36
Planning	3.91 (1.05)	4.18 (.91)	0.27
Honesty	3.58 (.80)	3.52 (.79)	-0.06
Aesthetic Openness	3.64 (.87)	3.45 (.99)	-0.19
Resilience	3.37 (.97)	3.37 (.88)	0
Conscientiousness	3.70 (.67)	3.91 (.61)	0.21
Sensitivity to Others	4.70 (.57)	4.62 (.63)	-0.08

Results suggested a statistically significant difference between employed and unemployed on Conscientiousness ($t(327) = -2.79$, $p = .006$, $CI = -.35$ to $-.06$), and Verbal communication ($t(327) = -2.723$, $p = .007$, $CI = -.59$ to $-.10$).

7.2.6.2. Comparisons across level of study.

A comparison across study status (i.e. year of study, graduated, non-student) (see table 7.17) indicates, a dip in scores in year two for the majority of meta-strengths (excluding Conscientiousness and Aesthetic Openness), with an overall increase by year three only occurring for Positive Self Evaluations. No strengths increased year on year.

Table 7.17. Breakdown of mean scores by year of study (standard deviation within brackets)

Dependent variables	Never studied at HE level	Year One	Year Two	Year Three and above	Graduate
Valid n	14	45	20	42	62
Positive Self Evaluations	3.32 (.82)	3.58 (.76)	3.22 (.78)	3.64 (.77)	3.47 (.77)
Signalling Fit	4.69 (.78)	4.74 (.89)	4.58 (.86)	4.70 (.77)	4.91 (.89)
Verbal Communication	4.70 (1.14)	4.20 (1.14)	4.12 (.99)	4.07 (1.15)	4.58 (.96)
Planning	4.14 (.86)	4.15 (.89)	3.90 (1.19)	4.13 (1.09)	4.03 (.87)
Honesty	3.59 (.75)	3.49 (.84)	3.23 (.76)	3.47 (.77)	3.81 (.70)
Aesthetic Openness	3.78 (.72)	3.413 (.98)	3.45 (.96)	3.35 (.94)	3.76 (.95)
Resilience	3.41 (.85)	3.43 (.97)	3.07 (.92)	3.35 (.90)	3.48 (.85)
Conscientiousness	3.85 (.37)	3.88 (.57)	3.69 (.69)	3.77 (.69)	3.92 (.67)
Sensitivity to Others	4.75 (.56)	4.79 (.54)	4.60 (.69)	4.61 (.65)	4.52 (.59)
Age	40.00 (13.29)	22.47 (6.67)	20.44 (17.51)	26.79 (9.07)	38.51 (11.19)
Gross Annual Income	22949.53 (12931.55)	6963.69 (6330.59)	9438.18 (12539.89)	13733.33 (12425.07)	32763.58 (25680.31)
Promotions within current organisation	2.00 (3.19)	.70 (1.49)	.39 (.72)	.56 (1.48)	2.06 (3.23)
Promotions in entire working life	3.73 (6.11)	1.61 (3.23)	1.08 (1.72)	1.30 (1.96)	3.91 (5.09)
Periods of unemployment	9.95 (9.23)	17.80 (9.52)	15.55 (10.25)	11.46 (9.73)	13.44 (10.66)

These differences were explored further via nine ANCOVA's, controlling for variance in age shown by the mean scores to differ across year of study, and identified within stage two to be of potential significance in employer perceptions (see section 5.5.). The significance of these differences was investigated via a Kruskal-Wallis test ($p < .001$), following violations of homogeneity of variance (Levene (4, 306) = 4.40, $p = .002$; Brown-Forsythe (4, 110.11), 27.10, $p < .001$). The results of this test confirmed a statistically significant difference between the ages for each study status, supporting its potential role in influencing strength results.

Therefore differences in strength scores for the various levels of study were explored via ANCOVA's controlling for Age. The assumption of homogeneity of variance was

violated for Aesthetic Openness (Brown-Forsythe (4, 265.90) = 3.00, $p = .019$); Honesty (Brown-Forsythe (4, 220.32) = 4.63, $p = .001$); Verbal Communication (Brown-Forsythe (4, 198.27) 3.54, $p = .008$); and Positive Self-Evaluations (Brown-Forsythe (4, 195.60) 2.65, $p = .035$). Furthermore, the assumption of normality explored through the Shapiro-Wilk statistic, was violated for at least one subgroup on all variables (see appendix I). The results of these ANCOVA's were therefore compared with Kruskal-Wallis results, offering more insight around the differences in meta-strength scores for each study status level for these variables.

Results of the initial nine ANCOVA's identified a statistically significant difference between Study Levels on Positive self-evaluations only ($F(4, 305) = 2.80$, $p = .03$), and significant influence of the covariate of age alone, for Verbal communication ($F(1,305) = 6.84$, $p = .01$). A comparisons with Kruskal-Wallis results found significant differences in study status scores for Honesty ($p < .05$) and Verbal communication ($p = .01$). These findings do not lend support for the construct validity of these scales; however, further possible explanations for these findings are discussed within section 7.4.

7.2.6.3. Comparisons across Sex.

Following identified sex differences in competency development and employability perceptions outlined in section 2.3.9.4. potential differences in strengths across males and females, were explored. Note that a single case recorded a response other than male or female. For this reason it was not possible to compare additional sex groupings.

Conscientiousness, Planning, and Verbal Communication displayed the largest differences across sex group means (see table 7.18 for a full breakdown of these results). These differences were further explored via independent t tests. A Bonferri correction was applied to the .05 alpha level, leading to a revised criterion for significance of .16. All Levene's tests supported the assumption of equality of error variance. Results of the t tests presented a significant difference in strength scores for Planning ($t(326, 117) = 2.53$, $p = .012$) and Conscientiousness ($t(326, 120) = 3.61$, $p < .001$).

Table 7.18. Breakdown of mean scores by sex (standard deviation within brackets)

Dependent variables	Sex		Difference between male and female means
	Male	Female	
Valid n	38	153	
Positive Self Evaluations	3.67 (.09)	3.50 (.05)	.17
Signalling Fit	4.61 (.11)	4.79 (.06)	.18
Verbal Communication	4.56 (.14)	4.31 (.07)	.25
Planning	3.90 (.11)	4.20 (.07)	.30
Honesty	3.40 (.11)	3.57 (.05)	.17
Aesthetic Openness	3.34 (.12)	3.52 (.07)	.18
Resilience	3.58 (.10)	3.29 (.06)	.19
Conscientiousness	3.64 (.07)	3.94 (.04)	.30
Sensitivity to Others	4.48 (.07)	4.69 (.04)	.21

Following the above analyses, the predictive value of these scales on employability related outcomes was explored, while controlling for demographic information commonly identified as influential in career outcomes (i.e. Age, Sex, and Student status). Study levels within the Study Status variable were combined to reflect status as a student or otherwise (current student/not current student) to produce a categorical variable with only two groups, allowing for analysis via multiple regression (Field, 2005). If these scales do indeed measure variables which represent the essential underpinning components of employability, it is expected that these would reflect a small predictive power in the assessment of employment outcomes.

The data was assessed for viability within a multiple linear regression. Exploration of descriptive statistics for both the predictor parameters and criterion variables support the unbound variability of these scores, suggesting no significant restriction in the range of scores sampled.

7.2.6.4. Assumptions of multiple regression.

This analysis was performed on data from the 216 employed participants. The present sample meets Green's (2001) guideline of $50+9k$, where "k" refers to the number of included predictive variables ($50 + (9 \times 13) = 167$ cases). However, bearing in mind the assumption of a small effect size, power analysis suggests the present sample achieves a power of 0.19, suggesting these results must be viewed with caution. A total of 1,339 participants would be required for a sufficient power level to be achieved, in

comparison to a sample size of 189 for a medium effect size. See section 7.2.1. regarding sample size rationale.

Investigation of the correlation matrices suggested no perfect correlations between variables. With correlations ranging between .53 (for Positive Self-Evaluations and resilience) to .003 (for Positive Self-Evaluations and Aesthetic Openness). Within all of these variables average Variance Inflation Factor (VIF) figure did not appear to be substantially greater than 1.

For each of the SCS variables, normality of residuals was confirmed via observations of histograms of regression standardized residuals and Normal P-P plots of regression standardized residuals. Distributions within the OCS measures indicated some skewedness in distribution. However, additional statistics indicate that these datasets do not contravene the threshold values; average VIF's were not substantially greater than 1, Tolerance < 2.0 suggesting the assumption of multicollinearity between independent variables is met (Kutner, Nachtsheim, Neter, & Li, 2004). This is further supported by Durbin-Watson statistics which in all cases is <2.00, indicating no potential problems associated with collinearity (Field, 2005).

Exploring the possible inclusion of influential cases, Cooks Distance values for all variables, were <1, suggesting no one case influenced the models as a whole. Consideration of Leverage statistics above two times and three times the average suggested several cases that may potentially be influential. This was further investigated via an inspection of DFBeta statistics and standardised DFFIT statistics. In instances where DFFIT or DBETA statistics > 1.0 were present the analysis was repeated with the removal of these influential cases, sensitivity analysis across these two datasets in each case suggested no change to statistical significance, as such the original analysis is presented below.

7.2.6.5. Multi-linear regression.

A forwards stepwise regression was applied, in which variables were entered into the regression within two steps. The first step represented variables with pre-established relationships with employment related outcomes, namely; sex, age, and student status. Next the nine meta-strength scores were entered into the analysis.

Results of the regression for the SCS External Compensation measure suggested that while Age, Study Status, and Sex, had no significant predictive value, a single variable within step two, Positive Self Evaluations, was found to display significant predictive value in relation to external compensation ($p=.02$). Associated beta values for the external compensation predictive model are presented in table 7.19.

Table 7.19. Multiple regression for external compensation

	B	SE B	β
Model 1			
Constant			
Positive Self Evaluations	2.70	1.13	0.17

Note $R^2=.027$

Results of the regression for the SCS intrinsic fulfilment measure suggested that within step one age and gender significantly better predict results than the most basic model ($f(2, 204) = 4.76, p = .01$), as did Positive Self-Evaluations ($f(3, 203) = 12.12, p < .001$) and Honesty ($f(4, 202) = 10.91, p < .001$). The below table offers associated beta values for the intrinsic fulfilment predictive model.

Table 7.20. Multiple regression for intrinsic fulfilment

	B	SE B	β
Model 4			
Constant	-7.744	9.950	
Age	.254	.133	.129
Sex	-9.639	4.062	-.158
Positive Self Evaluations	9.905	2.098	.306
Honesty	5.246	2.087	.169

Note Adjusted $R^2=.42$,

Results of the regression for the SCS work-life balance measure suggested a single variable, Positive Self-Evaluations significantly better predicts results than the most basic model ($f(1, 205) = 24.38, p < .001$). Associated beta values for the work-life balance predictive model are presented in table 7.21.

Table 7.21. Multiple regression for work-life balance

	B	SE B	β
Model 1			
Constant	24.552	4.833	
Positive Self Evaluations	6.544	1.325	.326

Note Adjusted R^2 = .11

Moving on to an assessment of the OCS measures, results of the regression for annual income suggested that Age ($f(1, 185) = 60.32, p < .001$), Study Status ($f(2, 184) = 42.90, p < .001$), and Sex ($f(3, 183) = 32.63, p < .001$), significantly better predicted results than the most basic model. In addition, two meta-strengths were shown to significantly improve the value of this model; Sensitivity to Others ($f(4, 182) = 29.42, p < .001$) and Verbal Communication ($f(5, 181) = 25.84, p < .001$). The table below offers associated beta values for the annual income predictive model.

Table 7.22. Multiple regression for annual income

	B	SE B	β
Model 5	16565.449	10298.291	
Constant	525.465	101.730	.323
Age	4070.074	870.393	.279
Student status	6517.174	2982.245	.129
Sex	-8370.200	1988.412	-.250
Sensitivity to Others	3028.365	1114.537	.165
Verbal Communication	4070.074	870.393	.279

Note Adjusted R^2 = .42

Results of the regression for promotions within the current organisation suggested the single predictive variable Age ($f(1, 204) = 17.30, p < .001$) significantly better predicted results than the most basic model. Associated beta values for this variable are presented in table 7.23.

Table 7.23. Multiple regression for promotion within current organisation

	B	SE B	β
Model 1	-.481	.434	
Constant	.054	.013	.280
Age	-.481	.434	

Note Adjusted R^2 = .28.

Results of the regression for promotions during a participants entire working life suggested that in addition to Age ($f(1, 204) = 62.99, p < .001$) linked to current organisations, additional predictive value was achieved through the inclusion of sex ($f(2, 203) = 40.12, p < .001$), and Signalling Fit ($f(3, 202) = 29.34, p < .001$), in relation to promotions over an entire working life. See table 7.24 for a breakdown of this final models results.

Table 7.24. Multiple regression for promotions over entire working life

	B	SE B	β
Step 1	-5.527	1.437	
Constant	.135	.019	.423
Age	2.346	.599	.236
Sex	.685	.283	.144
Signalling Fit	.685	.283	.144

Note Adjusted R^2 = .30

Finally, results of the regression for the periods of unemployment measure of CS suggested that the best predictive model for understanding reported periods of unemployment included Study Status ($f(1, 200) = 7.84, p = .006$) and Aesthetic Openness ($f(2, 199) = 8.06, p < .001$). Associated beta values for the variables in this model are presented in table 7.25.

Table 7.25. Multiple regression for periods of unemployment

	B	SE B	β
Model 2	26.617	2.818	
Constant	-1.316	.514	-.175
Student status	-1.316	.514	-.175
Aesthetic Openness	-2.053	.726	-.194

Note Adjusted R^2 = .08

7.3. Discussion

This chapter describes the preliminary validation of the Employability Assessment Scale. Originally aimed to assess the development of 13 meta-strengths, the scale was expanded at the scale item development stage to 14 to reflect a segregating of written and verbal communication strengths. Results of an EFA identified an 11-factor solution. However, investigation of the final factor suggested a 10 factor solution to have the best item fit in terms of theoretical consistency. A further factor was removed following identification of a poor internal consistency within the subscale. Table 7.26 illustrates the division and merging of the original subscales into the final nine subscales.

Table 7.26. Comparison of initial and final subscale labels/content

Original 14 subscales	Final subscales
Optimism	Positive Self Evaluations
Core Self-Evaluations	
Staying Abreast of Information	Signalling Know-How
Written Communication	
Verbal Communication	Verbal Communication
Sensitivity to Others	Sensitivity to Others
Honesty	Honesty
Strategic Thinking	Planning
Taking Responsibility	Working Cooperatively with Others (later excluded)
Working Cooperatively with Others	
Resilience	Resilience
Openness	Aesthetic Openness
Conscientiousness	Conscientiousness
Self-Awareness	

Some of the original subscales were shown to be distinct from other subscales, reflecting an isolated contribution to understanding item responses (for example, Openness). Conversely, other subscales appeared to converge into a single factor, reflecting shared meaning in how participants responded to items (for example, Working Cooperatively with Others and Honesty items were integrated into the Sensitivity to Others factor)

Several forward stepwise multiple regressions identified predictive value in relation to these meta-strengths, for OCS and SCS measures (see table 7.27 for a summary of significant findings across the regression analyses).

Table 7.27. Summary of significant results taken from multiple regressions exploring meta-strengths scores as predictors of OCS and SCS scores

Meta-strengths	SCS Criterion			OCS Criterion			
	External compensation	Intrinsic fulfilment	Work-life balance	Income	Current promotions	Entire life promotions	Unemployment periods
Positive Self Evaluations	X	X	X				
Signalling Fit						X	
Verbal Communication				X			
Planning							
Honesty		X					
Aesthetic Openness							X
Resilience							
Conscientiousness							
Sensitivity to Others				X			
Age		X		X	X	X	
Sex		X		X		X	
Student status				X			X

Of the employability strengths taken forward, Positive Self-Evaluations was identified as that with the most predictive power related to career outcomes. Scores on this subscale predicted all SCS scores, including external compensation items which offer a subjective account of financial return and promotions. In contrast, this predictive value

was absent in connection with all objective measures of CS. This variation in predictive value supports the definition of employability presented in chapter two “*an individual’s capacity and willingness to identify, and engage in opportunities to acquire and to keep an attractive job...*” and the understanding of what is perceived as an attractive job based on an individual’s goals, values, and interests, which are considered within self-management processes. This understanding of employability explains a context in which income, promotions, and unemployment periods may be seen as less than ideal within the context of possible promotions, income etc. offered to the population as a whole, but would be considered as reflecting adequate external compensation as measured by the SCS subscale. It is these subjective assessments of external compensation, which will take into account personal contexts and abilities, which are expected to be better aligned with employability involving personal negotiation processes.

Considering Positive Self-Evaluations as a strong predictor; this supports previous research presented as to the value placed on confidence related constructs (see section 2.3.7.8.). Similarly, this finding parallels qualitative accounts produced within the RGT study, in which Self-Awareness, Optimism, and Confidence were found to be relevant to conceptualisations of employability used in everyday assessments by stakeholders. Self-evaluations are representative of the outcomes of the management section of the framework, and thus prominent within the understanding of employability presented here. Additional significant predictors of SCS were identified for intrinsic fulfilment as Honesty, Age, and Sex.

Current findings related to Honesty’s predictive power towards OCS do not appear to support research emphasising the importance placed on honesty and integrity by employers (Archer & Davison, 2008; Chavan & Surve, 2014). Nevertheless, the impact of honesty on intrinsic fulfilment could support the propositions of signalling theory and other theories such as Heijden and Van Der Heijden (2006) which emphasis balance between employer and employee needs and interests, and the strive for organisation-person fit. This finding may illustrate the interdependence of employers and employees in getting this fit right. This reinforces the practice of teaching staff placing importance on this element (Buntat et al., 2013).

The best predictor of OCS was Age (a significant predictor for all OSC variables, except unemployment periods). This was the sole significant predictor for current promotions. When expanding to consider all promotions across a life time, Sex and Signalling Fit were found to offer significant additional predictive power.

Age increases the opportunity for promotion to occur and so this finding is unsurprising. A further connection between Age and Income can be in part understood as contextual factor of increased minimum wage restrictions for differing age groups. Furthermore, it is expected that as age progresses, so will the breadth and depth of experiences, leading to progression along some pay scales. A connection between maturity and “Evidence-based practice”, “self-awareness”, “openness”, “professionalism”, “prioritising”, and “relevance to the job” categories within the RGT study, would further support the range of employability factors which are potentially associated with increases in age.

Moreover, sex differences in income and promotion across the lifetime may reflect different career developments for men and women. This “gender gap” has been well documented within the literature (Bishu & Alkadry, 2017; Chu & Linz, 2017; Jenkins & Finneman, 2018; Verniers & Vala, 2018; Wright, Baxter & Birkelund, 1995). Yet despite this Nabi (1999) states that investigations into sex differences in relation to employability skills is rare. When considering this sex variable, personal career goals must be taken into account. t-test results indicated a significantly higher rating of importance given to external compensation as a career success goal by men, compared to women. This result supports older previous research which suggests men value this outcome more highly (Powell & Mainiero, 1992; Sturges, 1999). This suggests that sex differences in career expectations may not be diminishing. This is not to discount the contribution of additional contextual factors in understanding this contrast.

Signalling Fit as significant predictor of promotions across the lifetime but not within current promotions may reflect the nature of a boundariless career in which moving across organisations is frequently utilised to gain promotions, while promotions within institutions may reflect the impact of automatic promotions and thus the decreased involvement of Signalling Fit procedures.

When considering the role of meta-strengths in predicting unemployment, Aesthetic Openness was the only strength to offer significant predictive power for this criterion variable. As these scores increased, the number of reported periods of unemployment

decreased. This finding contradicts that of Uysal and Pohlmeier (2011) who identified restrictions in the value of Openness as significant in the instances of female unemployment, and of those with migration history only. In comparison Sex was not identified as a significant predictive variable here. Furthermore, Uysal and Pohlmeier (2011) finding that Conscientiousness significantly predicted unemployment, was not replicated here. Variations in findings may result from the distinction between Uysal and Pohlmeier (2011) focus on unemployment duration, versus the present study's limit to exploring instances of unemployment of six months or longer. Other possible factors to consider are the variations observed in white and blue collar positions within this prior study, and the recruitment of a German sample.

It is also important to note the relatively narrow focus of the current Aesthetic Openness items. Openness items extracted through the initial validation process highlight an interest in artistic experience which informs an understanding of openness purely in terms of aesthetics, however, openness employed by Uysal and Pohlmeier (2011) included a consideration of action, feelings, and ideas, fantasy, and values facets of openness. This later expression of openness may better reflect openness as presented in the employability conceptualisations of Bridgstock (2009); De Grip et al. (2004); Fugate et al. (2004); and Kluytman and Ott (1999). Similarly, Openness as expressed within the RGT data i.e. openness to criticism and alternative practices, openness to alternative ideas actions and values, are not represented here. Having retained the full openness scale rather than reducing this scale based on FA results of the present study, may have elicited differing findings. However, Conscientiousness items reflect a much broader range of facets. Indeed, two subscales can be identified as reflecting aspects of conscientiousness (planning and conscientiousness subscale) both including items from the HEXACO original short form subscale.

The link between Verbal Communication and income indicates the value of this strength in articulating worth and potentially negotiating wage. However, this variable did not have significant predictive value in relation to unemployment. Communication skills were identified as a protective factor against unemployment by Kieselback (2003). They note self-esteem to function in a similar way; however, a lack of significance of PES for unemployment periods also disputes this. Likewise, Planning,

Communication, and Self-awareness were all linked by Amundson, (1994) to effective negotiation in gaining a job. Thus, this research fails to support the value of several factors identified within previous research as potentially important predictors of employment. This may be again be linked to the important distinction between OCS measures which reflect a relative employability measure, comparing success against the rest of the population, and SCS measures which offer an assessment grounded in personal expectations and aspirations.

Interestingly, reported periods of unemployment since reaching working age decreases with year of study. Further investigations found a significant negative relationship between age and reported periods of unemployment. This may reflect the retrospective nature of this question, combined with the requirement to only identify those periods of greater than six months. Therefore, unlike questions relating to promotion, a simple identification of instances is insufficient, the length of these instances also needs to be accurately recalled. This brings into question the validity of this criterion variable in informing the value of these predictive variables in understanding employment outcomes. While the model as a whole, Verbal Communication, and Openness specifically, show a significant ability to predict unemployment periods, this result may be biased as a result of the period of unemployment requested being too difficult to accurately recount.

Leaving aside unemployment periods, given these questions around the accuracy of these reports, Income was the only additional measure that appeared to be significantly predicted by student status, even after taking into account age variables. Income findings would likely reflect the lack of access to higher paid graduate level roles for students. Verbal Communication and Sensitivity to Others were identified as attributing further value to this prediction.

Another unusual finding from the present chapter was identified when considering meta-strength scores across study status. This investigation revealed an unexpected pattern. An expectation that scores would increase, or stay level across university years, as well as an expectation that scores would increase within graduate compared to student, or non-student samples, both assume that HE is developing these areas. Furthermore, given the self-report nature of this survey, the level of awareness one has around their skills needs to be considered. The progression of Consciousness around

competency, while attributed to a number of authors (including Geller, 2002; Howell, 1982; Robinson, 1974) reflects a common view of the progression from unconscious incompetence, where an individual is unaware of not possessing a strength, to conscious incompetence in which they become aware of this strength and lack of mastery in this area, followed by conscious competence where this strength is utilised but requires consciousness to engage with it, and finally to unconscious competence in which the strength can be applied without conscious thought. It is plausible that rather than reducing their competency in important areas during progression along a degree, a student's understanding of what it means, for example, to be competent, has impacted their response to "*I am filled with doubts about my competence*" (Positive Self Evaluation item) and would vary as they progress along a degree. The implications for self-reporting would be that self-reports of competence would not follow a linear path, parallel to actual competency.

Thus, a lack of evidence of these increases can be interpreted in three ways 1) support for the lack of test validity, 2) support for the lack of success in HE's development of important aspects of employability, 3) changes in perceptions of strengths as student's progress through university. The present data is inconclusive. Further research comparing self-reports and objective measures of skills across study levels would offer further insights into this circumstance.

7.4. Chapter Summary

The present chapter represents the last stage in the research presented within the thesis. This study aimed to explore the factor structure underlying the proposed measurement tool. The present results give support for the value of Positive Self-Evaluation as an assessor of employability related strength. Moderate support is given for the Verbal Communication, Openness, Conscientiousness, Signalling Fit, and Sensitivity to Other's scales.

Findings relating to SCS compared to OCS illustrate the understanding presented here of employability as a developer of personal meaning and aspirations. Furthermore, decreases in self-reported competency levels across study years suggests further research comparing self-reports to objective skills assessments is needed.

Chapter 8

Discussion

“Employability may be ill defined, but that doesn’t mean references to it are meaningless”

(Gazier, 1998, p.42)

8.1. Thesis Overview

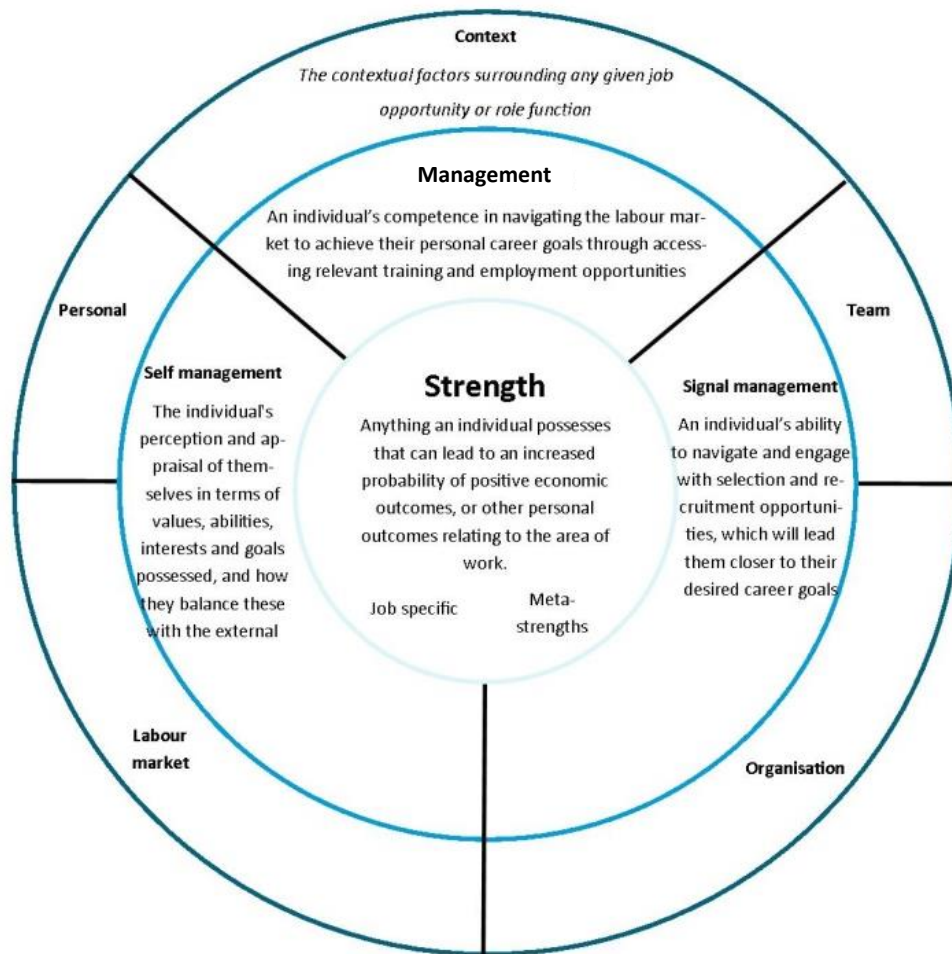
This thesis offers a timely and valuable contribution to both the literature and practical engagement of HEIs with employability development. The present chapter seeks to summarise the research carried out herein to answer the question of “*What is the current understanding surrounding factors making up the construct of employability?*”. It is argued here that the accumulation of data offered by these three consecutive research stages supports the definition of employability as:

“An individual’s capacity and willingness to identify, and engage in opportunities to acquire and to keep an attractive job within the context of changing organisational, societal, and personal demands, illustrated through the presentation of themselves as a compatible candidate”

The consideration of employability as comprised of three expanding circles of information, was formulated through a review of the literature (see chapter two), and supported through the acquirement of stakeholder’s experiences within the RGT study (see chapter four and five). Stage two concludes with support for the development of Positive Self-Evaluation, Openness, Verbal Communication, Signalling Fit, Honesty, and Sensitivity to others, as means of developing individual graduate’s employability. This development is bordered, by the framework, within a wider employability context which acknowledged individual development as a small but increasable contributor to employment outcomes. This framework is thus named the Strengths-Management-Context or SMC Employability Framework.

These conclusions will be illustrated with reference to preceding findings and considered in the context of existing literature. Limitations of the present research will be discussed and implications for the strength and accuracy of conclusions will be examined. Subsequently, the bearing of the presented theory on conceptual work and current working practices within HE will be posed, concluding with recommendations for further research.

Figure 8.1: The strength-management-context (SMC) employability framework



8.2. Stage One: Review of the Literature

Stage one offered an invaluable contribution to the employability literature and advancement of evidence-based practice within employability development. The aim of this initial review was to identify the prevailing responses to what employability equated to. In so doing this research asked, “What do current conceptualisations of employability, published within the academic sphere, see as the domain of employability?” This starting point aligned with a PCT approach to employability, in which the role of existing knowledge on the formulation of personal understandings is acknowledged (Kelly, 1955).

In considering employability development within HE, it is tempting to focus in on the issue of individual strengths, reflecting the skills agenda communicated within government policy. However, this approach fails to contextualise this understanding of

employability within the wider concept. Neglecting these contextual dimensions reflects a situation which West (2000) describes as “*in danger of becoming vacuous, without either academic credibility or vocational application*” (p.587). As such it is vulnerable to over-emphasising the value of skills development. The by-product of this approach is to appear to validate this narrow policy driven definition. Furthermore, such a narrow consideration of employability presents to prospective students a misleading picture of the contribution of HEIs to future employability. A point which is timely to consider given the increased demands placed on HEIs by the CMA regulations.

By separating out these various dimensions of employability the connections between the functioning of processes and a consideration of the strengths that underlie them, is neglected. Previous conceptualisations appear to overlook the role of the very strengths they emphasise, in the running of processes presented parallel to these, with the exception of Arthurs intelligent career framework which acknowledges the interconnected nature of knowing-how, knowing-whom, and knowing why. Other conceptualisations acknowledge the flow of these strengths into employability processes. For example, Dacre-Pool and Sewell (2007) feed “generic skills” and “degree subject knowledge understanding and skills” into “reflection and evaluation” processes. However, again the strengths required to successfully engage with this reflection process, or apply these reflections, are overlooked. Bridgstock (2009) argues we should consider the “*the abilities required to continuously recognise and capitalise on employment and training related opportunities and integrate these with other aspects of the individual’s life*” (p.34). The current investigation of meta-strengths expands beyond this request, to consider strengths involved in self-management as well as career-management processes. Such gaps in previous conceptualisations may reflect an implicit assumption on the part of the researcher as to the application of strength categories to the process. Nevertheless, it is argued that it is this area of employability which is most susceptible to interventions, and which will illustrate the largest gains in individual employability. Consequently, the present framework offers a valuable emphasis in its presentation of the concept of employability, which takes these connections and makes them the focus of development. This focus offers HEIs an invaluable stable and wide-reaching structural base for employability development.

Given the PCT stance taken to understand this phenomenon, it is accepted that frequent revision of the views held by employer will occur. Consequently, to enable this

continuous reconstruction repeat investigations would be needed to offer confidence in the sustained contribution of strengths outlined within this thesis. However, the partnership of these strengths with established views on employment processes offers protection from redundancy, in the absence of significant modifications to the employment context or applicant processes. If these signalling and self-management processes continue to be important in engaging in the world of work, these strengths, as a function of these processes, will also continue to be relevant to discussions of employability. Furthermore, while Suleman (2018) argues that the dominant focus on employability skills neglects economic and social processes affecting employability, the present list of strengths is both linked to negotiating processes between personal strengths and external demands, and is presented alongside this broader context of employability. In this sense, the combination of these two stages offers a more realistic picture of the role of the strengths outlined in stage two within the broader employability discussion.

Research identified within the review highlighted the lack of employer involvement in conceptual development. Moreover, Hogan et al. (2013) emphasised the reluctance of employers to utilise these academically construed frameworks, preferring to employ in-house knowledge. A claim supported when considering the empirical research of Francis-Smythe et al. (2013) into information sources utilised in senior managers evidence-based decision-making practices. This finding alongside concerns around the processes involved in the development of the reviewed conceptualisations illustrated the importance of further data collection from employers directly. This data collection allowed for an understanding of employability from a different perspective in the employability-employment process, and thus the relevance of the literature review framework within a practical context.

8.3. Stage Two: An Inductive Approach to Theory Development

The RG study outlined in chapters four and five again offered a unique contribution to the employability literature. This study represented the first identified application of RGT to the investigation of employability. In so doing, this study sidestepped issues of

bias and restriction in the surveying of employers via predetermined structures. Supplementing the academic perspective of stage one, this study explored employability as understood by those involved in awarding employment outcomes. This approach allowed for a consideration of a more detailed level of analysis, enabling the identification of sought-after strengths, through the comparison of individuals. A range of occupations were sampled to identify common threads in employers' interpretation of employability. This approach was aimed at preventing job-specific strengths becoming the focus. Instead, commonalities across occupations were expected to highlight the possible existence of strengths needed for the employability processes signalling and self-management.

Employers considered their experience, be it recalling signalling experiences utilised to distribute employment outcomes (recruitment, promotion), or day-to-day functioning reflecting aspects of employee fit, to communicate their understanding of employability. This allowed them to identify strengths and weaknesses attributed to the success of individual employees.

This study also aided the comparison of employer perspectives and the perspectives of those involved in employability development in HE (see chapter five). This comparison offered two benefits. Firstly, it was possible to consider the value of academically generated employability research (stage one) in understanding employability within an employers context, through a comparison of the degree of overlap in these two stakeholders' perceptions. Secondly, this research allowed for an initial evaluation of the current HE viewpoints in accurately informing employability development practices to meet the needs of employers. Despite dated requests for employers and instructors to work together (for example, Department of Business, Innovations, and Skills (DBIS) 2011, 2103), this study offered a rare and highly valuable source of comparative information; a point noted by reviewers of the manuscript submitted for publication.

The results of this study supported an understanding of employability as presented within Williams et al.'s (2016) employability framework. Aspects of self-management were communicated through discussions of professionalism, shared company values and passion. Similarly, signal-management was alluded to through reference to relevance to the job, preparation for interview, and signalling know-how. Moreover,

context was incorporated within these understandings through reference to adaptability, and categories of parental support, and distinctiveness.

This data continued to support the limited role of strengths in offering a full understanding of employability, and for the value of skills beyond those emphasised in current HE quality assurance. If this content is compared to the key skills emphasised within the infamous Dearing Report, there is an absence of constructs explicitly requesting numeracy or information technology, alongside a call for evidence-based practice, business awareness, strategic thinking and behaviour, optimism, professionalism, taking responsibility, interpersonal competence, adaptability, persistence, conscientiousness, openness, and emotional management, all of which were absent from the report. This situation highlights the breadth of employability development beyond those cited as key aims of HEIs' in 1997. This could reflect the development of employers' aspirations for graduates (Cremin, 2009) but is expected to imitate the lack of realistic conceptualisations of employability by Government reports encouraging HEI's responsibility for employability development. Categories of strengths produced from stage two; corresponds with existing skills lists to varying degrees (see sections 7.1.). Named strengths within existing employability conceptualisations, confidence (Dacre-Pool & Sewell, 2007; Knight & Yorke, 2004), communication skills, (Hillage & Pollard, 1998), self-awareness (Hillage & Pollard, 1998; Knight & Yorke, 2004), emotional intelligence, and cognitive ability (Fugate et al., 2004), and adaptability (Fugate et al., 2004; Heijden & Van Der Heijden 2006) are all present within the RGT study data. As a result, stage two offers a source of triangulation for these strengths as aspects of employability.

Furthermore, the importance of compromise between personal strengths and priorities, and external demands was highlighted within this data. This finding mirrored conclusions drawn by Hogan et al. (2013) in his description of employability as a socially desirable behaviour. Similarly, this supports Heijden and Van Der Heijden's (2006) emphasis on the components "corporate sense" and "balance". This pattern within the present data supported the pivotal role of the negotiating processes; self and signal-management.

Results presented within chapter five suggest that current practices in employability development may show areas of weaknesses around the development of interpersonal

competence. This finding is significant given the insular nature of learning within degrees. Striving to accomplish individual results has been suggested to undermine collaborative processes (Volkov & Volkov, 2007) with little incentive to address dysfunctional group processes as a result of outcome-based assessments. Furthermore, emphasis on the competitive job market further pushes this competitive element, reducing focus on learning communities which could lead to transformative learning (Mezirow, 1997; Newman, 1992).

8.4. Framework Modifications

In considering the value of the stage one framework in encapsulating these experiences, points of convergence and divergence between the understandings of employability presented within stage one and two lead to several modifications to the original framework (see table 5.4.). Capital was renamed as strengths, replacing categories of HC, CC, SC and psychological capital, with job specific- and meta-strength distinction. Furthermore, definitions of self-management and context were modified to reflect the negotiating processes of the management sphere, which expanded more broadly than career goals. Finally, a distinction between four contexts of employability assessment was introduced: 1) Personal circumstances, 2) Team context; 3) Organisational context, and 4) Labour market context.

Meta-strengths which were linked to signalling and/or self-management processes within the data were taken forward in stage three, to develop an appropriate measurement tool and evaluate their predictive value in relation to CS outcomes. These meta-strengths were:

1. Collaboration
2. Communication (later divided into Verbal and Written)
3. Confidence
4. Conscientiousness
5. Honesty
6. Openness
7. Optimism
8. Resilience

9. Sensitivity to Others
10. Self-Awareness
11. Staying Abreast of Information
12. Strategic Thinking
13. Taking Responsibility.

8.5. Stage Three: Initial Validation of a Self-Audit Tool

Stage three offered illuminating findings which supported several aspects of the proposed SMC framework.

Given the lack of a suitable existing measure to assess the range of strengths outlined in stage one and two, stage three began with the development of a measurement tool. Where no adequate existing measure existed for a given strength, items were developed via the RG constructs elicited from stage two. These items underwent quality assessments, SME review, and cognitive interview processes. This stage reflects the third stage in Harvey's (2001) outline of the operationalisation process in which he reports employability measures have been known to violate, namely classify a scope of indicators for each aspect of employability.

Following administration, responses underwent an EFA to investigate the factors underlying responses on these various scales. This process resulted in the naming of 10 factors underlying these competency subscales: Positive Self-Evaluations, Signalling Fit, Verbal Communication, Planning, Honesty, Openness, Resilience, Working Cooperatively, Conscientiousness and Sensitivity to others. These factors reflected the original factor list well.

A consideration of differences in strength scores across study status (undergraduates, graduates, those who had never studied at HE) found a common decrease in scores at year two of an undergraduate degree. It is possible that this reduction represents an increased understanding around these strengths. With HE bringing together those of higher academic success, the range of abilities experienced by this year is likely wider than that experienced prior to university, and thus personal evaluations could compensate for this new information. Another explanation for the year-on-year decrease in some of these scores is the conscious awareness, or otherwise, of possessing

strengths. It must also be acknowledged that these findings reflect a cross-sectional, rather than a longitudinal design, and therefore variations across years could also reflect cohort effects. These issues reinforce previous discussions of shortfalls in self-reporting connected to perceived employability within section 2.3.7.10.

A comparison of the predictive power for OCS and SCS illustrate the unique contribution that considering personal career goals can have on highlighting important aspects of employability. If restricted to OCS measures, the value of Positive Self-Evaluation's would have gone unseen, as would Honesty.

8.6. Reflections on Potential Limitations of the Research

It is necessary that the potential limitations and weaknesses of these studies are acknowledged and their relative importance for the interpretation of the results, and validity of the findings, are considered.

Investigations into the value of the initial employability audit tool have been evaluated solely in terms of their relationships with employability associated variables, OCS, SCS. The present research does not offer comparisons between these subscales and existing measures or criteria of these strengths. For instance, scores on the Strategic Thinking subscale were not compared to scores on existing scales or criteria also expected to reflect Strategic Thinking. This is of little consequence for the interpretation of existing validated scales which have undergone additional investigations by successive researchers. However, this does raise concerns around the degree to which newly established subscales reflect the meta-strengths they are purported to, independent of their status as employability strengths.

The absence of concurrent validity checks for these subscales reflected, in part, the desire to first evaluate any overlap amongst subscales. Such overlap would have indicated the appropriateness of restructuring these items, thus making planned parallel assessments potentially irrelevant. Furthermore, the length of the process participants engaged with was identified as a potential source of bias. The existing scales took approximately 22 minutes to complete. While this has been identified as an appropriate expectation (Kline, 1995), this guideline for participation length is provided in the absence of considering the degree of involvement needed in a task. Stage three required

individuals to utilise their existing understanding of themselves in various situations, with potentially contradictory outcomes, to direct a behavioural response to the question (to select a relevant number to encapsulate this). This process may have involved comparing themselves to others so to provide a frame of reference. Repetition of this process across up to 144 items is expected to have strained focus. This may explain the large number of incomplete submissions, and low reuptake for retest purposes.

Furthermore, the demand placed on participants by this task is expected to impact the accuracy of results. While attention items were utilised to identify unreliable respondents, it is not known to what degree improvements in error rates for these items reflect general attentiveness. This concern is indeed important to note. While EFA item loadings suggest that item scoring reflected anticipated patterns, it is plausible that the clarity of these item scores as an indicator of the latent variables is challenged. The presentation of this stage of research as an initial validation emphasises the need for future testing. As such conclusions are presented as preliminary. Results offer an abbreviated scale for the basis of future investigations. In a similar vein, the postulation that these strengths underlay signal and self-management processes, requires testing.

While not the intended purpose of the present research, it is also noteworthy that this data represents “being employed” rather than a consideration of what is required to successfully set-up a business from the ground. Alongside the supposed dilution of traditional university values from a hub of advanced knowledge development, to a consideration of its role in enhancing student’s capital gains, there has also been a drive to promote entrepreneurship amongst students (Etzkowitz, Webster, Gebhardt, & Terra, 2000). Such entrepreneurs, rather than undergoing a recruitment process, will require the strengths necessary to engage in an alternative context. In the absence of further research, the extent to which this framework can be transferred to this new context is unclear.

These limitations do not detract from the development of knowledge around the nature of employability, but rather emphasise areas for future research which will further illuminate the area of study. Further study will offer a wider context to the present findings.

8.7. Contributions to Theory

The thesis incorporates several unique and valuable contributions to the employability knowledge base. Stage one presents an ambitious review of an expanding literature base, bringing together a broad range of literature in the area of employability. An extensive range of conceptual themes are engaged with and synthesised into a valuable map of employability perspectives. The perceived value of the systematic review which formed the basis of the stage one presentation, is illustrated in its publication within *Journal of Education and Work*, 1717 views recorded by the publishers site, and its subsequent citation within 23 articles since its publication in 2016 (figure correct at time of writing, 22/05/18). This review was the first systematic review of employability conceptualisations and has informed discussions of how employability is defined within a review of the literature conducted by the HEA (Artess et al., 2017) and in other research reports, such as that conducted by the National Centre for Vocational Education Research in Australia (Guenther et al., 2017), with conclusions appearing to strike cords with employability researchers internationally (Botha & Coetzee, 2017; Bron, 2017). The capital dimension of the paper was taken forward in research into learning outcomes by Caspersen, Smeby, and Aamodt (2017), informing considerations of employability-related support in STEM subjects (O’Leary, 2016), international capital of refugees (Eggenhofer-Rehart et al., 2018) and interpretations of research results of those exploring employability within Australian marketing graduates (McArthur, Kubacki, Pang, & Alcaraz, 2017). The manuscript has further contributed to the rationale of research into youth employability (Mann & Huddleston, 2017) and led to an invitation to speak at the 4th International Conference on Employer Engagement in Education, held in London in 2017. It is expected that this review will continue to offer a valuable contribution to research for the foreseeable future, contributing to the theoretical landscape of employability by offering a starting point for the incorporation of additional literature to the issue of employability. Drawing in this peripheral literature will allow for further expansion of our understanding.

Through a synthesis of these existing conceptualisations, stage one offers a framework of employability which can be agreed upon by a variety of stakeholders taking different approaches to the consideration of employability. Therefore, while individual differences in approach would still exist, the SMC Employability Framework

contextualises them within a wider framework for which previous research can be understood. As such, this study allows for a regrouping of divergent investigations and consideration of dormant areas of research, providing direction for future research.

Stage two presents a new perspective to the issue of employability, offering the first use of RGT, and indeed, the first acknowledged investigation of employability from the standpoint of PCT, although connections between developments in the area of ST and PCT can be made. The research offers new insights in relation to the comparison between employers and HE instructors, which can help explain some of the disappointment expressed at graduate readiness for the world of work. Implicit theories are important in explaining divergence in views that impact behaviours and outcomes. Applying implicit theories to the employability field, as done within stage two, provides interesting findings around the driving forces behind employability outcomes.

Since this investigation, the methodological approach has been published as a case study of repertory grid technique as part of the Sage research methods collection, offering experience to those interested in further considering the contribution of RGT.

The value of stage two has been endorsed through the acceptance of conference presentations at the British Psychological Society's Division of Occupational Psychology Conference 2017, and the Division of Academics and Researchers in Psychology Inaugural Conference 2018, as well as the 5th International Conference on Employer Engagement and Training. Stage two has also been submitted to the Education + Training Journal - Emerald Group; the author is currently awaiting a decision following minor amendments.

The SMC Employability Framework itself can be described as providing a valuable and evidence-based identification of the nature of employability, helping to explain seemingly contradictory employment outcomes, such as those outlined in chapter two. This framework offers testable concepts, with clear definitions, in a parsimonious fashion. Such a model offers value in generating prediction around the outcomes of behaviours. Furthermore, with the existence of multiple employability theories, and wider academic theories which can inform aspects of employability, this framework attempts to encourage theoretical ecumenicalism, that is, research directions which

promote cooperation and better understanding among different denominations, or in this case theories and disciplines.

Finally, stage three addresses calls from the likes of Harvey (2001) and Clarke (2008) to reintroduce employability theory and a concrete conceptualisation of employability, to the foundations of employability measures. Although yet to be presented or published in full, the initial findings of stage three were accepted as a poster submission for the European Association of Work and Organisational Psychology Conference 2017. Furthermore, at the 2017 Psychology Postgraduate Research Day, it was awarded the final-year prize for best presentation. Such endorsements support the value of these studies within the current research climate. Plans are currently in place to publish a number of aspects of this study, including a consideration of current students CS aspirations, and the development of the scale itself.

8.8. Implications for Practice

The products of this thesis offer numerous practical implications. First and foremost, this research adds to the ever-growing voice for employer engagement in curriculum design (Quality Assurance Agency (QAA), 2014; Wilson, 2012). The constantly evolving nature of employers knowledge, and thus their developing expectations for potential employees, feeds into the need for continuity in this involvement, with employers input facilitating the continued appropriateness of content aimed at offering a route into specialist careers. In the absence of these specific career targets, the path for employability development is less clear. The SMC Employability Framework allows for a more stable understanding of employability development, which is anticipated to enhance employment outcomes in any areas of work and present a more durable target. As such, this framework offers potential value to those degrees which offer a diversity of employment directions. It also provides a common basis on which more widespread institutional, faculty, or department-based employability strategies can focus.

The SMC Employability Framework can be utilised to inform the focus of employability development initiatives within HE. The framework provides a source of guidance for curriculum mapping and quality assurance assessments. The implementation of this framework for such a purpose has already commenced within

the Psychology subject area at Newman University. An employability strategy informed by the present research considers the development of Signalling and Self-management processes both within and outside of module content. This strategy presents a practical impact of this thesis for undergraduate psychology students on ten programmes of study. This strategy received a commendation by the validation panel and has been cited as an area of good practice which it is hoped will be spread more widely across the institution. A publication outlining the employability framework itself, alongside a case study of its integration within Newman University Psychology subject area, is currently in preparation. It is expected that such dissemination will offer a template for integration of the framework within other HEIs, and indeed educational establishments in general.

There is also practical value to the SMC Employability Framework through its use as a structure for informing students about employability. Dacre-Pool and Sewell (2007) argued for the provision of a *“straightforward, practical model of employability that will allow the concept to be explained easily and that can be used as a framework for working with students to develop their employability”* (p.277). They contend that the unweildy nature of some previous employability conceptualisations act as a barrier to student engagement with employability. This critique emphasises the perceived practical value of a student-accessible conceptualisation. The present thesis offers such a model. Having been discussed with undergraduate students at various levels, and within a range of subject areas, through dissemination within a common work placement module, anecdotal evidence supports the clarity and utility of this framework for students. Such clarity results from the emphasis on two clear employability processes through which to direct employability development. Furthermore, this is achieved while maintaining a realistic consideration of the impact of contextual factors. Thus, the SMC Employability Framework is parsimonious, without being reductionist.

The increased onus on individuals to develop their employability has been identified as having negative implications for individuals' health (Berntson & Marklund, 2007; Moreu & Leathwood, 2006). This is said to result from the personalising of employability failure. Given findings within stage three, such an internalising of past failures is a significant concern for future presentation of employability. The presentation of employability offered by the SMC Employability Framework positions the role of the individual within the wider context of employability. This approach

means that when used as a basis to inform students, it is possible to inform students of areas in need of development, while allowing for the reframing of previous failures to attain employment in a manner that enhances self-efficacy. This would suggest that in addition to the direct focus on developing Positive Self-Evaluations, the formal acknowledgement of contextual aspects when discussing the nature of employability through this framework, may play a role in enhancing employability related outcomes.

Thus far, practical benefits have been discussed in the context of HE employability development; however, the same arguments can be made for employer action. While Tomlinson (2012) presents an interpretation of the emphasis on HEIs as responsible for employability development as “*considerable government faith in the role of HE*” (Tomlinson, 2012, p.408), alternative, perhaps more cynical perspectives, might argue that HE is being offered as a scapegoat for employers investment in much needed training programmes for their new employees (Bolden, Connor, Duquemin, Hirsh, & Petrov, 2009; Petrove, Southall, & Boldeb, 2016; Stinton, 2007; Wilson, 2012). Taking this perspective, the provided framework could also be utilised by employers as a means of developing their new recruits. Indeed, Atkins (1999) points out the role of HE as an employer, and a developer of “cutting edge thinking”, which could lead to developments within the workplace if this framework were to be utilised as both outward and inward facing.

As a final point, those involved in employability development and the advertisement of employability outcomes have, if not a moral responsibility, a legal responsibility (CMA, 2015) to offer accurate and informed information around HEIs’ contribution to these targets. Therefore, it is important that the narrow role which skills development can play on employment outcomes is emphasised to potential and current students. Indeed, stage three offers the beginnings of research that could offer more valuable information regarding learning gains, reflecting a new approach to educational outcomes within the UK. This approach would give a clearer indication of the progression achieved by students within individual institutions. While it is acknowledged that this focus is unlikely to replace the dominant employment outcome narrative which surrounds university advertisement, this context could be communicated within open day events, to position this issue within the wider benefits of the university. Furthermore, learning gains information could offer a local address of employability development guidance

for prospective students. As such this framework offers a timely contribution to HE practices.

8.9. Future Research Directions

As with all research, these inquiries produce more questions than answers. Here, the dominant areas of further investigation uncovered by these studies are now presented. In presenting these avenues, further support for the heuristic value of this thesis as stimulation for future research, is also offered.

Firstly, the SMC Employability Framework would suggest that future research may explore the link between these strengths and evidence of the signalling- and self-management processes, for example, exploring the predictive value of the strengths list against frequency of engagement in, successful job searches. Furthermore, additional research is needed to understand what important aspects of context best predict employment outcomes. This could allow skills developments to be situated within these contexts to better predict the relative value they offer. It is predicted that when controlling for certain contextual aspects, the development of these skills will present a much larger and more significant role in remaining employment outcome variations.

In addition, subsequent research is underway to explore differences between employers and instructors' perceptions of valuable strengths, through the presentation of the complete strengths list produced from stage two. Conversely, qualitative investigations are planned to explore instructors' perceived role in students' interpersonal development. It is expected that this research will provide valuable context to the finding within stage two, that employers emphasise the role of interpersonal competence to a much greater extent than do instructors.

Moreover, further research is required to compare the reduced scale produced in stage three, with that of measures expected to indicate the strength presented. Again, this further research will add insights into the results presented within stage three.

Investigations into research methodology, including the value of attention traps as predictors of generalised attention, and further investigations into interventions which

can enhance attentiveness during the completion of lengthy experimental procedures are also of interest.

Lastly, it is acknowledged that this research focuses on a single arena in which universities are expected to develop employability, and individual graduate's skills development. This is not to say that through the partnership of universities and businesses, that further advances in employability outcomes could not occur. For instance, West (2000) outlines five ways in which HE impacts the labour market: 1) as an employer; 2) as a creator of research and development; 3) through the development of students; 4) through pairing of university courses and organisations for delivery of training for specific occupations; 5) as a screening device which informs employers of candidate abilities. Further research into the contribution of universities to enhancing employment outcomes, could explore such diverse topics as the evidence-based progression of application processes and selection processes, the enhancement of SC through business partnerships, in-house training, and so on.

In summary, the present research offers a timely and valuable contribution to both theory and practice. In its pursuit of a realistic address of the question what employability is and what HEIs can do to develop it, this study provides valuable resources to employers, instructors, policy makers, and students alike. The use of original approaches to tackle this question should provide a lasting contribution to the employability literature and raise important questions around HEI's most appropriate actions.

8.10. Personal Reflections

The completion of this PhD has been a long journey, commencing in 2010 prior to employment as a lecturer in Psychology. This research topic was born out of dissatisfaction with the starting point of an evaluation project for a local university's employability award. Aware of my career aspirations to become a lecturer I was concerned with my lack of clarity around what employability was, and how employability was developed. As noted by Dacre-Pool and Sewell (2007). I was similarly overwhelmed by the more complex background to the initially straightforward conceptualisation of USEM (Knight & Yorke, 2004), but felt a structure was needed on

which to hang the employability activities I would be expected to engage in. Each stage of the research offered new insights into the nature of the topic, as well as an understanding of me as a researcher and academic.

Stage one allowed me to develop new skills in the area of literature reviewing and ultimately highlighted the lack of agreement and forward motion in addressing concerns around how universities were understanding employability. Key papers by Heijde & Van Der Heijden, (2006), Bridgstock (2009) and Hogan et al. (2013) while frequently disregarded from reviews of employability conceptualisations, even today (see Small et al., 2018) despite having referenced Williams et al.'s (2016) (see Whitton, 2017), reflected significant steps forward in my own understanding of employability. In their reference to balance and meta-skills, these researchers gave direction to this research. Initially I felt that skills-related models should be my focus of investigation, reflecting an initial narrative review conducted in 2011, which I was at the time, confident was comprehensive. Upon commencing and completing the systematic review, I have gained an increased respect for the value and place of such reviews within research and evidence-based practice. This process also highlighted to me the importance of transparency in research accounts.

Stage two held the daunting task of interviewing individuals who had opinions of both the value of individuals (as part of a recruitment role) and the value of HE's role (as part of their position as graduate recruiters). This process, particularly when engaging with a new interviewing technique, led to a steep learning curve in presenting myself as a confident researcher. The value of discourse with others, in considering alternative explanations, and the importance of openness within this discourse, was reaffirmed by this lengthy analytical procedure.

Finally, step three offered an opportunity to explore more quantitative approaches. Particularly insightful was the balance between theoretical and purely mathematical interpretations of statistical analyses.

The period of eight years between commencing this degree and today has involved a number of personal journeys which I have had to balance alongside my work and study. In 2013 I took leave from my studies, as a result of acute stress and an episode of depression. This period in my life taught me that working continuously, while addressing work and study commitments, was not beneficial for my health. I had to

discover who I was outside of completing deadlines. Later in 2014 I again took a leave of absence to have my child. I have since had the double guilt associated with absence from work, and absence from my child, that I imagine all working parents have. These two events have had a significant impact on the way I work. While, by all accounts, I now work less hours than I used to, making time for mindfulness, exercise, and family and personal time, the time I do spend is considerably more productive and focused. I can't say I truly understand how I have managed to achieve this balance, or what I was doing with my time before I had a child! However, I feel that alongside my studies, and experience at work, I have developed a better understanding of what is important to me, and how to place study and work, within the wider context of my life.

When considering what I will take away from this experience into my future career I can note an array of research directions to pursue, a new role as employability coordinator at Newman, and an appreciation for life outside of my career! I have learnt when to take a break, how to remove myself from stress, and that when all is said and done, I am fortunate to be in a job which feels more like a hobby than work.

References

- Aghion, P., & Williamson, J. G. (1998). *Growth, inequality, and globalization: theory, history, and policy*. London: Cambridge University Press.
- Alós, R., Esteban, F., Jódar, P., & Miguélez, F. (2015). Effects of prison work programmes on the employability of ex-prisoners. *European Journal of Criminology*, 12(1), 35-50. <https://doi.org/10.1177/1477370814538776>
- Amundson, N. E. (1994). Negotiating identity during unemployment. *Journal of Employment Counseling*, 31(3), 98-104. <https://doi.org/10.1002/j.2161-1920.1994.tb00178.x>
- Anderson, N. (1990). Repertory grid technique in employee selection. *Personnel Review*, 19(3), 9-15.
- Anderson, R. T. (2016). University fees in historical perspective. History & Policy. Retrieved from <http://www.historyandpolicy.org/policy-papers/papers/university-fees-in-historical-perspective>
- Andrews, J., & Higson, H. (2008). Graduate employability, ‘soft skills’ versus ‘hard’ business knowledge: a European study, *Higher Education in Europe*, 33 (4), 411-422. <https://doi.org/10.1080/03797720802522627>
- Archer, W. & Davison, J. (2008). *Graduate Employability: The Views of Employers*, The Council for Industry and Higher Education: London.
- Artess, J., Mellors-Bourne, R., & Hooley, T. (2017). *Employability: A review of the literature 2012-2016*. York: Higher Education Academy
- Arthur, M. B. (1994). The boundaryless career: A new perspective for organizations inquiry, *Journal of Organizational Behaviour*, 15(4), 295-306. doi: 10.1002/job.4030150403
- Arthur, M. B., Claman, P. H., & DeFillippi, R. J. (1995). Intelligent enterprise, intelligent careers. *The Academy of Management Executive*, 9(4), 7-20. doi: 10.5465/AME.1995.9512032185
- Arthure, M.B. & Rousseau, D. M. (2006). *The Boundaryless career: A new employment principle for a new organizational era*. Oxford: Oxford University Press.
- Ashford, S. J., & Taylor, M. S. (1990). Adaptation to work transitions: An integrative approach. *Research in personnel and human resources management*, 8, 1-39.

- Ashton, D. (2011). Media work and the creative industries: identity work, professionalism and employability, *Education + Training*, 53 (6), 546-560. <https://doi.org/10.1108/00400911111159494>
- Ashton, M. C., & Lee, K. (2009). The HEXACO–60: A short measure of the major dimensions of personality. *Journal of personality assessment*, 91(4), 340-345.
- Association of Graduate Recruiters (AGR) (2016). The AGR 2016 Annual Survey. Retrieved from <http://www.justoncampus.co.uk/wp-content/uploads/2016-AGR-Annual-Survey-2.pdf>
- Atkins, M. J. (1999). Oven-ready and self-basting: taking stock of employability skills. *Teaching in Higher Education*, 4(2), 267-280. <https://doi.org/10.1080/1356251990040208>
- Avey, J. B., Reichard R., Luthans F., & Mhatre K. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors and performance. *Human Resource Development Quarterly*, 22(2), 127-152. doi: 10.1002/hrdq.20070
- Ayoubi, R. M., Alzarif, K., & Khalifa, B. (2017). The employability skills of business graduates in Syria: do policymakers and employers speak the same language?. *Education+ Training*, 59(1), 61-75. <https://doi.org/10.1108/ET-10-2015-0094>
- Bailly, F. (2008). The role of employers' beliefs in the evaluation of educational output. *Journal of SocioEconomics*, 37(3), 959–968 <https://doi.org/10.1016/j.socec.2006.12.083>
- Baker, D. (2015). Mass Higher Education and the super research university. *International Higher Education*, 49(1). 9-10. <https://doi.org/10.6017/ihe.2007.49.7991>
- Baker, C., Loughren, E. A., Dickson, T., Goudas, M., Crone, D., Kudlacek, M., ...Tassell, R. (2017). Sports graduate capabilities and competencies: a comparison of graduate and employer perceptions in six EU countries. *European Journal for Sport and Society*, 14 (2), 95-116. <https://doi.org/10.1080/16138171.2017.1318105>
- Ball, L. (2003). Future directions for employability research in the creative industries, Retrieved from www.adm.heacademy.ac.uk/resources/resources-by-topic/employability/future-directionsfor-employability-research-in-the-creative-industries.

- Barbuto, J. E., & Burbach, M. E. (2006). The emotional intelligence of transformational leaders: A field study of elected officials. *The Journal of social psychology, 146*(1), 51-64. <http://dx.doi.org/10.3200/SOCP.146.1.51-64>
- Barczak, G., Lassk, F., & Mulki, J. (2010). Antecedents of team creativity: An examination of team emotional intelligence, team trust and collaborative culture. *Creativity and Innovation Management, 19*(4), 332-345. doi: 10.1111/j.1467-8691.2010.00574.x
- Barnett, R. (1994). *The limits of competence: knowledge, higher education and society*. Bristol: Open University Press.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*(1), 1 – 26.
- Baruch, Y. (2014). The development and validation of a measure for protean career orientation. *The International Journal of Human Resource Management, 25*(19), 2702-2723. <https://doi.org/10.1080/09585192.2014.896389>
- Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behaviour. *Journal of Organizational Behaviour, 14* (2), 103-118. doi: 10.1002/job.4030140202
- Bathmaker, A. M., Ingram, N., & Waller, R. (2013). Higher Education, social class and the mobilisation of capitals: Recognising and playing the game. *British Journal of Sociology of Education, 34*(5-6), 723-743. <http://dx.doi.org/10.1080/01425692.2013.816041>
- BBC (2017, March 14). Graduates aren't skilled enough, say employers. Retrieved from <http://www.bbc.co.uk/newsbeat/article/39268144/graduates-arent-skilled-enough-say-employers>
- Becker, G. S. (1962). Investment in human capital: A theoretical analysis. *Journal of Political Economy, 70*(5:2), 9-49. <https://doi.org/10.1086/258724>
- Bennich-Björkman, L. (1997). *Organising Innovative Research: The Inner Life of University Departments*. New York: Pergamon.
- Berntson, E., & Marklund, S. (2007). The relationship between perceived employability and subsequent health. *Work & Stress, 21*(3), 279-292. <https://doi.org/10.1080/02678370701659215>

- Bhaerman, R., & Spill, R. (1988). A dialogue on employability skills: how can they be taught?, *Journal of Career Development*, 15(1), 41-52. <https://doi.org/10.1177/089484538801500105>
- Bishu, S. G., & Alkadry, M. G. (2017). A systematic review of the gender pay gap and factors that predict it. *Administration & Society*, 49(1), 65-104. <https://doi.org/10.1177/0095399716636928>
- Blair, J., Czaja, R. F., & Blair, E. A. (2013). *Designing surveys: A guide to decisions and procedures*. London: Sage Publications.
- Block, R. A., Hancock, P. A., & Zakay, D. (2010). How cognitive load affects duration judgments: A meta-analytic review. *Acta psychologica*, 134(3), 330-343. doi:10.1016/j.actpsy.2010.03.006
- Blundell, J., Wittkowski, A., Wieck, A., & Hare, D. J. (2012). Using the repertory grid technique to examine nursing staff's construal of mothers with mental health problems. *Clinical psychology & psychotherapy*, 19(3), 260-269. <https://doi.org/10.1002/cpp.747>
- Bolden, R., Connor, H., Duquemin, A., Hirsh, W., & Petrov, G. (2009). *Employer engagement with higher education: defining, sustaining and supporting higher skills provision*. Retrieved from: <https://ore.exeter.ac.uk/repository/handle/10036/79653>
- Bono, J.F. E., & Judge, T. A. (2003). Core self-evaluations: A review of the trait and its role in job satisfaction and job performance. *European Journal of Personality*, 17(S1) s5-s18. doi 10.1002/per.481
- Botha, J. A., & Coetzee, M. (2017). The significance of employee biographics in explaining employability attributes. *South African Journal of Economic and Management Sciences*, 20(1), 9-12. <https://doi.org/10.4102/sajems.v20i1.1636>
- Bourdieu, P. (2011). The forms of capital. (1986). *Cultural theory: An anthology*, 1, 81-93.
- Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. London: Sage Publications.
- Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, 5(1), 88-103. doi: 10.1111/j.1751-9004.2010.00334.x

- Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31-44. <http://dx.doi.org/10.1080/07294360802444347>
- Briner, R. B., Denyer, D., & Rousseau, D. M. (2009). Evidence-based management: concept clean up time? *Academy of Management Perspectives*, 23, 19-32.
- Briscoe, J. P., Hall, D. T., & DeMuth, R. L. F. (2006). Protean and boundaryless careers: An empirical exploration. *Journal of Vocational Behavior*, 69(1), 30-47. <https://doi.org/10.1016/j.jvb.2005.09.003>
- British Psychological Society (BPS) (2014). *Code of Human Research Ethics*. Retrieved from: <https://www.bps.org.uk/sites/bps.org.uk/files/Policy%20-%20Files/BPS%20Code%20of%20Human%20Research%20Ethics.pdf>
- Bron, C. T. A. (2017). Employability discourse and recruitment practices in Sweden-Consequences for non-traditional graduates. Retrieved from: http://conferences.au.dk/fileadmin/user_upload/ESREA-LBHN2017_Filer/Thunborg-Bron_employability_discourse_and_recruitment_practices_in_swedenabct0228.docx
- Brown, P., Hesketh, A., & Williams, S. (2003). Employability in a knowledge-driven economy. *Journal of Education and Work*, 16(2), 107-126. <http://dx.doi.org/10.1080/1363908032000070648>
- Brown, P., Hesketh, A., & Williams, S. (2004). *The mismanagement of talent: Employability and jobs in the knowledge economy*. Oxford: Oxford University Press.
- Browne, J. (2010). Higher Education funding and student finance. Department for Business, Innovation & Skills (BIS) Retrieved from <https://www.gov.uk/government/publications/the-browne-report-higher-education-funding-and-student-finance>
- Buck, L. L. & Barrick, R. K. (1987). They're trained, but are they employable?, *Vocational Education Journal*, 62 (5), pp.29-31.
- Buntat, Y., Jabor, M. K., Saud, M. S., Mansor, S. M. S. S., & Mustaffa, N. H. (2013). Employability skills element's: difference perspective between teaching staff

and employers industrial in Malaysia. *Procedia-Social and Behavioral Sciences*, 93, 1531-1535. <https://doi.org/10.1016/j.sbspro.2013.10.077>

- Burr, V., King, N., & Butt, T. (2014). Personal construct psychology methods for qualitative research. *International Journal of Social Research Methodology*, 17(4), 341-355. <https://doi.org/10.1080/13645579.2012.730702>
- Burt, R. S. (1997). The contingent value of social capital. *Administrative science quarterly*, 42(2), 339-365. doi: 10.2307/2393923
- Cable, D.M., & Judge, T.A. (1996). Person-organization fit, job choice decisions, and organizational entry, *Organizational Behavior and Human Decision Processes*, 67 (3), 294-311. <https://doi.org/10.1006/obhd.1996.0081>
- Cai, Y. (2013). Graduate employability: A conceptual framework for understanding employers' perceptions. *Higher Education*, 65(4), 457-469.
- Cain, J., Romanelli, F., & Smith, K. M. (2012). Academic entitlement in pharmacy education. *American journal of pharmaceutical education*, 76(10), Article 189. 1-8. <https://doi.org/10.5688/ajpe7610189>
- Campanelli, P. (2016). Multi-item Scale Development: Writing, Adapting and Assessing [training course information]. Retrieved from <http://www.ncrm.ac.uk/training/show.php?article=6262>
- Campanelli, P. C., Martin, E. A., & Rothgeb, J. M. (1991). The use of respondent and interviewer debriefing studies as a way to study response error in survey data. *The Statistician*, 253-264.
- Carr, F. (2017, July 11). A third of employers are unhappy with graduates' attitude to work. *The Telegraph*. Retrieved from <http://www.telegraph.co.uk/education/2017/07/11/third-employers-unhappy-graduates-attitude-work/>
- Caspersen, J., Smeby, J. C., & Aamodt, O. P. (2017). Measuring learning outcomes. *European Journal of Education*, 52(1), 20-30. <https://doi.org/10.1111/ejed.12205>
- CBI and Pearsons Education (2016) The Right Combination: CBI/Pearson Education and Skills Survey 2016 retrieved from <http://www.cbi.org.uk/cbi-prod/assets/File/pdf/cbi-education-and-skills-survey2016.pdf>
- Chan, D., Schmitt, N., DeShon, R. P., Clause, C. S., & Delbridge, K. (1997). Reactions to cognitive ability tests: The relationships between race, test

- performance, face validity perceptions, and test-taking motivation. *Journal Of Applied Psychology*, 82(2), 300-310. doi:10.1037/0021-9010.82.2.300
- Chavan, R. R., & Surve, A. Y. (2014). Assessing parameters of employability skills: an employers' perspective. *Asian Journal of Management Research*, 5(2), 254-260.
 - Chen, C. C., Choi, J., & Chi, S. C. (2002). Making justice sense of local-expatriate compensation disparity: Mitigation by local referents, ideological explanations, and interpersonal sensitivity in China-foreign joint ventures. *Academy of Management Journal*, 45(4), 807-817.
 - Chhinzer, N., & Russo, A. M. (2018). An exploration of employer perceptions of graduate student employability. *Education+ Training*, 60(1), 104-120. <https://doi.org/10.1108/ET-06-2016-0111>
 - Choi, B. Y., Park, H., Yang, E., Lee, S. K., Lee, Y., & Lee, S. M. (2012). Understanding career decision self-efficacy: A meta-analytic approach. *Journal of Career Development*, 39(5), 443-460. <https://doi.org/10.1177/0894845311398042>
 - Chomsky, N. (1975). *The logical structure of linguistic theory*. New York: Plenum press.
 - Chomsky, N. (1988). *Language and problems of knowledge: The Managua lectures* (Vol. 16). MIT press.
 - Christie, F. (2017). The reporting of university league table employability rankings: a critical review, *Journal of Education and Work*, 30(4), 403-418, doi: 10.1080/13639080.2016.1224821
 - Chu, Y-W, C., & Linz, S. (2017). Gender gap in upward mobility: what is the role of non-cognitive traits? *International Journal of Manpower*, 38 (6), 835-853. <https://doi.org/10.1108/IJM-12-2015-0220>
 - Clarke, M. (2008). Understanding and managing employability in changing career contexts. *Journal of European Industrial Training*, 32(4), 258-284. <https://doi.org/10.1108/03090590810871379>
 - Clarke, M. (2009). Plodders, pragmatists, visionaries and opportunists: career patterns and employability. *Career Development International*, 14(1), 8-28. <https://doi.org/10.1108/13620430910933556>
 - Clarke, M. (2017). Rethinking graduate employability: the role of capital, individual attributes and context. *Studies in Higher Education*, 1-15. <http://dx.doi.org/10.1080/03075079.2017.1294152>

- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94 (Supplement), S95–S120. <https://doi.org/10.1086/228943>
- Coleman, S., & Keep, E. (2001). *Background literature review for PIU project on workforce development*. Performance Improvement Unit, UK Cabinet Office, London.
- Collet, C., Hine, D., & du Plessis, K. (2015). Employability skills: perspectives from a knowledge-intensive industry. *Education + Training*, 57(5), 532-559. <https://doi.org/10.1108/ET-07-2014-0076>
- Collini, S. (2012). *What are Universities for?* London: Penguin.
- Competition and Markets Authority (CMA) (2015). CMA advises universities and students on consumer law, Retrieved from <https://www.gov.uk/government/news/cma-advises-universities-and-students-on-consumer-law>
- Confederation of British industry (CBI) (1999) Making Employability Work: An Agenda for Action. London: CBI
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39-67. doi: 10.1002/da.10113
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety*, 18(2), 76-82.
- Conrad, D., & Newberry, R. (2011). Business communication skills: Attitudes of human resource managers versus business educators. *American Communication Journal*, 13(1), 4-23.
- Converse, J., & Presser, S. (1986). *Survey questions: Handcrafting the standardized Questions*. London, England: Sage Publication.
- Costa, P. T., & McCrae, R. R. (1989). *NEO five-factor inventory (NEO-FFI)*. Odessa, FL: Psychological Assessment Resources.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical assessment, research & evaluation*, 10(7), 1-9.

- Cotton, K. (1993). *Developing Employability Skills*, Northwest Regional Educational Laboratory, Retrieved from www.nwrel.org/scpd/sirs/8/c015.html (accessed April 2005).
- Cotton, D., & Gresty, K. (2006). Reflecting on the think-aloud method for evaluating e-learning. *British Journal of Educational Technology*, 37(1), 45-54. <https://doi.org/10.1111/j.1467-8535.2005.00521.x>
- Couper, M., Tourangeau, R., Conrad, F., & Singer, E. (2006). Evaluating the effectiveness of visual analog scales: A web experiment, *Social Science Computer Review*, 24(2): 227-245. <https://doi.org/10.1177/0894439305281503>
- Cranmer, S. (2006). Enhancing graduate employability: best intentions and mixed outcomes. *Studies in Higher Education*, 31(2), 169-184. <https://doi.org/10.1080/03075070600572041>
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. London, England: Sage Publications.
- Cronbach, L. J. (1984). *Essentials of psychological testing* (4th ed.). Harper International Edition: Cambridge.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological bulletin*, 52(4), 281-302. <http://dx.doi.org/10.1037/h0040957>
- Crosswell, L. J. & Elliott, R. G. (2004, November). Committed teachers, passionate teachers: the dimension of passion associated with teacher commitment and engagement. Australian Association for Research in Education (AARE) Conference, Melbourne, Australia. Retrieved from <http://eprints.qut.edu.au/968/>.
- Czaja, R., & Blair, J. (2005). *Designing survey: A guide to decisions and procedures Undergraduate research methods and statistics in the social sciences*. New York, NY: Putnam.
- Dacre-Pool, L. D., & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education+ Training*, 49(4), 277-289. <https://doi.org/10.1108/00400910710754435>
- Daniels, J., D'Andrea, M., & Gaughen, K. J. (1998). Testing the validity and reliability of the Perceived Employability Scale (PES) among a culturally diverse population. *Journal of Employment Counseling*, 35(3), 114-123. doi: 10.1002/j.2161-1920.1998.tb00993.x

- Davis, C., Buckley, T., Hogarth, T., & Shackleton, R. (2000). *Employers skills survey case study—engineering*. DfEE, London.
- Davies, L. (2000). Why kick the ‘L’ out of ‘Learning’? The development of students’ employability skills through part-time working, *Education + Training*, 42(8), 436-44. <https://doi.org/10.1108/00400910010379961>
- De Grip, A. J., Van Loo, J., & Sanders, J. (2004). The Industry Employability Index: Taking account of supply and demand characteristics. *International Labour Review*, 143(3), 211 -233. doi: 10.1111/j.1564-913X.2004.tb00269.x
- De la Harpe, B., Radloff, A., & Wyber, J. (2000). Quality and generic (professional) skills, *Quality in Higher Education*, 6(3), 231-243.
- De Vos, A., & Dries, N. (2013). Applying a talent management lens to career management: The role of human capital composition and continuity. *The International Journal of Human Resource Management*, 24(9), 1816-1831. <http://dx.doi.org/10.1080/09585192.2013.777537>
- Dearing, R. (1997). *Higher Education in the Learning Society*. Report of the National Committee of Inquiry into Higher Education. HMSO, Norwich.
- Denham, J. (2013, September 13) Graduates unprepared for employment, *The Independent*, Retrieved from <http://www.independent.co.uk/student/graduates-unprepared-for-employment-8814643.html>
- Department for Business, Innovation & Skills (BIS). (2016) High education: success as a knowledge economy. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/523546/bis-16-265-success-as-a-knowledge-economy-web.pdf
- Derr, C. B., & Laurent, A. (1989). The Internal and External Career: a theoretical and cross cultural perspective. In M. B. Arthur, D. T. Hall & B. S. Lawrence (Eds.), *Handbook of career theory* (pp.454-471). Cambridge: Cambridge University Press.
- Deshmukh, A. K., & Mohan, A. (2016). What Better Defines Demand Chain Management: A Q-Sort Technique Based Perspective. *PRIMA: Practices & Research in Marketing*, 7(1/2), 8-24.
- DeVellis, R. F. (2016). *Scale Development: Theory and Applications* (2nd ed.). Thousand Oaks, CA: Sage.
- Dick, P., & Jankowicz, D. (2001). A social constructionist account of police culture and its influence on the representation and progression of female officers: A

- repertory grid analysis in a UK police force. *Policing: An International Journal of Police Strategies & Management*, 24(2), 181-199. <https://doi.org/10.1108/13639510110390936>
- Donald, W. E. D. W. (2017). *Students' perceptions of graduate employability: a sequential explanatory approach* (Doctoral Thesis, University of Southampton). Retrieved from <https://eprints.soton.ac.uk/415935/>
 - Doyle, A. (2012). *Temporal Intelligence in Leadership: The Conceptualisation and Evaluation of Temporal Individual Differences among Leaders*. (PhD thesis, University of Worcester). Retrieved from <https://eprints.worc.ac.uk/2339/>
 - Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of Success in the Era of the Boundaryless Career. *Journal of Organizational Behavior*, 24(6), 689–708. doi: 10.1002/job.214
 - Eggenhofer-Rehart, P. M., Latzke, M., Pernkopf, K., Zellhofer, D., Mayrhofer, W., & Steyrer, J. (2018). Refugees' career capital welcome? Afghan and Syrian refugee job seekers in Austria. *Journal of Vocational Behavior*. 105(1), 31-45. <https://doi.org/10.1016/j.jvb.2018.01.004>
 - Eisenberg, N., Fabes, R. A., Guthrie, I. K., & Reiser, M. (2000). Dispositional emotionality and regulation: Their role in predicting quality of social functioning. *Journal of Personality and Social Psychology*, 78, 136–157.
 - El Mansour, B., & Dean, J. C. (2016). Employability Skills as Perceived by Employers and University Faculty in the Fields of Human Resource Development (HRD) for Entry Level Graduate Jobs, *Journal of Human Resource and Sustainability Studies*, 4 (1), 39- 49. doi: 10.4236/jhrss.2016.41005
 - Ericsson, K. A., Charness, N., Feltovich, P. J., & Hoffman, R. R. (2006). *The Cambridge handbook of expertise and expert performance*. Cambridge: Cambridge University Press.
 - Etzkowitz, H., Webster, A., Gebhardt, C., & Terra, B. R. C. (2000). The future of the university and the university of the future: evolution of ivory tower to entrepreneurial paradigm. *Research Policy*, 29(2), 313-330. [https://doi.org/10.1016/S0048-7333\(99\)00069-4](https://doi.org/10.1016/S0048-7333(99)00069-4)
 - European Federation of Psychologists Association (EFPA) (2013). *EFPA Review Model for the Description and Evaluation of Psychological and Educational Tests*. Retrieved from <http://www.efpa.eu/professional-development/assessment>

- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272-299. <http://dx.doi.org/10.1037/1082-989X.4.3.272>
- Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). London: Sage Publications.
- Figueiredo, H., Biscaia, R., Rocha, V., & Teixeira, P. (2017). Should we start worrying? Mass Higher Education, skill demand and the increasingly complex landscape of young graduates' employment. *Studies in Higher Education*, 42(8), 1401-1420. <http://dx.doi.org/10.1080/03075079.2015.1101754>
- Finch, D. J., Hamilton, L. K., Baldwin, R., & Zehner, M. (2013). An exploratory study of factors affecting undergraduate employability. *Education + Training*, 55(7), 681-704. <https://doi.org/10.1108/ET-07-2012-0077>
- Fitzpatrick, A. R. (1983). The meaning of content validity. *Applied Psychological Measurement*, 7(1), 3-13. <https://doi.org/10.1177/014662168300700102>
- Flynn, F. J., & Ames, D. R. (2006). What's Good for the Goose May Not Be as Good for the Gander: The Benefits of Self-Monitoring for Men and Women in Task Groups and Dyadic Conflicts, *Journal of Applied Psychology*, 91(2), 272-281. <http://dx.doi.org/10.1037/0021-9010.91.2.272>
- Forrier, A., & Sels, L. (2003). The concept employability: A complex mosaic. *International journal of human resources development and management*, 3(2), 102-124. <https://doi.org/10.1504/IJHRDM.2003.002414>
- Forrier, A., Sels, L., & Stynen, D. (2009). Career mobility at the intersection between agent and structure: A conceptual model. *Journal of Occupational and Organizational Psychology*, 82(4), 739-759. doi: 10.1348/096317909X470933
- Forrier, A., Verbruggen, M., & De Cuyper, N. (2015). Integrating different notions of employability in a dynamic chain: The relationship between job transitions, movement capital and perceived employability. *Journal of Vocational Behavior*, 89, 56-64. <https://doi.org/10.1016/j.jvb.2015.04.007>
- Fowler, F. J. Jr. (1995). *Improving survey questions: Design and Evaluation*. London: Sage Publications.

- Francis-Smythe, J., Haase, S., Thomas, E., & Steele, C. (2013). Development and validation of the career competencies indicator (CCI). *Journal of Career Assessment*, 21(2), 227-248. doi: 10.1177/1069072712466724
- Francis-Smythe, J. A., & Robertson, I. T. (2003). The importance of time congruity in the organisation. *Applied Psychology*, 52(2), 298-321.
- Francis-Smythe, J., & Robertson, I. (1999). Time-related individual differences. *Time & Society*, 8(2-3), 273-292. <https://doi.org/10.1177/0961463X99008002004>
- Francis-Smythe, J., Robinson, L., & Ross, C. (2013). The role of evidence in general managers' decision-making. *Journal of General Management*, 38(4), 3-21. <https://doi.org/10.1177/030630701303800402>
- Fugate, M., & Kinicki, A. J. (2008). A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change. *Journal of Occupational and Organizational Psychology*, 81(3), 503-527. doi: 10.1348/096317907X241579
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A Psycho-social Construct, Its Dimensions, and Applications. *Journal of Vocational Behavior*, 65 (1), 14–38. <https://doi.org/10.1016/j.jvb.2003.10.005>
- Funke, F., & Reips, U. D. (2012). Why semantic differentials in web-based research should be made from visual analogue scales and not from 5-point scales. *Field methods*, 24(3), 310-327. <https://doi.org/10.1177/1525822X12444061>
- Gardner, H. (1993). *Multiple intelligences: The theory in Practice*, New York: Basic Books.
- Gattiker, U. E., & Larwood, L. (1986). Subjective career success: A study of managers and support personnel. *Journal of Business and Psychology*, 1(2), 78-94.
- Gault, J., Leach, E., & Duey, M. (2010). Effects of business internships on job marketability: the employers' perspective, *Education + Training*, 52 (1), 76-88. <https://doi.org/10.1108/00400911011017690>
- Gazier, B. (1998). Employability: Concepts and Policies, 1–20. European Employment Observatory: European Commission. Retrieved from www.eu-employment-observatory.net/ersep/imi67_uk/00140002.asp

- Geller, E. S. (2002). The challenge of increasing proenvironmental behavior. In R. B. Bechtel & A. Churchman (Eds.), *Handbook of environmental psychology* (pp.525-540). New York: John Wiley & Sons
- Goffin, K., Raja, J. Z., Claes, B., Szejcowski, M., & Martinez, V. (2012). Rigor in qualitative supply chain management research: Lessons from applying repertory grid technique. *International Journal of Physical Distribution & Logistics Management*, 42(8), 804-827. <https://doi.org/10.1108/09600031211269767>
- Goldin, C. D., & Katz, L. F. (2009). *The race between education and technology*. Harvard University Press.
- Goodenough, W. H. (1981). *Culture, language, and society*. London: Benjamin-Cummings Pub Co.
- Gorusch, R. L. (1983). *Factor Analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in personality*, 37(6), 504-528. [https://doi.org/10.1016/S0092-6566\(03\)00046-1](https://doi.org/10.1016/S0092-6566(03)00046-1)
- Gough, D., Oliver, S., & Thomas, J. (2012). *An introduction to systematic reviews*, London: Sage Publications.
- Greenhaus, J. H., Parasuraman, S., & Wormley, W. M. (1990). Effects of race on organizational experiences, job performance evaluations, and career outcomes. *Academy of Management Journal*, 33, 64-86. doi: 10.2307/256352
- Greguras, G. J., & Robie, C. (1998). A new look at within-source interrater reliability of 360-degree feedback ratings. *Journal of Applied Psychology*, 83(6), 960-968. <http://dx.doi.org/10.1037/0021-9010.83.6.960>
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26, 463-488. <https://doi.org/10.1177/014920630002600305>
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194), 105- 117.
- Guenther, J. C., Bat, M., Stephens, A., Skewes, J., Boughton, B., Williamson, F., & Dwyer, A. (2017). Enhancing training advantage for remote Aboriginal and Torres Strait Islander learners, Technical Report, NCVER:Adelaide.

- Guilbert, L., Bernaud, J. L., Gouvernet, B., & Rossier, J. (2016). Employability: review and research prospects. *International Journal for Educational and Vocational Guidance*, 16(1), 69-89. <https://doi.org/10.1007/s10775-015-9288-4>
- Hackett, G., & Betz, N. E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior*, 18, 326-339. [https://doi.org/10.1016/0001-8791\(81\)90019-1](https://doi.org/10.1016/0001-8791(81)90019-1)
- Hair, J. F., Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Upper Saddle River, NJ: Prentice Hall.
- Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of vocational behavior*, 65(1), 1-13. <https://doi.org/10.1016/j.jvb.2003.10.006>
- Hardesty, D. M., & Bearden, W. O. (2004). The use of expert judges in scale development: Implications for improving face validity of measures of unobservable constructs. *Journal of Business Research*, 57(2), 98-107. [https://doi.org/10.1016/S0148-2963\(01\)00295-8](https://doi.org/10.1016/S0148-2963(01)00295-8)
- Harré, R. (1983). Identity projects. *Threatened identities*, 31-51.
- Harris, R. G. (2001). The knowledge-based economy: intellectual origins and new economic perspectives. *International Journal of Management Reviews*, 3(1), 21-40. doi: 10.1111/1468-2370.00052
- Harvey, L. (2001). Defining and measuring employability. *Quality in Higher Education*, 7(2), 97-109. <http://dx.doi.org/10.1080/13538320120059990>
- Harvey, L., Locke, W., & Morey, A. (2002). *Enhancing Employability, Recognising Diversity: Missing Links Between Higher Education and the World of Work: Main Report*. Universities UK.
- Hedman, J., Tan, F. B., Holst, J., & Kjeldsen, M. (2017). Taxonomy of payments: a repertory grid analysis. *International Journal of Bank Marketing*, 35(1), 75-96. <https://doi.org/10.1108/IJBM-12-2015-0187>
- Heijde, C. M., & Van Der Heijden, B. I. (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human resource management*, 45(3), 449-476. doi:10.1002/hrm.20119
- Heslin, P. A. (2005). Conceptualizing and evaluating career success. *Journal of Organizational Behavior*, 26(2), 113-136. doi:10.1002/job.270

- Hesketh, A. J. (2000). Recruiting an elite? Employers' perceptions of graduate education and training. *Journal of education and work*, 13(3), 245-271. <https://doi.org/10.1080/713676992>
- Higher Education Funding Council for England (HEFCE). (2010). Understanding the information needs of users of public information about Higher Education. Retrieved from: <http://www.hefce.ac.uk/pubs/rereports/year/2010/hepublicinfouserneeds/>
- Higher Education Statistics Agency (HESA) (2018). *Graduate Outcomes: The Data*. Retrieved from: <https://www.hesa.ac.uk/innovation/outcomes/about/data>
- Hillage, J., & Pollard, E. (1998). Employability: developing a framework for policy analysis. *Labour Market Trends*, 107, 83-84.
- Hirschi, A. (2011). Vocational identity as a mediator of the relationship between core self-evaluations and life and job satisfaction. *Applied Psychology*, 60 (1), 622–644. doi:10.1111/j.1464-0597.2011.00450.x
- Hirschi, A., Freund, P. A., & Herrmann, A. (2014). The career engagement scale: Development and validation of a measure of proactive career behaviors. *Journal of Career Assessment*, 22(4), 575-594. <https://doi.org/10.1177/1069072713514813>
- Hogan, R., Chamorro-Premuzic, T., & Kaiser, R. B. (2013). Employability and career success: Bridging the gap between theory and reality. *Industrial and Organizational Psychology*, 6(1), 3-16. doi: 10.1111/iops.12001
- Holmes, L. (2013). Competing perspectives on graduate employability: possession, position or process?. *Studies in Higher Education*, 38(4), 538-554. <http://dx.doi.org/10.1080/03075079.2011.587140>
- Hou, Z. J., Leung, S. A., Li, X., Li, X., & Xu, H. (2012). Career adapt-abilities scale—China form: Construction and initial validation. *Journal of Vocational Behavior*, 80(3), 686-691. <https://doi.org/10.1016/j.jvb.2012.01.006>
- Houben, E., De Cuyper, N., & Kyndt, E. (2016, July). The Reciprocal Relationship Between Perceived Employability and Work-related Learning, Jure – Earli conference, Helsinki, Finland. Retrieved from <https://lirias.kuleuven.be/handle/123456789/547094>
- Howell, W. S. (1982). *The empathic communicator*. University of Minnesota: Wadsworth Publishing Company Retrieved from: <http://changingminds.org/explanations/learning/consciousness/competence.htm>

- Hurrell, S. A. (2016). Rethinking the soft skills deficit blame game: Employers, skills withdrawal and the reporting of soft skills gaps. *Human Relations*, 69(3), 605-628. <https://doi.org/10.1177/0018726715591636>
- Husain, M. Y., Mokhtar, S. B., Ahmad, A. A., & Mustapha, R. (2010). Importance of employability skills from employers' perspective. *Procedia-Social and Behavioral Sciences*, 7(1), 430-438. <https://doi.org/10.1016/j.sbspro.2010.10.059>
- Jagger, N., Davis, S., Lain, D., Sinclair, E., & Sinclair, T. (2001). Employers' views of postgraduate physicists. Retrieved from <http://www.employment-studies.co.uk/pdflibrary/1417phys.pdf>
- Jameson, J., Strudwick, K., Bond-Taylor, S., & Jones, M. (2012). Academic principles versus employability pressures: a modern power struggle or a creative opportunity?. *Teaching in Higher Education*, 17(1), 25-37. <https://doi.org/10.1080/13562517.2011.590978>
- Jankowicz, D. (2004). *The easy guide to repertory grids*, West Sussex: John Wiley & Sons, Ltd.
- Jenkins, J., & Finneman, T. (2018). Gender trouble in the workplace: applying Judith Butler's theory of performativity to news organizations. *Feminist Media Studies*, 18(2), 157-172. <https://doi.org/10.1080/14680777.2017.1308412>
- Jenks, C. (Ed.). (2002). *Cultural reproduction*. Routledge.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14-26. <https://doi.org/10.3102/0013189X033007014>
- Judge, T. (1999). Managerial Coping with Organizational Change: A Dispositional Perspective, *Journal of Applied Psychology*, 84, 107-122. <http://dx.doi.org/10.1037/0021-9010.84.1.107>
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2003). The core self-evaluations scale: Development of a measure. *Personnel Psychology*, 56(2), 303-331. doi: 10.1111/j.1744-6570.2003.tb00152.x
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organisational Behaviour*, 19(1), 151-188.

- Kawaf, F., & Tagg, S. (2017). The construction of online shopping experience: A repertory grid approach. *Computers in Human Behavior*, 72, 222-232. <https://doi.org/10.1016/j.chb.2017.02.055>
- Kayworth, T. R., & Leidner, D. E. (2001). Leadership Effectiveness in Global Virtual Teams, *Journal of management Information Systems*, 18(3), 7-40. <http://dx.doi.org/10.1080/07421222.2002.11045697>
- Kelly, G. (1955). *A theory of personality: The psychology of personal constructs*. London: W.W. Norton & Company.
- Kelly, G (1991). *The psychology of personal constructs*. London: Routledge in association with the Centre for Personal Construct Psychology.
- Kim, J. N., Rhee, Y., & Hankuk, U. (2011). Strategic Thinking About Employee Communication Behavior (ECB) in Public Relations: Testing the Models of Megaphoning and Scouting Effects in Korea, *Journal of Public Relations Research*, 23 (3), 243-268, doi: 10.1080/1062726X.2011.582204
- King, Z. (2004). Career self-management: Its nature, causes and consequences. *Journal of vocational behavior*, 65(1), 112-133. [https://doi.org/10.1016/S0001-8791\(03\)00052-6](https://doi.org/10.1016/S0001-8791(03)00052-6)
- Kirves, K., Kinnunen, U., & De Cuyper, N. (2014). Contract type, perceived mobility and optimism as antecedents of perceived employability. *Economic and Industrial Democracy*, 35(3), 435-453. <https://doi.org/10.1177/0143831X13486702>
- Kjelland, J. (2008). Economic returns to Higher Education: Signaling v. human capital theory; An analysis of competing theories. *The Park Place Economist*, 16(1), 70-77.
- Klibi, M. F., & Oussii, A. A. (2013). Skills and attributes needed for success in accounting career: Do employers' expectations fit with students' perceptions? Evidence from Tunisia. *International Journal of Business and management*, 8(8), 118-132. doi:10.5539/ijbm.v8n8p118
- Klotz, A. C., da Motta Veiga, S. P., Buckley, M. R., & Gavin, M. B. (2013). The role of trustworthiness in recruitment and selection: A review and guide for future research. *Journal of Organizational Behavior*, 34(S1), S104-S119. <https://doi.org/10.1002/job.1891>

- Kluytmans, F., & Ott, M. (1999). Management of employability in the Netherlands. *European Journal of Work and Organizational Psychology*, 8(2), 261-272. <http://dx.doi.org/10.1080/135943299398357>
- Knight, P., & Yorke, M. (2004). *Learning, Curriculum and Employability in Higher Education*, London: RoutledgeFalmer.
- Knight, P. T., & Yorke, M. (2003). Employability and good learning in Higher Education. *Teaching in Higher Education*, 8(1), 3-16. <http://dx.doi.org/10.1080/1356251032000052294>
- Knight, P., & Yorke, M. (2006). *Embedding employability into the curriculum* (Vol. 3). York: Higher Education Academy.
- Korver-Nieberg, N., Berry, K., Meijer, C. J., & Haan, L. (2014). Adult attachment and psychotic phenomenology in clinical and non-clinical samples: A systematic review. *Psychology and Psychotherapy: theory, research and practice*, 87(2), 127-154. doi: 10.1111/papt.12010
- Kossek, E. E., Roberts, K., Fisher, S., & Demarr, B. (1998). Career self-management: A quasiexperimental assessment of the effects of a training intervention. *Personnel Psychology*, 51, 935– 962
- Krause, K. L. D. (2014). Challenging perspectives on learning and teaching in the disciplines: the academic voice. *Studies in Higher Education*, 39(1), 2-19. <https://doi.org/10.1080/03075079.2012.690730>
- Kroft, K., Lange, F., Notowidigdo, M. J., & Katz, L. F. (2016). Long-term unemployment and the Great Recession: the role of composition, duration dependence, and nonparticipation. *Journal of Labor Economics*, 34(S1), S7-S54.
- Kromydas, T. (2017). Rethinking higher education and its relationship with social inequalities: past knowledge, present state and future potential. *Palgrave Communications*, 3(1), 1-12. doi: 10.1057/s41599-017-0001-8
- Kuhn, T. S. (1970). *The Structure of Scientific Revolutions* (Unabridged).
- Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel psychology*, 28(4), 563-575. doi: 10.1111/j.1744-6570.1975.tb01393.x
- Lees, D. (2002). Graduate employability-literature review (pp.1-23). York: LTSN Generic Centre.
- Leitch, S. (2006). *Prosperity for all in the global economy-world class skills*. The Stationery Office.

- Lemke, F., Clark, M., & Wilson, H. (2011). Customer experience quality: an exploration in business and consumer contexts using repertory grid technique. *Journal of the Academy of Marketing Science*, 39(6), 846-869.
- Levine, M., Prosser, A., Evans, D., & Reicher, S. (2005). Identity and emergency intervention: How social group membership and inclusiveness of group boundaries shape helping behavior. *Personality and Social Psychology Bulletin*, 31(4), 443-453. <https://doi.org/10.1177/0146167204271651>
- Li, C., Gervais, G. & Duval, A. (2006). The dynamics of overqualification: Canada's underemployed university graduates, Analytical Paper No. 039, Catalogue No. 11-621-MIE, Statistics Canada, Ottawa, Retrieved from www.statcan.gc.ca/pub/11-621-m/11-621-m2006039-eng.pdf
- Lindell, M. K., & Brandt, C. J. (1999). Assessing interrater agreement on the job relevance of a test: A comparison of the *CVI*, *T*, *r* *wg(j)*, and *r** *wg(j)* indexes. *Journal of Applied Psychology*, 84(4), 640–647. <http://dx.doi.org/10.1037/0021-9010.84.4.640>
- Lopes, P. N., Brackett, M. A., Nezlek, J. B., Schütz, A., Sellin, I., & Salovey, P. (2004). Emotional intelligence and social interaction. *Personality and Social Psychology Bulletin*, 30(8), 1018-1034. <https://doi.org/10.1177/0146167204264762>
- Low, M., Botes, V., Rue, D. D., & Allen, J. (2016). Accounting employers' expectations-The ideal accounting graduates. *The E-Journal of Business Education & Scholarship of Teaching*, 10(1), 36-57.
- Lorenz, C. (2012). If You're So Smart, Why Are You Under Surveillance? Universities, Neoliberalism, and New Public Management, *Critical Inquiry*, 38 (3), 599-629. <https://doi.org/10.1086/664553>
- Lowry, P. B., Romano, N. C., Jenkins, J. L. & Guthrie, R. W. (2009). The CMC Interactivity Model: How Interactivity Enhances Communication Quality and Process Satisfaction in Lean-Media Groups, *Journal of Management Information Systems*, 26, 155-195.
- Lu, L., & Argyle, M. (1991). Happiness and cooperation. *Personality and Individual Differences*, 12(10), 1019-1030. [https://doi.org/10.1016/0191-8869\(91\)90032-7](https://doi.org/10.1016/0191-8869(91)90032-7)
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of organizational behavior*, 23 (6), 695-706.

- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: toward a micro-intervention. *Journal of organizational behavior*, 27(3), 387-393. doi: 10.1002/job.373
- Luthans, F., Youssef-Morgan, C. M., & Avolio, B. J. (2015). *Psychological capital and beyond*. USA: Oxford University Press.
- Lynch, K. (2015). Control by Numbers: New Managerialism and Ranking in Higher Education, *Critical Studies in Education*, 56 (2), 190-207. doi: 10.1080/17508487.2014.949811s
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological methods*, 4(1), 84-99. <http://dx.doi.org/10.1037/1082-989X.4.1.84>
- Mann, A., & Huddleston, P. (2017). Schools and the twenty-first century labour market: perspectives on structural change. *British Journal of Guidance & Counselling*, 45(2), 208-218. <https://doi.org/10.1080/03069885.2016.1266440>
- Marginson, S. (2013). The impossibility of Capitalist Markets in Higher Education, *Journal of Education Policy*, 28 (3), 353-370. <https://doi.org/10.1080/02680939.2012.747109>
- Mason, G., Williams, G., & Cranmer, S. (2009). Employability skills initiatives in higher education: what effects do they have on graduate labour market outcomes?. *Education Economics*, 17(1), 1-30. <https://doi.org/10.1080/09645290802028315>
- Mat, N. & Zabidi, Z. (2010). Professionalism in practices: a preliminary study on Malaysian public universities, *International Journal of Business and Management*, 5 (8), 138-145.
- Matsunaga, M. (2015). How to factor-analyze your data right: do's, don'ts, and how-to's. *International Journal of Psychological Research*, 3(1), 97-110. <http://dx.doi.org/10.21500/20112084.854>
- McArdle, S., Waters, L., Briscoe, J. P., & Hall, D. T. T. (2007). Employability during unemployment: Adaptability, career identity and human and social capital. *Journal of Vocational Behavior*, 71(2), 247-264. <https://doi.org/10.1016/j.jvb.2007.06.003>
- McArthur, E., Kubacki, K., Pang, B., & Alcaraz, C. (2017). The Employers' View of "Work-Ready" Graduates: A Study of Advertisements for Marketing Jobs in

- Australia. *Journal of Marketing Education*, 39(2), 82-93.
<https://doi.org/10.1177/0273475317712766>
- McGrath, C. H., Guerin, B., Harte, E., Frearson, M., & Manville, C. (2015). Learning gain in higher education. *Santa Monica, California, United States of America: RAND Corporation*. Retrieved from https://www.rand.org/content/dam/rand/pubs/research_reports/RR900/RR996/RAND_RR996.pdf
 - McQuaid, R. W. (2006). Job search success and employability in local labor markets. *The Annals of Regional Science*, 40(2), 407-421.
 - McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban studies*, 42(2), 197-219. <https://doi.org/10.1080/0042098042000316100>
 - Meijers, F. (1998). The development of a career identity, *International Journal for the Advancement of Counselling*, 20(1), 191-207. <https://doi.org/10.1023/A:1005399417256>
 - Metz, I., & Tharenou, P. (2001). Women's career advancement: The relative contribution of human and social capital. *Group & Organization Management*, 26(3), 312-342. <https://doi.org/10.1177/1059601101263005>
 - Mezirow, J. (1997). Transformative learning: Theory to practice, *New directions for adult and continuing education*, 74(1), 5-12. <https://doi.org/10.1002/ace.7401>
 - Mohamedbhai, G. (2008). *The effects of massification on higher education in Africa*. ACCRA: Association of African Universities. Retrieved from <http://ahero.uwc.ac.za/index.php?module=cshe&action=downloadfile&fileid=18409092513202791624126>
 - Molden, D. C. (2014). Understanding priming effects in social psychology: What is "social priming" and how does it occur? *Social Cognition*, 32(Supplement), 1-11. <https://doi.org/10.1521/soco.2014.32.supp.1>
 - Molesworth, M., Nixon, E., & Scullion, R. (2009). Having, being and Higher Education: The marketisation of the university and the transformation of the student into consumer. *Teaching in Higher Education*, 14(3), 277-287. <http://dx.doi.org/10.1080/13562510902898841>
 - Moreau, M. P., & Leathwood, C. (2006). Graduates' employment and the discourse of employability: a critical analysis. *Journal of Education and Work*, 19(4), 305-324. <http://dx.doi.org/10.1080/13639080600867083>

- Morgan, D. L. (2013). *Integrating Qualitative and Quantitative Methods*. London: Sage Publications.
- Morrison, A. R. (2014). 'You have to be well spoken': students' views on employability within the graduate labour market. *Journal of Education and Work*, 27(2), 179-198. <http://dx.doi.org/10.1080/13639080.2012.742178>
- Moynihan, T. (1996). An inventory of personal constructs for information systems project risk researchers, *Journal of Information Technology*, 26(1), 39-57. doi: 10.2307/4132340
- Moynihan, S., Paakkari, L., Välimaa, R., Jourdan, D., & Mannix-McNamara, P. (2015). Teacher Competencies in Health Education: Results of a Delphi Study. *PloS one*, 10(12), <https://doi.org/10.1371/journal.pone.0143703>
- Nabi, G. R. (1999). An investigation into the differential profile of predictors of objective and subjective career success, *Career Development International*, 4 (4), 212-24. <https://doi.org/10.1108/13620439910270599>
- Nagy, T. F. (2005). *Ethics in Plain English: An illustrative casebook for psychologists* (2nd ed.). London: Sage Publications.
- Napier, N. P., Keil, M., & Tan, F. B. (2009). IT project managers' construction of successful project management practice: a repertory grid investigation. *Information Systems Journal*, 19(3), 255-282. <https://doi.org/10.1111/j.1365-2575.2007.00264.x>
- Nash, R. (1990). Bourdieu on education and social and cultural reproduction. *British Journal of Sociology of Education*, 11(4), 431-447. <https://doi.org/10.1080/0142569900110405>
- Neuendorf, K. (2011). Internal consistency reliability: Can Cronbach's alpha be too high. *COM 631-Multivariate analysis*. Retrieved from <https://academic.csuohio.edu/kneuendorf/c63111/hand5a.pdf>
- Newman, J. H. C. (1992). *The idea of a university*. University of Notre Dame Press.
- Newman University (2008). *Ethical Guidelines*. Retrieved from <https://sharepoint.newman.ac.uk/supp/research/Ethics%20Approval%20Forms/Ethical%20Guidelines.pdf>
- Nevo, B. (1985). Face validity revisited. *Journal of Educational Measurement*, 22(4), 287-293. doi: 10.1111/j.1745-3984.1985.tb01065.x

- Ng, T. W., Eby, L. T., Sorensen, K. L., & Feldman, D. C. (2005). Predictors of objective and subjective career success: A meta-analysis. *Personnel psychology*, 58(2), 367-408. doi: 10.1111/j.1744-6570.2005.00515.x
- Ng, T. W., & Feldman, D. C. (2014). Subjective career success: A meta-analytic review. *Journal of Vocational Behavior*, 85(2), 169-179. <https://doi.org/10.1016/j.jvb.2014.06.001>
- Nofle, E. E., & Robins, R. W. (2007). Personality predictors of academic outcomes: Big five correlates of GPA and SAT scores. *Journal of Personality and Social Psychology*, 93 (1), 116–130.
- O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior research methods, instruments, & computers*, 32(3), 396-402. <https://doi.org/10.3758/BF03200807>
- O'Leary, S. (2016). The opportunities and challenges for employability-related support in STEM degrees. *New Directions in the Teaching of Physical Sciences*, 11(1), 1-11. <https://doi.org/10.29311/ndtps.v0i11.567>
- Osgood, C. E., & Suci, G. J. (1957). *The measurement of meaning*. Urbana, IL: University of Illinois Press.
- Osmani, M., Weerakkody, V., Hindi, N. M., Al-Esmail, R., Eldabi, T., Kapoor, K., & Irani, Z. (2015). Identifying the trends and impact of graduate attributes on employability: a literature review. *Tertiary Education and Management*, 21(4), 367-379. <https://doi.org/10.1080/13583883.2015.1114139>
- Palmer, A. P., Montaña, J. M., & Palou, M. O. (2009). Generic skills in higher education. Comparative study of the views of employers and academics. *Psicothema*, 21(3), 433-438.
- Pan, J., & Zhou, W. (2015). How do employees construe their career success: an improved measure of subjective career success. *International Journal of Selection and Assessment*, 23(1), 45-58. doi: 10.1111/ijsa.12094
- Paranjape, M. S. (2007). Determinants of Employability of Graduates: A Case Study of University of Mumbai. *The Indian Journal of Labour Economics*, 50(2), 331-346.
- Parker, S. (1998). Enhancing Role Breadth Self-Efficacy: The Roles of Job Enrichment and Other Organizational Interventions. *Journal of Applied Psychology*, 83, 835-852. <http://dx.doi.org/10.1037/0021-9010.83.6.835>

- Parker, S. K., Williams, H. M., & Turner, N. (2006). Modeling the Antecedents of Proactive Behavior at Work. *Journal of Applied Psychology*. 91(3), 636-652. <http://dx.doi.org/10.1037/0021-9010.91.3.636>
- Pedhazur, E. G. & Schmelkin, L. P. (1991). *Measurement, Design, and Analysis: An integrated approach*. Mahwah: Lawrence Erlbaum Associates.
- Perez, E. A., Garrouste, C., & Kozovska, K. (2010). Towards a benchmark on the contribution of education and training to employability: a discussion note. *JRC Scientific and Technical Reports EUR*, 24147, 1-16.
- Perrewe, P. L., Zellars, Z. L., Ferris, G. R., Rossi, A. M., Kacmar, C. J., & Ralston, D. A. (2004). Neutralizing job stressors: Political skill as an antidote to the dysfunctional consequences of role conflict. *Academy of Management Journal*, 47(1), 141-152. doi: 10.2307/20159566
- Petticrew, M., & Roberts, H. (2008). Systematic reviews—do they ‘work’ in informing decision-making around health inequalities?. *Health Economics, Policy and Law*, 3(2), 197-211. doi: 10.1017/S1744133108004453
- Phillips, R., McNaught, C. & Kennedy, G. (2010). Towards a generalised conceptual framework for learning: the Learning Environment, Learning Processes and Learning Outcomes (LEPO) framework. In: World Conference on Educational Multimedia, Hypermedia and Telecommunications (EDMEDIA) 2010, 28 June - 2 July 2010, Toronto, Canada pp.2495-2504.
- Philpott, J. (1999). *Behind the ‘Buzzword’: Employability*. London: Employment Policy Institute.
- Pinsonneault, A., & Heppel, N. (1997). Anonymity in Group Support Systems Research: A New Conceptualization, Measure, and Contingency Framework, *Journal of management Information Systems*, 14(3), 89-108. <http://dx.doi.org/10.1080/07421222.1997.11518176>
- Pond, K., & Harrington, A. (2013). Models of employability development in undergraduate Business Education—a critical review of current practice. *Loughborough University, UK. Žiūrēta*.
- Portes, A. (1998). Social capital. *Annual Review of Sociology*, 24, 1-24.
- Powell, G. N., & Mainiero, L. A. (1992). Cross-currents in the river of time: conceptualising the complexities of women's careers. *Journal of Management*, 18(2), 215-237. <https://doi.org/10.1177/014920639201800202>

- Praskova, A., Creed, P. A., & Hood, M. (2015). The development and initial validation of a career calling scale for emerging adults. *Journal of Career Assessment*, 23(1), 91-106. <https://doi.org/10.1177/1069072714523089>
- Prickett, S. (1994) Enterprise in higher education: nice work or ivory tower versus exchange and mart? *Higher Education Quarterly*, 48(3), pp.169-18
- Ramli, A., Nawawi, R., & Chun, M. P. P. (2010). Employees' perception of employability skills needed in todays workforce among physiotherapy graduates. *Procedia-Social and Behavioral Sciences*, 7(c), 455-463. <https://doi.org/10.1016/j.sbspro.2010.10.062>
- Ray, R., McKinsey, C., & Abel, A. L. (2012). The state of human capital 2012: false summit – why the human capital function still has far to go, Research Report No. R-1501-12-RR, McKinsey and Company.
- Regan, J. A. (2012). The role obligations of students and lecturers in higher education. *Journal of Philosophy of Education*, 46(1), 14-24. doi: 10.1111/j.1467-9752.2011.00834.x
- Robbins, L. R. B. (1963). Higher Education: Report of the Committee appointed by the Prime Minister under the chairmanship of Lord Robbins, 1961-63 (No.2). London: HM Stationery Office.
- Robinson, W. L. (1974). Conscious Competency: The Mark of a Competent Instructor. *The Personnel Journal—Baltimore*, 53(1), 538-539
- Robles, M. M. (2012). Executive perceptions of the top 10 soft skills needed in today's workplace. *Business Communication Quarterly*, 75(4), 453-465. doi: 10.1177/1080569912460400
- Roberts, T. L., Cheney, P. H., Sweeney, P. D. & Hightower, R. T. (2004). The Effects of Information Technology Project Complexity on Group Interaction, *Journal of management Information Systems*, 21(3), 223-247. <http://dx.doi.org/10.1080/07421222.2004.11045814>
- Rothwell, A., & Arnold, J. (2007). Self-perceived employability: development and validation of a scale. *Personnel Review*, 36(1), 23-41. <https://doi.org/10.1108/00483480710716704>
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students, *Journal of vocational Behaviour*, 73(1), 1-12. <https://doi.org/10.1016/j.jvb.2007.12.001>

- Rotter, J. (1973). Internal-external locus of control scale. *Measures of social psychological attitudes*. Ann Arbor: Institute for Social Research, 47.
- Salgado, J. F. (1997). The Five Factor model of personality and job performance in the European community. *Journal of Applied Psychology*, 82, 30 – 43.
- Scanlan, T. K., Chow, G. M., Sousa, C., Scanlan, L. A., & Knifsend, C. A. (2016). The development of the sport commitment questionnaire-2 (English version). *Psychology of Sport and Exercise*, 22(1), 233-246. <https://doi.org/10.1016/j.psychsport.2015.08.002>
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): a reevaluation of the Life Orientation Test. *Journal of personality and social psychology*, 67(6), 1063-1078. <http://dx.doi.org/10.1037/0022-3514.67.6.1063>
- Schein, E. H. (1996). Career anchors revisited: Implications for career development in the 21st century. *The Academy of Management Executive*, 10(4), 80-88.
- Schmidt, F. L., Hunter, J. E., & Urry, V. W. (1976). Statistical power in criterion-related validation studies. *Journal of Applied Psychology*, 61(4), 473-485. <http://dx.doi.org/10.1037/0021-9010.61.4.473>
- Schuman, H., & Presser, S. (1981). *Questions and Answers in Attitude Surveys: Experiments on Question Form, wording and Context*, New York: Academic Press.
- Sherer, M., Maddux, J. E., Mercandante, B., Prentice-Dunn, S., Jacobs, B., & Rogers, R. W. (1982). The self-efficacy scale: Construction and validation. *Psychological Reports*, 51(2), 663-671. <https://doi.org/10.2466/pr0.1982.51.2.663>
- Shultz, K. S., Whitney, D. J., & Zickar, M. J. (2013). *Measurement theory in action: Case studies and exercises*. Sussex: Routledge.
- Simons, J. (2013). An introduction to Q methodology. *Nurse Researcher*, 20(3), 28-32. doi: 10.7748/nr2013.01.20.3.28.c9494
- Sin, C., & Amaral, A. (2017). Academics' and employers' perceptions about responsibilities for employability and their initiatives towards its development. *Higher Education*, 73(1), 97-111. <https://doi.org/10.1007/s10734-016-0007-y>
- Singh, P., Thambusamy, R. X., & Ramly, M. A. (2014). Fit or unfit? Perceptions of employers and university instructors of graduate's generic skills, *Procedia-Social*

- and *Behavioural sciences*, 123(1), 315-324.
<https://doi.org/10.1016/j.sbspro.2014.01.1429>
- Small, L., Shacklock, K., & Marchant, T. (2018). Employability: a contemporary review for higher education stakeholders. *Journal of Vocational Education & Training*, 70(1), 148-166. doi: 10.1080/13636820.2017.1394355
 - Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations Book 2 - Of the Nature, Accumulation, and Employment of Stock.*
 - Sofoluwe, A. O., Shokunbi, M. O., Raimi, L., & Ajewole, T. (2013). Entrepreneurship education as a strategy for boosting human capital development and employability in Nigeria: Issues, prospects, challenges and solutions. *Journal of Business Administration and Education*, 3(1), 25-50.
 - Solberg, V. S., Good, E. G., Nord, D., Holm, C., Hohner, R., Zima, N. . . . , Malen, A. (1994). Assessing career search expectations: Development of the Career Search Efficacy Scale, *Journal of Career Assessment*, 2(2), 111-123.
 - Spector, P. E. (1988). Development of the work locus of control scale. *Journal of occupational psychology*, 61(4), 335-340. doi: 10.1111/j.2044-8325.1988.tb00470.x
 - Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87 (1), 355-374.
 - Stafford, L., Marston, G., Chamorro-Koc, M., Beatson, A., & Drennan, J. (2017). Why one size fits all approach to transition in Disability Employment Services hinders employability of young people with physical and neurological disabilities in Australia. *Journal of Industrial Relations*, 59(5), 631-651.
<https://doi.org/10.1177/0022185617723379>
 - Stasz, C. (1997). Do employers need the skills they want? Evidence from technical work. *Journal of Education and work*, 10(3), 205-223.
<https://doi.org/10.1080/1363908970100301>
 - Stickland, R. (1996). Career self management - Can we live without It? *European Journal of Work and Organizational Psychology*, 5(4), 583-596.
<https://doi.org/10.1080/13594329608414881>
 - Stinton, J. (2007). Employer engagement in the design, development and delivery of foundation degrees in the eastern region. *The Research and Development Bulletin*, 5(2), 27-32.

- Streiner, D. & Norman, G. R. (1994). *Health measurement scales: A practical guide to their development and use*, (2nd Ed.). Oxford: Oxford University Press.
- Sturges, J. (1999). What it means to succeed: Personal conceptions of career success held by male and female managers at different ages. *British Journal of Management*, 10, 239-252. <https://doi.org/10.1111/1467-8551.00130>
- Sturgis, P., Roberts, C., & Smith, P. (2014). Middle alternatives revisited: how the neither/nor response acts as a way of saying “i don’t know”? *Sociological Methods & Research*, 43(1), 15-38. <https://doi.org/10.1177/0049124112452527>
- Suarta, I. M., Suwintana, I. K., Sudhana, I. F. P., & Hariyanti, N. K. D. (2017). Employability Skills Required by the 21st Century Workplace: A Literature Review of Labor Market Demand. In *International Conference on Technology and Vocational Teachers (ICTVT 2017)* (Vol. 1, p.7) Retrieved from https://www.researchgate.net/profile/Ni_Kadek_Hariyanti/publication/320469836_Employability_Skills_Required_by_the_21st_Century_Workplace_A_Literature_Review_of_Labor_Market_Demand/links/59f6a065aca272607e2bca5d/Employability-Skills-Required-by-the-21st-Century-Workplace-A-Literature-Review-of-Labor-Market-Demand.pdf
- Suhartanto, D., & Triyuni, N. N. (2016). Tourist loyalty toward shopping destination: the role of shopping satisfaction and destination image. *European Journal of Tourism Research*, 13 (1), 84-102
- Suleman, F. (2018). The employability skills of higher education graduates: insights into conceptual frameworks and methodological options. *Higher Education*, 76(2), 263-278. <https://doi.org/10.1007/s10734-017-0207-0>
- Sumanasiri, E. G. T., Ab Yajid, M. S., & Khatibi, A. (2015). Conceptualizing Learning and Employability “Learning and Employability Framework. *Journal of Education and Learning*, 4(2), 53-63. <http://dx.doi.org/10.5539/jel.v4n2p53>
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using Multivariate statistics* (6th ed.). London: Person Education Inc.
- Tan, F. B., & Hunter, M. G. (2002). The repertory grid technique: A method for the study of cognition in information systems. *MIS quarterly*, 26(1), 39-57. doi: 10.2307/4132340
- Tasker, M. & Packham, D. (1994) Government, higher education and the industrial ethic, *Higher Education Quarterly*, 48(3), 182-19.

- Tasker, M. E., & Packham, D. E. (1990). Freedom, funding and the future of the universities. *Studies in Higher Education*, 15(2), 181-195.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, 22(1), 63-81. [https://doi.org/10.1016/0001-8791\(83\)90006-4](https://doi.org/10.1016/0001-8791(83)90006-4)
- The Quality Assurance Agency for Higher Education (2014). Employer Engagement Emerging Practice from QAA Reviews Retrieved from <http://www.qaa.ac.uk/en/Publications/Documents/Employer-Engagement-Report.pdf>
- Thijssen, J. G., Van der Heijden, B. I., & Rocco, T. S. (2008). Toward the employability—link model: current employment transition to future employment perspectives. *Human Resource Development Review*, 7(2), 165-183. <https://doi.org/10.1177/1534484308314955>
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173-186. <https://doi.org/10.1016/j.jvb.2011.05.009>
- Tomlinson, M. (2007). Graduate employability and student attitudes and orientations to the labour market. *Journal of Education and Work*, 20(4), 285-304.
- Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy*, 25(4), 407-431. <https://doi.org/10.1057/hep.2011.26>
- Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education + Training*, 59(4), 338-352. <https://doi.org/10.1108/ET-05-2016-0090>
- Torgerson, C. (2003). *Systematic reviews*. Bloomsbury Publishing.
- Trow, M. A. (1976). *Problems in the transition from elite to mass Higher Education*. Berkeley, California: McGraw-Hill.
- University of Leicester (2016). *Research Code of Conduct*. Retrieved from <https://www2.le.ac.uk/offices/researchsupport/policyandstrategy/research-code-of-conduct-and-ethics-1/research-code-of-conduct-and-ethics>
- Uysal, S. D., & Pohlmeier, W. (2011). Unemployment duration and personality. *Journal of Economic Psychology*, 32(6), 980-992. <https://doi.org/10.1016/j.joep.2011.03.008>

- Van Dam, K. (2004). Antecedents and consequences of employability orientation. *European Journal of Work and Organizational Psychology*, 13(1), 29-51. <https://doi.org/10.1080/13594320344000237>
- Vanhercke, D., Cuyper, N. D., Peeters, E., & De Witte, H. (2014). Defining perceived employability: a psychological approach, *Personnel Review*, 43(4), 592-605. <https://doi.org/10.1108/PR-07-2012-0110>
- Velicer, W. F., & Fava, J. L. (1998). Affects of variable and subject sampling on factor pattern recovery. *Psychological methods*, 3(2), 231-251.
- Verniers C., & Vala, J. (2018). Justifying gender discrimination in the workplace: The mediating role of motherhood myths. *PLoS ONE*, 13(1), e0190657. <https://doi.org/10.1371/journal.pone.0190657>.
- Vernon, P. E. (1963). *Personality Assessment*. London: Methuen.
- Weiss, A. (1995). Human capital vs. signalling explanations of wages. *The Journal of Economic Perspectives*, 9(4), 133-154.
- West, J. (2000). Higher education and employment: opportunities and limitations in the formation of skills in a mass higher education system. *Journal of Vocational Education and Training*, 52(4), 573-588.
- Whitton, S. M. D. (2017, December). Models of employability and their relevance for part-time learners. Paper presented at the SRHE Annual Research Conference, Newport, Wales. Abstract retrieved from <https://www.srhe.ac.uk/conference2017/abstracts/0263.pdf>
- Wickramasinghe, V., & Perera, L. (2010). Graduates', university lecturers' and employers' perceptions towards employability skills, *Education + Training*, 52 (3), 226-244.
- Wille, B., De Fruyt, F., & Feys, M. (2013). Big five traits and intrinsic success in the new career era: A 15-Year longitudinal study on employability and Work–Family conflict. *Applied Psychology*, 62(1), 124-156. <http://dx.doi.org/10.1037/a0034917>
- Williams, S., Dodd, L. J., Steele, C. & Randall, R. (2016). A systematic review of current understandings of employability, *Journal of education and work*, 29(8), 877-901. <http://dx.doi.org/10.1080/13639080.2015.1102210>

- Williams, S., Karypidou, A., Steele, C., & Dodd, L. (2018). *A personal construct approach to employability: Comparing stakeholders' implicit theories*, Manuscript submitted for publication.
- Willis, G. & Lessler, J. (1999). *Questionnaire Appraisal System-1999*, Research Triangle Park, NC: Research Triangle Institution.
- Wilson, T. (2012). A review of business–university collaboration: the Wilson review, Retrieved from <https://www.gov.uk/government/publications/business-university-collaboration-the-wilson-review>
- Wilson, F. R., Pan, W., & Schumsky, D. A. (2012). Recalculation of the critical values for Lawshe's content validity ratio. *Measurement and Evaluation in Counseling and Development*, 45(3), 197-210. <https://doi.org/10.1177/0748175612440286>
- Wittekind, A., Raeder, S., & Grote, G. (2010). A longitudinal study of determinants of perceived employability. *Journal of Organizational Behavior*, 31(4), 566-586. doi: 10.1002/job.646
- Wikle, T. A., & Fagin, T. D. (2015). Hard and soft skills in preparing GIS professionals: Comparing perceptions of employers and educators. *Transactions in GIS*, 19(5), 641-652.
- Woolcock, N. (2014, May 28) Employers are struggling to find ‘work ready’ graduates, *The Times*, Retrieved from <https://www.thetimes.co.uk/article/employers-are-struggling-to-find-work-ready-graduates-gvhkr0cndz3>
- Wright, E. O., Baxter, J., & Birkelund, G. E. (1995). The gender gap in workplace authority: A cross-national study. *American sociological review*, 407-435. doi: 10.2307/2096422
- Yorke, M. (2001). *Employability in the first cycle higher education. A working paper for the 'Skills plus' Project*. Liverpool John Moores University.
- Yorke, M. & Knight, P. T. (2006). *Embedding employability into the curriculum*, HEA Learning and Employability series 1 and 2, Retrieved from: http://www.employability.ed.ac.uk/documents/Staff/HEABriefings/ESECT-3-Embedding_employability_into_curriculum.pdf
- Zhou, W., Sun, J., Guan, Y., Li, Y., & Pan, J. (2012). Criteria of career success among Chinese employees: Developing a multidimensional scale with qualitative

and quantitative approaches. *Journal of Career Assessment*, 21 (2), 265-277. doi: 1069072712471302.

- Zippay, A. (2001). The roles of social capital in reclaiming human capital: A longitudinal study of occupational mobility among displaced steelworkers. *Journal of Sociology and Social Welfare*, 28(4), 99-119.

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Appendix A. Example Data Extraction Sheet

Data Extraction Sheet

Systematic data extraction sheet for: “A review of current understandings of employability”

Reviewer Initials: __SW____

Identification Features of the Study	
Study No: 2	Date of data extraction: 3/10/2011
Authors: Dacre-Pool and Sewell	Year of Publication: 2007
Source: Education + Training	Vol No: 49 Issues No: 4 Page No: 277-289
Country of Origin: UK	
Title of Article: The Key to Employability: Developing in Practical model of Graduate Employability	
Type of study: <input type="checkbox"/> Review <input type="checkbox"/> Empirical Paper <input checked="" type="checkbox"/> Other (Specify): Presentation of new model and brief review	

Basic Inclusion Criteria / Verification of Study Eligibility Include in review if the following is met from Section A. Section A The paper reports to focus on: <input checked="" type="checkbox"/> Introducing a holistic model, theory or framework of employability Continue to section B, if the above is met.
Include in review if one of the following is met from Section B. Section B The paper focuses on the construct of employability <input checked="" type="checkbox"/> Which aimed to inform an understanding of the employability of individuals Continue to section C, if one of the above is met.
Include in review if the following is met from section C. Section C <input checked="" type="checkbox"/> Paper English language <input checked="" type="checkbox"/> Published Between 1980 and the present day Continue to section D, if the above is met.
EXCLUDE from Review if: <input type="checkbox"/> Focuses on a specific element of employability e.g. employability skills <input type="checkbox"/> Explores the impact of specific conditions/situations on employability e.g. brain injury <input type="checkbox"/> Is not the primary reference to the model, framework, theory

Inclusion reason other than above:
Exclusion reason other than above:
<input checked="" type="checkbox"/> Include at this stage – continue below <input type="checkbox"/> Exclude at this stage – paper does not meet the basic inclusion criteria

Additional notes
Perspective written fromthose working to develop employability of UK graduates
Definition of employability used:.....Employability i8s having a set of skills, knowledge, understanding and personal attributes that make a person more likely to choose and secure occupations in which they can be satisfied and successful. p280
Self-defined as: <input type="checkbox"/> Theoretical Framework <input type="checkbox"/> Theory <input type="checkbox"/> Conceptual Framework <input checked="" type="checkbox"/> Model <input type="checkbox"/> Other. Please specify.....
Which best describes the empirical support for this: <input type="checkbox"/> No findings given to support structure of employability given <input checked="" type="checkbox"/> Empirical Support from other sources for dimensions <input type="checkbox"/> Empirical Support from primary research for dimensions <input type="checkbox"/> Empirical support for model as a whole
Components of conceptualisation: Self-esteem; self-efficacy; self-confidence; reflection and evaluation; career development learning; work and life experience; degree subject knowledge; understanding and skills; Generic Skills; Emotional Intelligence.

Appendix B. Ethical approval stage two

To: **STELLA WILLIAMS**

Subject: Ethical Application Ref: **sw309-ca95**

(Please quote this ref on all correspondence)

20/11/2013 09:09:20

Psychology

Project Title: **Investigating Employability as construed by Higher Education: A Repertory Grid study**

Thank you for submitting your application which has been considered.

This study has been given ethical approval, subject to any conditions quoted in the attached notes.

Any significant departure from the programme of research as outlined in the application for research ethics approval (such as changes in methodological approach, large delays in commencement of research, additional forms of data collection or major expansions in sample size) must be reported to your Departmental Research Ethics Officer.

Approval is given on the understanding that the University Research Ethics Code of Practice and other research ethics guidelines and protocols will be compiled with

- <http://www2.le.ac.uk/institution/committees/research-ethics/code-of-practice>
- <http://www.le.ac.uk/safety/>

The following is a record of correspondence notes from your application **sw309-ca95**. Please ensure that any proviso notes have been adhered to:-

Nov 8 2013 9:02AM The method replicates that approved within a previous research project, with a different population (sw309-ebb95). However, the following amendment have been made. 1) use of telephone interviewing. 2) use of a transcription service with a proportion of the audio files from participants who have not opted out of this process.

Participant sampling has also been reised to utilise a snowballing method.

Nov 18 2013 9:09AM Please change the start date to one that is in the future. Thank you.

Please amend the consent form so that it has contact information for ethics at the bottom. Please see
template:

<https://www2.le.ac.uk/departments/psychology/extranet/undergraduate-materials/resources/ethics>

Nov 18 2013 11:35AM These amendments have now been added.
--- END OF NOTES ---

Appendix C. Stage two information sheet and consent form

Participant Consent Form

BACKGROUND INFORMATION

Title: Investigating Employability as construed by Higher Education: A Repertory Grid study

Researchers: Stella Williams, Catherine Steele and John Maltby from the University of Leicester and Lorna Dodd from Newman University

Purpose of data collection: PhD thesis

1. Proposed aim

The proceeding research aims to provide data around the nature of employability as construed by academics in a variety of disciplines and understand how they perceive the opportunities for HE to develop this. This information will then be compared with results from graduate and student employers.

2. Detailed methodology

Participants will be guided through the completion of a repertory grid via an interview format. They will be asked to consider examples of individual students they have come into contact with that represent varying degrees of employability, and to consider ways in which these individuals are similar and different in terms of their employability.

The process will take approximately one hour. Interviews will be conducted in a private setting by a single interviewer. The interview will be recorded for the purposes of later analysis and participants will be able to request a break or to end the interview at any time. No deception as to the nature or purpose of the study will take place.

Following completion of the grid a summary analysis of the content will be provided to ensure the participant is happy with data recorded. Audio files will then be sent to a transcription service for completion.

3. Key considerations you will need to make before starting the study.

There are no anticipated risks to participating in this study, although it is acknowledged that your time is valuable and thus we will complete the process as swiftly as possible, while still maintaining the value of the data received. If at any point you feel you would like to end the interview you are free to do so by stating this to the interviewer.

The interview will be recorded on a personal recording device, and then transcribed. Following transcription the original audio file will be erased. The transcription and any other data gathered during the process (i.e. interviewer notes) will be kept either on a password protected computer and/or under lock and key. This data will only be accessible to the researchers involved in the research and transcription service. If you do not wish your interview to be sent to a transcription service please inform the researcher.

The results of the interview will be combined with that of employers to form a clearer understanding of what employability means to graduate and student employers. This will form the basis of a paper to be published within an academic journal, and also a chapter of the lead researchers PhD submission.

Participants will have access to any and all of these outputs upon request.

CONSENT STATEMENT

1. I understand that my participation is voluntary and that I may withdraw from the research at any time up until 1st February 2014 without giving any reason. I understand that I can withdraw at any point during the data collection by indicating a wish to do so, without reason. I understand that to withdraw after I have completed the interview, I can contact Ms Stella Williams on stella.williams@newman.ac.uk stating my Personal Identification Number.
2. My data are to be held confidentially by the named researchers.
3. This consent form will be kept separately from my data in a locked cabinet for up to a period of five years. After this the consent forms will be deleted.
4. My data will be combined with that of other participants when the data collecting part of the study has been completed. This will become coded data. At this point I understand that the only identifier to the data that exists is the Personal Identification Number provided at the start of the interview so I am able to withdraw at a later stage.
5. In accordance with the requirements of some scientific journals and organisations, I understand that the coded data will be kept in electronic form for up to five years. After this time they will be deleted.
6. In accordance with the requirements of some scientific journals and organisations, I understand that my coded data may be shared with other competent researchers. I understand that my coded data may also be used in other related studies. My name and any other identifying details of taking part in the study will not be shared with anyone.
7. The overall findings may be submitted for publication in a scientific journal, or presented at scientific conferences.
8. This study will take approximately 10 months to complete.
9. I will be able to obtain general information about the results of this research by giving the researcher my email address now as detailed below.

I am giving my consent for data to be used for the outlined purposes of the present study

All questions that I have about the research have been satisfactorily answered.

I agree to participate.

Participant's signature: _____

Date: _____

If you would like to receive a summary of the results by e-mail, when this is available, please provide your email address: _____

If you have further questions about this study, you may contact Stella Williams sw309@le.ac.uk. This study was reviewed by the University of Leicester Psychology Research Ethics Committee (PREC). You may contact the Chair of PREC Dr. Heather Flowe at hf49@le.ac.uk if you have any questions or concerns regarding the ethics of this project.

Please note that this form will be kept separately from your data.

Appendix D. Example repertory grids

Job title: Group human resources manager

Construct	Similarity	Contrast pole
1.1	Taking the back seat and going with the flow	Driven
1.2	Completely academic	Work ethic: Looking for ways to work and develop
1.3	Not involved in extracurricular activities	Can demonstrate leadership
1.4	Handed things	Take ownership of career, do what it takes
1.5	Wholly focused on one thing	More well-rounded-getting involved
1.6	Stressed out about being in a role	Passion for providing exceptional customer and sales service
1.7	Waiting to be told	autonomous
1.8	Can't carry a conversation	Can build rapport
1.9	Weirdo	Can relate to other employees
1.10	Nothing about them	Uses their personality

Number of constructs: 10

Length of interview: 34 minutes and 56 seconds.

Job title: Volunteer Coordinator

Construct	Similarity	Contrast pole
2.1	Doing role just to get experience	Passionate
2.2	Not going above and beyond: Doing basics	Involved
2.3	Doing the role and getting out there	Dedicated
2.4	Having no Knowledge or experience	Transfer and utilise theoretical skills in practice
2.5	Someone coming in cold	Good knowledge about subject matter
2.6	Hearts not in it	Enthusiastic about working with clients
2.7	Sees everyone as inferior	Treats everyone the same
2.8	Not giving information to staff	Very open with staff
2.9	Not passing on what you want staff to do	Very clear on what want from others
2.10	They think they know best	Takes on board others opinions
2.11	Doesn't listen to others	Gives people opportunity for feedback
2.12	Testing it [the role] out	Choosing to stay within the field
2.13	Don't really want to do it	A bit more about them, a bit more passion
2.14	Not engaging just turning up	Going above the role: just can't stop
2.15	Theoretical Knowledge	Marrying personal experience with the job
2.16	Becoming too involved	Keep it professional
2.17	Not engaging	Being able to build a relationship with clients: applying their personality
2.18	Pure knowledge	Got a vibe: something about them
2.19	Not very nice to staff	Engaging with members of the team
2.20	Very hard to work with	Personal approach: can draw on life experiences
2.21	Not joining in	Doing the work
2.22	Haven't done the basics	Very supportive

Number of constructs: 22

Length of interview: 1hour 22 minutes 45 seconds

Appendix E. Illustrative record of analysis process

Appendix E1. Illustration of an initial categorisation system and notes leading to amendments.

Superordinate category	Subordinate category	Notes from conversation
Motivation	Passion or interest in role	
	Doing more than the basics	
	A hard worker	I think this could go under team worker which I would rephrase to team player.
	Persistence	
	Long-term commitment	
	Willing to contribute	
	Over involved	
Developer/future orientated	Willing to learn	
	Career management	
	Initiative/proactive	
Professionalism	Professional	
	Rational	
Social skills	Approachable	
	Pleasant	
	Extrovert	
	Rapport building	
Team worker	Compassion	Team player?
	Can take orders	
	Collaborative	
Problem solver	Willing to confront	
	Creative	
	Evidence-based	
Taking responsibility		I would say this fits under the category Professionalism.
Fit	Team	
	Job spec	
	Company ethos	
	Job	
Addition	Add to team	
	Got that something	
	Previous experience	I think this could be a category by itself.
	Comparison with others	
Stage in life		Could this fit under future orientated?
Insight	Self-awareness	
	Aware of process	
	Perspective (over involved was part of this previously)	
Confidence	Self and skills	
	In interview	
	To take risks	
Interview	Prepared	
	Presentation	
	Appropriate response	
Efficiency	Speed	
	Quick starter	
	Quality	
	Pride	
	Time management	
Truth/risk	Honesty	

	Reliable	
	Risky recruitment	
	Disappointment	
Flexible		
Intelligent		We may want to think about a different name for this, considering it would not be measured at interview as such. What about academically capable??
About company vs. job		

Appendix E2. Finalised categorisation system prior to IRA process

<i>Superordinate categories</i>	<i>Subordinate categories</i>
<p>Commitment Dedication – Just a job Directed, pledged or bound to engage with the role.</p>	<p>Passion-not interested Show a passion or interest in the role. About implicit motivation driven by interest in role.</p>
	<p>Interest in company - need a job Interest in company leading to commitment to it. Implicit interest in company as motivator</p>
	<p>Share company values Considered the goals and ethos of the company above their own ego. Or represent a match between their values and that of the company.</p>
	<p>Conscientious-don't care Driven to perform at a high standard. Consideration for quality in their output.</p>
	<p>Committed– not focused on job A commitment to the job, not attributed to a passion, interest or value, which results in a focus on these tasks and responsibilities.</p>
	<p>Long term commitment – stop gap Committed to the role or company for the long term, rather than a temporary destination.</p>
	<p>Persistent – give up Committed to the completion of work activities.</p>
	<p>Hard worker –no energy expelled Engages with work rather than avoiding aspects.</p>
<p>Interpersonal skills The skill to interact with others appropriately.</p>	<p>Empathy Ability to understand and share the feelings of others. To act compassionately.</p>
	<p>Rapport building Can build close and harmonious relationships with those around them.</p>
	<p>Collaborative – lone worker Will work with others, as required, towards a common goal. Exchanging information in an open and receptive fashion, and adapting personal ideas or plans in the pursuit of a common goal.</p>
	<p>Outgoing – shy Extravert-introvert</p>
	<p>Personable A pleasant appearance and manner. Others feel comfortable around them.</p>
<p>Intra personal skills Skills and abilities that occur within the person.</p>	<p>Optimistic Hopeful and confident about the future.</p>
	<p>Resilient Able to withstand or recover quickly.</p>
	<p>Self-awareness Considers own strengths and weaknesses, character, motives and desires. Previous labels: Found job that matches skills, Goal, will ask for help.</p>
	<p>Confidence Belief in self and one's abilities.</p>
	<p>Honest Truthful in their communications and actions.</p>
<p>Adaptable Can make self-suitable for new roles or purpose. Long term modification or adjustment.</p>	

Flexible – Rigid
Short term. Useful within a wide and changing spectrum of settings without making significant changes. Includes limits to hours where can only work certain hours.
Professional development
Willingness and/or effort to engage staff development.
Experience and Knowledge
Hold relevant experience, knowledge and skills for the role.
Recruitment understanding
Acts in a way that suggests an understanding of expectations within the recruitment process.
Business awareness
An awareness of the world of business.
Strategic
Focused on long term goals and commitments and how to best attain these.
Creative
Come up with novel ideas or solutions.
Evidence- based
Can apply knowledge to setting.
Proactive
An interest in or tendency towards creating or controlling a situation for themselves rather than requiring other people or circumstances to direct their behaviour.
Professionalism
Appropriate controlled, behaviour presenting to others a commitment and/or membership to the company commitment.
Independent-dependent
Free from outside control of ones choices. Not subject to others authority or management.
Communication skills
The ability to communicate a point to an audience.

Appendix E3. Independent reviewer one's categorisation system

Utilising subsample of 339 (reflecting minimum subsample which would create categories created by lead researcher).

Categories	Definition of Category	Code numbers of constructs allocated to this category
Background / Interview	The characteristics, experience and attitudes that a person brings in the application process	19.25 H12.23 19.21 19.5 H7.6 H9.6 H12.4 20.13 18.40 3.17 20.5 H12.20 H12.10 H9.2 H5.10 H12.18 H12.3 H12.14 H12.11 20.30 H7.5 H9.20 H12.9 H12.2 H12.6 H12.8 H12.7 H9.18 19.43 H12.22 H7.7 20.45 20.23 H12.21 20.31 20.43 20.37 20.44 H5.13 19.10 20.20 H5.12 10.19 8.9 19.33 12.5 H7.3 19.40 18.38 19.28 8.8 19.30 19.27 16.23 H12.17 H5.14 19.36 H5.19 H9.3 H7.12 18.21 17.12 19.29 H7.11 18.33 19.18 18.31 19.44 16.10 16.17 19.17 18.35 17.21 19.20 18.22 10.18 17.13 20.11 H5.3 10.25 19.38 16.9 17.14 16.1 16.3 17.17 19.4 19.31 20.4 H12.5 H12.11
Work Personality	The seemingly stable orientation that a person has about his or her work	10.32 H5.9 18.18 18.2 19.13 H7.4 H9.11 10.29 17.16 16.2 18.16 H9.1 10.28 17.20 H5.18 20.40 18.7 H9.23 H9.10 20.25 20.22 H5.2 20.29 18.28 20.9 18.17 17.24 19.39 17.25 8.5 3.13 19.41 3.11 20.41 19.16 20.6 H7.9 19.26 19.12 3.10 20.35 10.35 H5.15 8.17
Team Player	Attitudes or receptiveness to being involved in a team / social situation	18.10 10.11 16.8 19.11 20.32 17.8 18.8 3.16 17.11 H9.19 H9.14 H12.12 19.24 20.3 3.1 H9.15 20.2 10.24 H5.16 H7.10 19.23 10.12 H12.16 H9.9 18.29 8.13 20.16 H5.7 20.10 16.16 20.26 10.33 19.2 10.21 19.1 20.39 3.6 20.24 20.19 18.25 16.20 18.1

Leadership / Communication	Ability to communicate and motivate	20.42 17.15 8.19 3.9 3.18 H5.5 19.34 16.6 18.12 19.22 3.2 19.45 16.11 18.9 10.2 18.26 3.5 18.11 8.22 17.1 10.1 10.5 17.6 16.24 10.26 17.2 19.14 17.5 16.7 10.14 19.15 18.6 19.32 18.30 8.6 10.15 18.32 16.25 H9.8 H5.4 H12.19 19.8 8.12 19.3 8.4 20.33 H7.1 3.14 H7.13 H7.2
Will do a job	Someone who will do as job as instructed	H9.17 H9.4 H12.13 20.8 H12.1 18.37 17.19 10.27 19.42 10.34 16.21 18.15 20.21 16.22 H9.5 19.6 8.3 8.20 8.7 16.13 17.7 20.14 10.36 16.2 20.27 10.9 10.23 H9.16 10.31 H5.6 H5.8 20.17 8.11 10.6 18.23 8.21 10.10 10.8 16.18 18.24 18.13 18.36 19.19 19.37 20.1 20.18
Confidence / Core Personality	Seemingly core characteristics of the person	H5.1 18.27 H9.13 17.22 20.15 18.34 H7.8 18.39 17.4 17.9 10.16 3.7 3.4 17.23 10.4 10.3 8.18 8.16 8.15 16.26 3.8 16.4 16.5 10.13 18.19 17.18 3.3 8.10 3.12 8.2 10.20 17.3
Negative Person Someone you don't want	Someone you would be better off not employing	10.22 H9.22 18.4 20.12 8.1 18.3 19.7 18.14 18.5 20.7 16.14 20.36 H5.17 H12.15 H9.12 19.35 H9.21 19.9 20.23 H9.7 H5.11 20.28 16.15 3.19 8.14 10.7 10.30 18.20 16.19 20.38 3.15 16.12 10.17 17.10

Appendix E4. Reported amendments following initial IRA process

Background (my thoughts)

My category of knowledge and experience, alongside your category of Background show a lot of overlap. I think maybe the variation here comes from the wider range of nuance categories I have put together, which are aimed at being as distinct as possible from each other. Your categorising illustrates that they are not distinct, but similar in terms of their human capital roots.

Interview as a category (my thoughts)

The reason I did not refer to what they brought to interview is because I wanted to try and identify what they were signalling in the interview. I would then discuss in the write up how these components might be presented in the recruitment process, based on results.

There is an overlap between this aspect and my aspects of recruitment and business knowledge. This may suggest that these are best placed into the same category as experience and knowledge (see box below). Although, wording this so it is not too vague is not easy. It may be best to keep them as distinct subgroups within a more general ‘experience and knowledge’ category? Or reverting to previous thought I had about competency.

Box 1

My definitions

‘Experience and knowledge - Experience, knowledge and skills relevant for fulfilling the advertised role role.’

Recruitment understanding - Acts in a way that suggests an understanding of expectations within the recruitment process.

Business awareness - An awareness of the world of business.

Revisions

‘Job-specific knowledge, skills and experience.... = I say this to distinguish from the other skills etc listed later.

...identified by supervisors.... = to illustrate this is what recruiters/managers etc are looking for.

....as necessary for competent functioning within the role they are placed. = I say competent rather than effective, as other skills come in to make them more effective, but there are certain skills etc that are necessary before you can perfect to be efficient.

Or I may remove ‘experience’ as this is just evidence of skills and knowledge. Maybe, ...evidenced within experience and/or credentials?

So...Knowledge and Experience

'Job-specific knowledge, skills and experience identified by supervisors as necessary for competent functioning within the role they are placed.

Or.

'Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, and evidenced within experience and/or credentials.

Recruitment understanding and business awareness

I am thinking of keeping the recruitment and business separate, to show they are distinct. I considered combining business with both, but it would then not be clear in which it lied and I am unsure whether it is only relevant to just one of them.

I will put these as subordinate themes with, knowledge and experience. This will represent their relationship with knowledge and experience, and evidencing this.

Negative person (my thoughts)

I tried to avoid this value judgement, as I felt, in a lot of cases, the bipolar construct represented both positive and negative representations. My view is this is more likely to reflect what we as raters deem as important. I have had a look at what constructs you have put in this category (see table below) and it is quite spread across the categories, so I am not sure if a way to begin would be for you to consider what you think of the categories I have put each in e.g. whether you think they could also reflect these or not?

Construct			My category	Comments
10.22	Put theory into practice	Like theory but don't get on and do anything. No action taken	Evidence-based	
H9.22	Lacking self esteem	Judge self as better than is	Confidence	
18.4	Keep up	Not interested	Committed– not focused on job	
20.12	Take time and effort	Not bothered	Conscientious-don't care	
8.1	Reliable	Not responding	Independent-dependent	
18.3	Willing to learn	'I know everything'	Professional development	
19.7	Can find a way to do tasks asked to	Refuse to do things	Proactive	
18.14	Want to do a good job	Not bothered, just want the money.	Conscientious-don't care	
18.5	Consistent approach	Do something one day then not again for ten weeks	Independent-dependent	
20.7	Clock in and work	Long breaks and procrastination	Hard worker –no energy expelled	
16.14	Mature	See petty things as a big issue	Strategic	
20.36	Prepared to do extra	'That's not what I'm paid for'	Committed– not focused on job	

H5.17	Show you're interested, listening and engaging	Lazy demeanour (dragging feet)	Communication skills	
H12.15	Will make it work	Avoidance	Persistent – give up	
H9.12	Perfection doesn't mean 100%	Totally focused on perfection	Strategic	
19.35	Work priority (at work)	Too busy sorting everything else out	Committed– not focused on job	
H9.21	Pleasure to work with	Difficult to handle	Personable	
19.9	Don't ignore mundane work	Do what they want to do	Hard worker –no energy expelled	
20.23	Know what the company is looking for and adapt to fit	Their self, to the detriment of all else.	Adaptable	
H9.7	Engage in challenging role	Happy doing nothing	Resilient	
H5.11	Work ethic, take as much as can, hardworking	The world owes them a living	Hard worker –no energy expelled	
20.28	Push themselves	Sound off about personal development but can't be bothered	Professional development	
16.15	Hard working	Not getting to work on time	Hard worker –no energy expelled	
3.19	Reactive	Planning and prioritising	Strategic	
8.14	Friendly	Puts up barriers	Personable	
10.7	Happy to say this isn't their area	Take on work beyond their capabilities	Self-awareness	
10.30	Keeping the job in perspective	Panics, Stressed, anxious	Strategic	
18.20	Confident and secure in what do	Won't make a decision for themselves	Confidence	
16.19	Work more than the 'job'	Stick to job description	Committed– not focused on job	
20.38	Seek out new responsibility	Have to be coerced or bribed	Independent-dependent	
3.15	Moaner	Problem-solver	Optimistic	
16.12	Get up and go	Not forthcoming with ideas	Hard worker –no energy expelled	
10.17	Gets a project done	Starts a project and can't be bothered to finish it off	Persistent – give up	
17.10	Will engage in new things and be open-minded	Cynical attitude	Adaptable	

Team player

I would expect team player to overlap significantly with collaboration, personable, empathy, independent and communication skills. I am also not surprised you put one of the shared company values in this category; I would expect this to impact people's perceptions of someone as a team player. This is the same for conscientious. However, I

did take a look at the other constructs, which I would not necessarily have put as linked strongly with team player.

Is there anything else you think team player adds? Can it be made distinct from these other categories I illustrate overlap with below?

Table 2: Constructs placed in your ‘team player’ category, which I did not place in categories I would see as related to this.

			My category	Notes
H9.9	Can deal with things you don’t want to do.	I don’t do this, I won’t do that.	Resilient	I can see this as a team player aspect. This degree of overlap with different categories makes me incline to keep the broader categories, as they play into ‘team player’ but are also issues in and of themselves.
H9.14	Can get interactions with people	Introvert	Outgoing – shy	I could see this as rapport building also. From this I have returned to my own constructs and re-considered 19.32, 20.15, and H9.14. Some overlap rapport building and shy.
H5.7	Happy to ask for help and clarify	Not prepared to ask for help, over or under confident	Self-awareness	I can see this in your category- but link between seeking help and self-aware, shown in ones below, was my justification for putting this into ‘self-aware’. I will alter definition to reflect this.
H7.10	Is prepared to try anything	Single minded	Strategic	I am happy with my classification. This comment related to what jobs they sort out and the openness was associated with positive judgements.
H12.12	Recognise and seek help	Don’t recognise when in trouble	Self-awareness	I am happy with my classification.
H12.16	Seek Help	Haven’t asked for help	Self-awareness	I am happy with my classification.
3.6	Wont contribute, won’t get involved	Willing to try and learn	Professional development	I can see this as a team player aspect. This represents overlap between what good for teamwork and what is good in general.
3.16	Nothing to bring to the table	Able to offer the organisation something	Experience and Knowledge	This suggests I might need to add to the experience and knowledge definition to reflect adding to the team. See box below.

8.13	Don't have to tell what to do will think for themselves	Have to tell them everything and will question it	Proactive	I am happy with my classification.
10.12	Likes coming up with ideas that are practical	Just follows others	Proactive	I am happy with my classification.
10.21	Willing to be challenged, admit when wrong	Got their opinion and don't encourage challenges	Self-awareness	I can see this as a team player aspect. See change in definition below to accommodate this.
10.24	Always something they can contribute	arrogant	Self-awareness	Adding a subcategory under self-awareness, to be assertive and confident. As this will fall into self-aware assertive.
10.33	Happy to adapt and flex when needed	Likes rules and regulations. Rigid and fixed.	Adaptable	I am happy with my classification.
17.6	Empathetic, Think about whole Eco centre of where work	It's just about them and their boss.	Strategic	I can see the team role here. See amended definition.
18.10	"I'll give it a try"	"It's not going to work"	Professional development	I am happy with my classification.
18.18	Realise own potential	Comfortable how are	Self-awareness	I am happy with my classification.
17.11	Add to their team	Subtract from team	Experience and Knowledge	I can see the team role here but see revision below.
19.23	Will fit into team	Can't draw much out of them	Experience and Knowledge	I can see the team role here. May actually go better in communication skills.
19.24	Bring something to the team	Isolated	Experience and Knowledge	I can see the team role here, maybe better placed in collaborative.
20.2	Can buddy up with someone new and go with it	That's not my job	Flexible – Rigid	I can see this as a team player aspect. This represents overlap between what good for teamwork and what is good in general.
20.10	Will look for solutions to professional development	Find it difficult to identify and develop weaknesses	Self-awareness	I am happy with my classification.
20.16	Recognises areas for development and make effort to develop	Can't identify or rectify weaknesses	Self-awareness	I am happy with my classification.
20.24	Good addition to the team	The same as everyone else	Experience and Knowledge	I can see the team role here but see revision below.

Box 2.

Resulting from overlap with team player, shy, and rapport building.
Personable previously 'A pleasant appearance and manner. Others feel comfortable around them.'
 Rapport building previously 'Can build close and harmonious relationships with those around them'

Personable amended ‘‘The capacity to present oneself in a pleasant manner in order to build close and harmonious relationships with others’. (As a result collapse outgoing-shy, rapport building and personable).

Resulting from overlap with self-awareness and team player

Self-awareness previously ‘Considers own strengths and weaknesses, character, motives and desires.’

Self-awareness amended ‘Is aware of their own skills, knowledge, character, motives and desires, and utilises an understanding of their strengths and weaknesses in these to select appropriate roles, responses, and accept input from others.’ – it may be a bit lengthy!

Subcategory of confidence

Confidence (revised in box 3.): Confidence amended: Express a belief in self and one’s abilities which may lead to generalising beyond behaviours outside of their comfort zone, including questioning decisions. Reducing evidence of anxiety around high pressure performance.

Resulting from overlap between team player and knowledge and experience.

Current definition: Knowledge and Experience

‘Job-specific knowledge, skills and experience identified by supervisors as necessary for competent functioning within the role they are placed.

Or.

‘Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, and evidenced within experience and/or credentials.

Knowledge and awareness amended: maybe adding ‘which fill an existing need or add additional value.’

Resulting from overlap with team player and strategic

Strategic previously: ‘Focused on long term goals and commitments and how to best attain these.’

Strategic amended: Places present and responsibilities within the context of long term goals and wider team and company requirements, in order to prioritise their resources.’

Will do a job (my thoughts)

I think that this category would be too vague for me, as there are a number of reasons someone might do a job. Perhaps the labelling and definition need adjustment to address this?

I would see this as overlapping with commitment categories, flexibility, adaptability and also possible resilience, strategy, evidence-based, and independent. I can see how self-awareness and confidence would feed into this. I have had a look at the other constructs that you put here, but I would see them all impacting someone’s ability to do a job.

Table 3: Constructs placed in your ‘will do a job’ category, which I did not place in categories I would see as related to this.

			My category	Notes
8.20	There’s a time and a place for enthusiasm	Loud, constantly	Communication skills	I am happy with my classification.
16.22	Professional, Polite	Too relaxed	Professionalism	I am happy with my classification.
20.17	Detached	Too much one of the guys	Professionalism	I am happy with my classification.

10.23	Keen on evidence-based practice	Tries random stuff	Evidence based	I am happy with my classification.
19.19	Show a level of competency	Don't have knowledge for the role	Experience-knowledge	I am happy with my classification.
18.13	Will own up to problems	Try to hide problems	Honest	I am happy with my classification.
20.14	More natural people person	Shy and make no effort	Outgoing-shy	Collapse rapport building, shy etc. see above
H9.16	I have to be number one	Not competitive	Collaboration-lone worker	I am happy with my classification.
19.6	Can be managed	Assume they know better	Collaboration-lone worker	I am happy with my classification.

I suppose the question, as with others, is whether these discrete categories exist. I would welcome your views on this.

Confidence/core personality

I would definitely expect overlap with confidence, and would be surprised if confidence constructs provided where not in here. So for this reason I have returned to my grouping of the following constructs that you placed elsewhere.

Table 4: Constructs I placed under confidence, excluded from your confidence/core personality category.

			Your category	Notes
H5.19	Confidence, prepared to explain what you can offer and answering questions confidently and with humility	Self-confidence issues	Background/Interview	I can see how this could fit elsewhere, but am happy with my classification.
H7.9	Assertive	Passive/docile	Work Personality:	Might move to proactive.
18.20	Confident and secure in what do	Won't make a decision for themselves	Negative Person, Someone you don't want	I am happy with my classification.
18.24	Give self a chance	Prepare for disappointment	Will do a job:	See adaption to definition below.
19.3	Able to disagree with others	Just do it	Leadership/communication	See adaption to definition below.
H7.5	Happy in their position and make statements about themselves	Seek confirmation of what good at	Background/Interview	See adaption to definition below.

20.41	Question if not sure	Not confident to speak out	Work Personality:	See adaption to definition below.
H9.17	Can deal with things you don't want to do	Needs to be in comfort zone	Will do a job:	See adaption to definition below.
H9.11	Confident	Doesn't know they are as good as they are	Work Personality:	This falls into confidence now placed under self-awareness.
10.34	Willing to take the risk	Worried about his job	Will do a job:	See adaption to definition below.
20.29	Will put self through things outside of their comfort zone	Not confident	Work Personality:	See adaption to definition below.
16.7	Confident	Didn't interact	Leadership/communication	See adaption to definition below.
18.26	Rightly confident	Overwhelmed?	Leadership/communication	Again, a link with self-aware.
H9.22	Lacking self esteem	Judge self as better than is	Negative Person, Someone you don't want	I will move to self-aware, confidence.
H7.4	Remain calm under pressure	Get wound up when things don't go their way	Work Personality:	Unsure. Perhaps move to resilience.
19.22	Seem comfortable and relaxed	Nerves get to them	Leadership/communication	See adaption to definition below.
18.7	Show how confident are	Nobody can tell them they're not brilliant	Work Personality:	See link with self-awareness.

I can see from this that there is a lot of overlap between confidence and self-awareness. While I believe these are distinct, it will be worth noting in my analysis that there are some constructs which represent the relationship between the two. Someone who is confident, but not self-aware is arrogant, someone who is self-aware of their competence will be confident; someone not self-aware of their competence will be seen as having confidence issues. I will combine them into one, that way there are no constructs overlapping both.

I am not sure how to approach the others, I can see that a number of these categories might be considered unchanging aspects of someone's personality, which would bring them together.

Box 3.

Resulting from an absence within your confidence category <i>Confidence previously:</i> - Belief in self and one's abilities' Confidence amended: Belief in self and one's abilities which may lead to generalising beyond behaviours outside of their comfort zone, including questioning decisions. Reducing evidence of anxiety around high pressure performance. Add to communication' 'this may be impacted by, but is discrete from, a confidence in one's ability to perform these communication tasks.

Leadership/communication

I would expect overlap with communication. Therefore have returned to the constructs you did not place here from my communication category. Please note, all notes relate to a comparison of whether I should remove it from my existing category, not whether a new category is needed to accomodate it.

Table 5: Constructs I placed under communication, excluded from your leadership/communication category.

			Notes
H5.17	Show you're interested, listening and engaging	Lazy demeanour (dragging feet)	See adaption below. Adding appearing engaged.
3.4	Controlled and Stiff	Being themselves	Possible about confidence.
18.31	Look like really want the job	Not the job they really want	Looking at this I think this is better placed in passion as relates to an interest.
16.1	Expand on points at interview	Brief answers	See adaption below.
H5.16	will contribute, thinking about impact of what going to say	Says what they think without thought to impact	See adaption below. Add the word thoughtful.
H7.2	Communicate with confidence	Unable to put across consistently what offer and experience have	There would be questions if I put this in confidence as you have not labelled it as such either. This suggests overlap with confidence. See adaptation below.
20.20	Good in interview	Random, lack common sense	May fit better into communication now added the term 'thoughtful'
19.40	Used really good examples	Don't offer examples	I am happy with my categorisation here.
20.37	Can demonstrate experience	'If I was in that situation I would...'	I am happy with my categorisation here.
19.26	Elaborate	Sketchy on the details	I am happy with my

			categorisation here.
19.17	Can draw parallels with experience and role	Don't know how to write applications	I am happy with my categorisation here.
17.12	Can demonstrate an intention to learn	Can't demonstrate learning	I am happy with my categorisation here.
H12.20	Will communicate appropriately in interview	Quiet, shy, short answers	I am happy with my categorisation here.
8.20	There's a time and a place for enthusiasm	Loud, constantly	I am happy with my categorisation here. See addition of 'appropriate'.
10.13	Amazing listener	Hates to listen	I am happy with my categorisation here.
H9.19	Listening and analysing what is being said	Tendency to be impulsive	I am happy with my categorisation here. See addition of 'thoughtful'

From this I would suggest I should add in my description that this is 'appropriate' communication during interviews and working hours.

Box 4.

Changes resulting from communication constructs not being placed in your communication category.
Current communication definition: The ability to communicate a point to an audience. Includes; Listening skills, Articulate adapt communication. Non-verbal communication: include appearance. This may be impacted by, but is discrete from, a confidence in one's ability to perform these communication tasks.
Communication skills adapted: The ability to receive information in an engaged manner, and respond to this with a thoughtful presentation of appropriate information, adapted for the present context.

Other constructs placed in this category might represent qualities you would want from a leader; passion, interest in the company, conscientious, hard worker, empathy, rapport, collaborative etc. I think it's interesting that constructs I have put relating to flexible and adaptable are missing from here, and everything else is included. While leadership might be required for employability, it is not always. It may fit better with discussions of collaboration?

Others outside of my framework

I would love to re-position some of the constructs I have outside of the employability framework (a risk in recruitment, and distinctive, and thus have had a look at where you have put these.

Table 6: Constructs placed in my ‘a risk in recruitment’ or ‘distinctive’ ‘will do a job’ category, which you placed within background/interview.

H9.6	Shine out/wow factor	Just waving a piece of paper
19.38	Proven self	Cant demonstrate could do job
19.4	First in a good field of candidates	Performed the best out of a poor bunch
19.29	Gone the extra step	Not distinguishable from other candidates

I can see how 19.38 would fit with background, or my experience category. The others, to me, fit more with a consideration of all the candidates. As represented in the following category;

‘Distinctiveness: Communicates a “wow factor”, or aspect about oneself which is unique and valuable, within the pool of candidates.’

My other category, outside of the employability framework is as follows;

‘A risky recruitment: An employer’s confidence in their fit with role, normally as seen them in action before.’

These are presented below.

Table 7: Constructs placed in my ‘a risk in recruitment’ or ‘distinctive’ category, which you placed within ‘work personality’, ‘leadership/communication’ and ‘will do a job’ respectively.

			Notes
3.10	Nothing that makes someone stand out	A flare	While you see this as a stable orientation that a person has about work, I can see this, but I think this flare might vary in terms a number of characteristics about the role, and feel it is better placed as being ‘distinctive’.
16.24	Seen them work	Take a chance	I would not be happy putting this as an aspect of communication or leadership. I feel this is better placed in my ‘a risky recruitment’ category.
16.18	Excels above my standards	Disappointment	I could see it fitting in conscientious, a category I have linked with your ‘will do a job’ category.

Conclusions

I have not made any final decisions here as I think that needs to be done jointly. What I have provided below is my own framework, adapted in response to your analysis. Maybe take a look at my categories and see what you think? You could send me notes beforehand if you like.

Table 8: My revised categories

Superordinate categories	Subordinate categories	Notes on how altered in response to your analysis
Commitment Dedication – Just a job Directed, pledged or bound to engage with the role.	Passion-not interested Show a passion or interest in the role. Implicit motivation driven by interest in role.	
	Interest in company - need a job Interest in company leading to commitment to it. Implicit motivation driven by interest in the company.	
	Share company values Considered the goals and ethos of the company above their own ego. Or represent a match between their values and that of the company.	
	Conscientious-don't care Driven to perform at a high standard. Hold a consideration for quality in their output.	
	Committed– not focused on job A commitment to the job, not attributed to a passion, interest or value, which results in a focus on these tasks and responsibilities.	
	Long term commitment – stop gap Committed to the role or company for the long term, rather than a temporary destination.	
	Persistent – give up Committed to the completion of work activities.	
	Hard worker –no energy expelled Engages with work rather than avoiding aspects.	
Interpersonal skills The skill to interact with others appropriately	Empathy Ability to understand and share the feelings of others. To act compassionately.	
	Collaborative – lone worker Will work with others, as required, towards a common goal. Exchanging information in an open and receptive fashion, and adapting personal ideas or plans in the pursuit of a common goal.	
	Personable The capacity to present oneself in a pleasant manner in order to build close and harmonious relationships with others.	New see box 2
Intra personal skills Skills and abilities that occur within the person	Optimistic Hopeful about the future.	
	Resilient Able to withstand or recover quickly.	
	Honest Truthful in their communications and actions.	
	Self-awareness Is aware of their own skills, knowledge, character, motives and desires, and utilises an understanding of their strengths and weaknesses in these to select appropriate roles, and accept input from others.	Confidence Express a belief in self and one's abilities which may lead to generalising beyond behaviours outside of their comfort zone, including questioning decisions. Reducing evidence of anxiety around high pressure performance.

Experience and Knowledge 'Job-specific knowledge, skills and experience identified by supervisors as necessary for competent functioning within the role they are placed. Which fill an existing need or add additional value.' Or. 'Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, which fill an existing need or add additional value and evidenced within experience and/or credentials.	Recruitment understanding Acts in a way that suggests an understanding of expectations within the recruitment process.	New see box 1 and 2
	Business awareness An awareness of the world of business.	New see box 1 and 2
Adaptable	Can make self-suitable for new roles or purpose. Long term modification or adjustment	
Flexible – Rigid	Short term. Useful within a wide and changing spectrum of settings without making significant changes. Includes limits to hours where can only work certain hours	
Professional development	Willingness and/or effort to engage in staff development.	
Strategic	Places their present responsibilities within the context of long term goals and wider team and company requirements, in order to prioritise their resources.	New see box 2
Creative	Come up with novel ideas or solutions.	
Evidence- based	Can apply knowledge to relevant settings.	
Proactive	An interest in or tendency towards creating or controlling a situation for themselves, rather than requiring other people or circumstances to direct their behaviour.	
Professionalism	Appropriate controlled, behaviour presenting to others a commitment and/or membership to the company commitment.	
Independent- dependent	Free from outside control of ones choices. Not subject to others authority or management.	
Communication	The ability to receive information in an	New see box 4.

skills	engaged manner, and respond to this with a thoughtful presentation of appropriate information, adapted for the present context.	
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Appendix E5. Second reviewer coding of subsample

Categories presented by lead researcher		Second reviewers construct coding
Superordinate categories	Subordinate categories	
Commitment Dedication – Just a job Directed, pledged or bound to engage with the role.	Passion-not interested Show a passion or interest in the role. Implicit motivation driven by interest in role.	3.2, 8.19, 16.17, 16.19, 17.19, 18.15, 20.44, H5.9, H12.7, H12.17
	Interest in company -need a job Interest in company leading to commitment to it. Implicit motivation driven by interest in the company.	8.17, 17.21, 18.28, 18.31, 19.30, 19.43, 20.27, 20.30, 20.36, H12.23
	Share company values Considered the goals and ethos of the company above their own ego. Or represent a match between their values and that of the company.	19.25, 20.23,
	Conscientious-don't care Driven to perform at a high standard. Hold a consideration for quality in their output.	3.11, 8.8, 10.1, 18.14 20.18, 20.32, 20.12, 20.40, 20.42, H5.1, H9.12, H9.18
	Committed– not focused on job A commitment to the job, not attributed to a passion, interest or value, which results in a focus on these tasks and responsibilities.	8.11, 8.21, 10.10, 17.16, 19.35, H7.6
	Long term commitment – stop gap Committed to the role or company for the long term, rather than a temporary destination.	16.9, 18.40, 19.31, 20.5, 20.31, H7.3
	Persistent – give up Committed to the completion of work activities.	10.17, 10.31, 19.7, H9.9
	Hard worker–no energy expelled Engages with work rather than avoiding aspects.	8.7, 8.22, 10.9, 16.13, 16.15, 16.18, 19.19, 20.6, 20.7, H5.2, H5.11, H9.7
Interpersonal skills The skill to interact with others appropriately	Empathy Ability to understand and share the feelings of others. To act compassionately.	8.16, 10.13, 10.32, 16.16, 17.6, 18.37, 19.34
	Collaborative – lone worker Will work with others, as required, towards a common goal. Exchanging information in an open and receptive fashion, and adapting personal ideas or plans in the pursuit of a common goal.	3.1, 3.3, 3.8, 8.4, 8.6, 8.15, 10.14, 10.21, 16.25, 17.11, 18.1, 19.6, 19.11, 19.24, 20.3, 20.19, 20.26, 20.33, 20.39, H9.15
	Personable The capacity to present oneself in a pleasant manner in order to build close and harmonious relationships with others.	3.5, 8.14, 10.4, 10.15, 16.4, 16.5, 16.8, 16.11, 17.1, 17.9, 17.18, 17.23, 18.29, 19.14, 19.23, 20.14, 20.15, 20.25, H5.16, H7.13, H9.14, H9.21, H12.19
Intra personal skills Skills and abilities that occur within the person	Optimistic Hopeful about the future.	10.2, 17.10, 18.24
	Resilient Able to withstand or recover quickly.	10.26, 10.27, 10.28, 17.3, 18.39, 20.34, H7.4, H12.15
	Honest Truthful in their communications and actions.	3.4, 8.18, 16.26, 18.30, 19.36

	Self-awareness Is aware of their own skills, knowledge, character, motives and desires, and utilises an understanding of their strengths and weaknesses in these to select appropriate roles, and accept input from others.	3.13, 16.6, 16.7, 18.26, 19.32, 20.29, H5.15, H5.19, H7.5, H7.8, H9.5, H9.11, H9.13, H9.17, H9.22, H12.12, H12.16
		3.6, 3.10, 8.20, 10.7, 10.16, 10.24, 17.8, 17.24, 18.19, 18.35, 19.1, 20.21, 20.35, H5.7, H9.1, H9.10, H12.1, H12.2
Experience and Knowledge 'Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, which fill an existing need or add additional value.	Experience and Knowledge	3.16, 8.9, 10.18, 10.29, 16.10, 16.14, 17.13, 19.19, 19.20, 19.38, 19.44, 20.22, 20.37, H7.11, H7.12, H9.23, H12.6, H12.9, H12.14, H12.21
	Recruitment understanding Acts in a way that suggests an understanding of expectations within the recruitment process.	16.1, 16.23, 17.14, 17.15, 18.21, 18.22, 18.33, 18.35, 18.38, 19.4, 19.10, 19.17, 19.21, 19.22, 19.26, 19.27, 19.29, 19.37, 19.40, 20.11, 20.20, 20.24, 20.45, H5.12, H5.14, H9.4, H9.6, H9.8, H12.4, H12.5
	Business awareness An awareness of the world of business.	3.17, 10.25, 19.5, 19.18, 19.28, 20.4, 20.43, H9.2, H9.20, H12.3
Adaptable	Can make self-suitable for new roles or purpose. Long term modification or adjustment	10.19, 16.3, H5.13, H12.22
Flexible – Rigid	Short term. Useful within a wide and changing spectrum of settings without making significant changes. Includes limits to hours where can only work certain hours	8.1, 10.33, 19.39, 20.2, 20.9
Professional development	Willingness and/or effort to engage in staff development.	16.21, 17.12, 18.3, 19.33, 20.10, 20.16, 20.28, H5.3, H12.8
Strategic	Places their present responsibilities within the context of long term goals and wider team and company requirements, in order to prioritise their resources.'	3.19, 10.3, 10.34, 16.20, 17.17
Creative	Come up with novel ideas or solutions.	10.5, 10.20, 16.12, 19.45
Evidence- based	Can apply knowledge to relevant settings.	10.22, 10.23, H9.3, H12.10
Proactive	An interest in or tendency towards creating or controlling a situation for themselves, rather than requiring other people or circumstances to direct their behaviour.	3.12, 3.15, 8.2, 8.3, 8.13, 10.12, 10.35, 17.7, 18.18, 18.23, 18.25, 19.13, 19.41, 20.8, 20.38, H5.8
Professionalism	Appropriate controlled, behaviour presenting to others a commitment and/or membership to the company commitment.	8.5, 10.8, 16.22, 18.2, 19.8, 19.12, 19.15, 19.16, 20.1
Independent-dependent	Free from outside control of ones choices. Not subject to others authority or management.	8.10, 10.6, 10.36, 16.2,

		17.25, 18.17, 18.20
Communication skills	The ability to receive information in an engaged manner, and respond to this with a thoughtful presentation of appropriate information, adapted for the present context.	3.9, 3.14, 3.18, 8.12, 10.11, 17.5, 18.32, 19.3, 20.41, H5.4, H5.17, H5.18, H7.1, H7.2, H9.19, H12.20

Appendix E6. Comparison coding of content analysis by lead research and second independent researcher.

Notes based on discussion in red font.

Superordinate categories	Subordinate categories						My response
Commitment Dedication – Just a job Directed, pledged or bound to engage with the role.	Passion-not interested Show a passion or interest in the role. Implicit motivation driven by interest in role.	3.2	Self-interested	Ambitious for a course	86	L	Team work
		8.19	Enjoys what they're doing	Not interested. Miserable	80	L	Agree
		16.17	Interest in the job	Not motivated	83	M	Agree
		16.19	Work more than the 'job'	Stick to job description	94	H	Flexible
		17.19	Passionate employee	Just a job	-	-	Agree
		18.15	Keen	Take me or leave me attitude	100	H	Agree
		20.44	Found their niche in the world	Not fulfilling potential	74	L	Self-awareness
		H5.9	Passionate about subject	Complain that find subject boring	66	L	Agree
		H12.7	Can demonstrate a passion for area	Interest isn't evident	92	I	Agree
		H12.17	Has a passion for a specific role	Select roles that are convenient	-	-	Agree
	Interest in company -need a job Interest in company leading to commitment to it. Implicit motivation driven by interest in the company.	8.17	Enthusiastic	Wants a job to look good on CV	89	H	Agree
		17.21	Interested in the company	Just apply for anywhere	-	-	Agree
		18.28	Interested	Appear bored	94	H	Passion Generic interest not role or company related
		18.31	Look like really want the job	Not the job they really want	86	M	Agree
		19.30	Interested in THAT job and company	Don't mind what job have	74	M	Agree
		19.43	Interests fit within profile of institution	Interested in self not institution	74	M	Company Values
		20.27	Seek to take on extra	Stuck in a rut and happy to be there	77	H	Professional development
		20.30	Motivated. Know what want to do	Fallen into the job	74	L	Agree
		20.36	Prepared to do extra	'That's not what I'm paid for'	80	L	Flexible

		H12.23	More concentrated in applications	Applied for a variety of jobs	-	-	Agree
	Share company values Considered the goals and ethos of the company above their own ego. Or represent a match between their values and that of the company.	3.7	Getting a win	Making a difference	97	H	Agree
		19.25	Attitude towards importance of relevant values fit role	Don't grasp the type of role	74	M	Agree
		20.23	Know what the company is looking for and adapt to fit	Their self, to the detriment of all else.	83	M	Agree
	Conscientious-don't care Driven to perform at a high standard. Hold a consideration for quality in their output.	3.11	Not caring	Quality (not a 100%er)	83	L	Agree
		8.8	Energy and time	Don't fulfil the role description	74	L	Misc- could be knowledge and skills or hard worker or here
		10.1	Conscientious, does their best	Puts their own desires above the job	63	L	Agree
		18.14	Want to do a good job	Not bothered, just want the money.	89	M	Agree
		20.18	Maintain a high standard	Have work returned to them	80	L	Agree
		20.32	Buy into things	Don't understand why doing something. Not engaged with it.	89	H	Company values
		20.12	Take time and effort	Not bothered	83	M	Agree
		20.40	High standard of attention to detail	Slapdash	86	M	Agree
		20.42	Have high standard	Standards slip	77	L	Agree
		H5.1	Conscientious	Doesn't really care	86	M	Agree
		H9.12	Perfection doesn't mean 100%	Totally focused on perfection	78	I	Agree
		H9.18	Determination, to an appropriate level	What will be will be	67	L	Agree
	Committed– not focused on job A commitment to the job, not attributed to a passion, interest or value, which results in a focus on these tasks and responsibilities.	8.11	Do above and beyond	Have to push them	86	H	Proactive
		8.21	Good worker	Lazy	80	L	Agree
		10.10	Focused, get job done	Not committed	77	M	Agree
		17.16	Committed to the job	Doesn't really care	-	-	Agree
		19.35	Work priority (at work)	Too busy sorting everything else out	63	L	Agree
		H7.6	Commitment to work and good	Less motivated	77	L	Agree

	Return to can i add to hardworking category?		grades				
	Long term commitment – stop gap Committed to the role or company for the long term, rather than a temporary destination.	16.9	Happy to do the job and stay	The role is temporary for them	71	L	Agree
		18.40	Thinking of the future	No forward plan/aims in mind	80	L	Agree
		19.31	Want to make a contribution to institution	Just need work	74	M	Interest in company- just a job
		20.5	Good solid employees. Reliable	Over skilled/will leave soon	94	H	Agree
		20.31	Want that job	Need the money	77	L	Interest in role- just a job
		H7.3	Driven to find employment	Not knowing what they want and don't want	80	L	Independent (self Aware)
	Persistent – give up Committed to the completion of work activities.	10.17	Gets a project done	Starts a project and can't be bothered to finish it off	69	L	Agree
		10.31	Follows through	Gets bored and fed up can't be arsed to follow it through	69	L	Agree
		19.7	Can find a way to do tasks asked to	Refuse to do things	69	M	Agree
		H9.9	Can deal with things you don't want to do.	I don't do this, I won't do that.	86	I	flexible
	Hard worker–no energy expelled Engages with work rather than avoiding aspects. Includes being involved, not about whether have to push to do this or not, relates to commitment in this sense not proactivity. includes discussions of work ethic	8.7	Wants to do everything as soon as can	Won't find time to do things	74	L	Agree
		8.22	Get on and do the task	Doesn't do anything	80	L	Agree
		10.9	Will get on and do it	procrastinates and does things they would rather do instead of priorities	83	H	Agree
		16.13	Does what asked	Not pulling their weight	89	H	Agree
		16.15	Hard working	Not getting to work on time	86	M	Agree
		16.18	Excels above my standards	Disappointment	94	H	conscientious
		19.19	Show a level of competency	Don't have knowledge for the role	80	H	Agree
		20.6	Hardworking	Lazy	83	M	Agree
		20.7	Clock in and work	Long breaks and procrastination	86	M	Agree
		H5.2	Hard Working	Lazy	86	M	Agree
		H5.5	Dependable, reliable	Will not do tasks, don't deliver	86	M	Agree

Interpersonal skills The skill to interact with others appropriately	Empathy Ability to understand and share the feelings of others. To act compassionately.	H5.11	Work ethic, take as much as can, hardworking	The world owes them a living	86	M	Agree
		H9.7	Engage in challenging role	Happy doing nothing	89	H	Agree
		8.16	Emphatic	Doesn't express any feelings but anger and annoyance	74	L	Agree
		10.13	Amazing listener	Hates to listen	83	H	Agree
		10.32	Compassionate, non-judgemental	From a different era, Judgemental (sexist)	69	L	Agree
		16.16	Considerate of colleagues	Lack respect	74	L	Agree
		17.6	Empathetic, Think about whole Eco centre of where work	It's just about them and their boss.	-	-	Agree
		18.37	Grasp ideas and able to analyse and understand impact of one action on another	Have to spend time explaining to them	86	M	MISC- could be independent, could be knowledge and skills (JT Independent)
	Collaborative – lone worker Will work with others, as required, towards a common goal. Exchanging information in an open and receptive fashion, and adapting personal ideas or plans in the pursuit of a common goal.	19.34	Can relate to customers/clients	Doesn't relate to people well	69	M	Agree
		3.1	Out for themselves	A team player	91	M	Agree
		3.3	Bruising/crushing others	Getting people engaged with the project	91	M	Agree
		3.8	Achieving only your goals	Willing to compromise	89	M	Agree
		8.4	Will offer support	Respond to what their enthusiastic about	77	L	Agree
		8.6	Will put ideas over as part of a team	Will put ideas over as part of a team	80	M	Agree
		8.15	good in a team	A loner/hard to mix	94	H	Agree
		10.14	Interpersonal skills, warm likable, genuine	Rude, dismissive, only happy when their talking	74	L	Personable
		10.21	Willing to be challenged, admit when wrong	Got their opinion and don't encourage challenges	77	M	Agree
		16.25	Communicate an issue	Go away and talk about it somewhere else	89	H	Professional
		17.11	Add to their team	Subtract from team	-	-	Agree
		18.1	Influence the team positively	Negative effect on team morale	97	H	Agree
		18.34	Receptive	Dogmatic	91	L	Agree

		19.6	Can be managed	Assume they know better	66	M	Agree
		19.11	United as a team	Detrimental influence within office	63	L	Agree
		19.24	Bring something to the team	Isolated	74	M	Agree
		20.3	Person fits into team	Can't relate to or respect	94	H	Company values
		20.19	Engaged in team	Have difficulty engaging with others	91	H	Agree
		20.26	Good Team Player	Clash with others	83	M	Agree
		20.33	Engaged with staff	Not working as a cohesive team	91	H	Agree
		20.39	Work within and for the team	Not willing to do extra for the team	86	M	Agree
		H9.15	Team Player	Solo operator	75	I	Agree
		H9.16	I have to be number one	Not competitive	61	L	Agree
	Personable The capacity to present oneself in a pleasant manner in order to build close and harmonious relationships with others. Compassion, rapport building and extroversion are mentioned within. Is this clear or do these terms need adding? - why is personable of value? If for building rapport, should this be title?	3.5	Lack of Self awareness	Think about how the come across	86	L	Self-awareness
		8.14	Friendly	Puts up barriers	80	L	Agree
		10.4	Good person to be around	Negative	83	H	Agree
		10.15	Makes others feel good and shine	Things are about them	86	H	Agree
		16.4	Make you smile	Make you think 'oh God'	83	M	Agree
		16.5	Bubbly	Quiet	86	M	Agree
		16.8	Could work with them	Couldn't stand them around me	89	H	Agree
		16.11	Pleasant	Abrupt and standoffish	66	L	Agree
		17.1	Outgoing	Insular	-	-	Agree
		17.2	Good at motivating others	De-motivator	-	-	Agree
		17.9	Friendly	Arrogant	-	-	Agree
		17.18	Outgoing	Shy	-	-	Agree
		17.23	Calm	Aggressive	-	-	Agree
		18.29	Comfortable with them	Not instinctively comfortable with	83	L	Agree
		19.14	Can deal with cross people	Couldn't cope with difficult people	63	L	Agree
		19.23	Will fit into team	Can't draw much out of them	74	M	Agree
		20.14	More natural people person	Shy and make no effort	89	H	Agree
		20.15	Approachable	Come across as intimidating	69	L	Agree

Intra personal skills Skills and abilities that occur within the person		20.25	A joy to be around	Prickly, negative.	86	M	Agree
		H5.16	will contribute, thinking about impact of what going to say	Says what they think without thought to impact	91	H	Agree
		H7.13	People-centric	Cant instantly create rapport	90	I	, Agree
		H9.14	Can get interactions with people	Introvert	78	I	Agree
		H9.21	Pleasure to work with	Difficult to handle	58	L	Agree
		H12.19	Can engage well with people	No social skills	-	-	Agree
	Optimistic Hopeful about the future.	10.2	Positive	Doesn't have right attitude	83	H	Agree
		17.10	Will engage in new things and be open-minded	Cynical attitude	-	-	Agree
		18.24	Give self a chance	Prepare for disappointment	91	H	Agree
	Resilient Able to withstand or recover quickly.	10.26	Nothing fazes them	Panic	74	L	Agree
		10.27	Keep things in perspective. Not disappointed by unusual behaviour/see's chaos as normal	Expect people to behave normally and disappointed when don't	83	H	Agree
		10.28	Rationale	Takes stuff to heart	80	M	Agree
		10.30	Keeping the job in perspective	Panics, Stressed, anxious	77	M	Agree
		17.3	Stable	Changeable	-	-	Agree
		18.39	resilient	Despondent	83	L	Agree
		20.34	Prepared to address difficult situations	Shove it under the carpet	74	L	honest
		H7.4	Remain clam under pressure	Get wound up when things don't go their way	90	I	Agree
		H12.15	Will make it work	Avoidance	-	-	persistence
	Honest Truthful in their communications and actions.	3.4	Controlled and Stiff	Being themselves	94	H	Agree
		8.18	Trustworthy	A risk	74	L	Agree
		16.26	Open	Dishonest	71	L	Agree
		17.22	Deferent	Manipulative	-	-	Agree
		18.30	Believe the person is presenting themselves honestly	Are they being honest?	83	L	Agree
		19.2	Admit make mistakes	It's always someone else's fault	63	L	Agree
		19.36	Are really the person they put forward	Over exaggerates	74	M	Agree
		19.42	Take responsibility	Always blames others	60	L	Agree

<p>Self-awareness Is aware of their own skills, knowledge, GOALS character, motives and desires, and utilises an understanding of their strengths and weaknesses in these to select appropriate roles, and accept input from others. Include perspective on where they fit within wider picture? – also job self-match – in terms of current demands, future path and wider context – overlap with professional development – e.g. 17.24, 18.19 – combine into single category.</p>	Self-awareness	3.6	Wont contribute, won't get involved	Willing to try and learn	74	L	Misc- could be professional development could be JT collaborative
		3.10	Nothing that makes someone stand out	A flare	89	M	Something extra JT agree
		8.20	There's a time and a place for enthusiasm	Loud, constantly	63	L	Agree
		10.7	Happy to say this isn't their area	Take on work beyond their capabilities	57	L	Agree
		10.16	No ego	Ego driven	86	H	Collaborative-lone worker
		10.24	Always something they can contribute	arrogant	89	H	Collaborative-lone worker
		17.8	Willingness to take advise on board	Keeping going at a lost cause	-	-	Agree
		17.24	Learn from mistakes	Make same mistakes over and over	-	-	Agree
		18.19	Consider how can do better	Do just enough	89	M	Agree
		18.35	Met the person spec	Did not have attributes specified for job	80	L	Knowledge and skills
		19.1	Accept not always right	Doesn't accept different working practices	60	L	Agree
		20.21	Self-aware and has plan to progress	Complacent. I'm perfect, there's nothing wrong with me	86	M	Agree
		20.35	Aware of limitations and strengths	Pass on weak areas and practices	86	M	Agree

		H5.7	Happy to ask for help and clarify	Not prepared to ask for help, over or under confident	94	H	Agree
		H9.1	Wise	Cocky. Know it all, know nothing.	69	L	Agree
		H9.10	Controlled	Arrogant	61	L	Agree
		H12.1	Aware of what they're good at	Lack of reflection	94	H	Agree
		H12.2	Know where they might fit in	Lost	94	H	Agree
	Confidence Express a belief in self and one's abilities which may lead to generalising beyond behaviours outside of their comfort zone, including questioning decisions. Reducing evidence of anxiety around high pressure performance.	3.13	Arrogance	Didn't make a big deal of their skills	91	H	Agree
		16.6	Assertive	Shy	91	H	Agree
		16.7	Confident	Didn't interact	77	L	Agree
		18.26	Rightly confident	Overwhelmed?	77	L	Agree
		19.32	Extravert	Not as confident with conversation	74	M	Agree
		20.29	Will put self through things outside of their comfort zone	Not confident	77	L	Agree
		H5.15	Very aware of how developing and what learning	Not thinking about skills development	89	M	Professional development
		H5.19	Confidence, prepared to explain what you can offer and answering questions confidently and with humility	Self-confidence issues	100	H	Agree
		H7.5	Happy in their position and make statements about themselves	Seek confirmation of what good at	90	I	Agree
		H7.8	Comes across as arrogant	Under confident	83	L	Agree

		H7.9	Assertive	Passive/docile	93	H	Agree
		H9.5	Handel situations that are unnerving	Fearful of making a comment	89	H	Agree
		H9.11	Confident	Doesn't know they are as good as they are	83	I	Agree
		H9.13	Confident and enthusiastic	Shy and reticent	89	H	Agree
		H9.17	Can deal with things you don't want to do	Needs to be in comfort zone	86	I	Agree
		H9.22	Lacking self esteem	Judge self as better than is	64	L	Agree
		H12.12	Recognise and seek help	Don't recognise when in trouble	-	-	Self-awareness
		H12.16	Seek Help	Haven't asked for help	-	-	Self-awareness
Experience and Knowledge 'Job-specific knowledge and skills identified by supervisors as necessary for competent functioning within the role they are placed, which fill an existing need or add additional value..	Experience and Knowledge	3.16	Nothing to bring to the table	Able to offer the organisation something	89	M	Agree
		8.9	Have had life experiences	Head strong fed up quickly	77	L	Agree
		10.18	Experience in the field, understand their field	New starter	66	L	Agree
		10.29	Well read, cultured	Not a broad perspective	86	H	Agree
		16.10	Life skills and experience	Not very mature	80	L	Agree
		16.14	Mature	See petty things as a big issue	80	L	Agree
		17.13	Experienced more	Naive	-	-	Agree

		18.16	Got the potential to develop	Not got the basics	57	L	Agree
		19.19	Show a level of competency	Don't have knowledge for the role	80	H	Agree
		19.20	Fit level of experience team needs	There are not enough resources to train them	80	H	Agree
		19.38	Proven self	Cant demonstrate could do job	80	H	Agree
		19.44	Offer external links	No experience elsewhere	74	M	Agree
		20.22	Technically Gifted	Not very bright	80	L	Agree
		20.37	Can demonstrate experience	'If I was in that situation I would...'	86	M	Agree
		H5.10	Degree in a broad area (e.g. math)	Degree with less opportunities attached to it	77	L	Agree
		H7.11	Global in outlook	Local outlook	73	L	Agree
		H7.12	Breadth of experience	Engages in what want to	80	L	Agree
		H9.23	Sheltered	Seen everything, done everything.	81	I	Agree
		H12.6	Lots of educational training	No Passports	69	L	Agree
		H12.9	Opportunities used to their advantage	Don't make or find their own opportunities	-	-	Proactive and strategic JT agree
		H12.14	Will work to include things of real value in their plan	No evidence of doing anything	-	-	Agree
		H12.21	Has a variety of work experience	Nothing to reflect on in interview	-	-	Agree
	Recruitment understanding Acts in a way that suggests	16.1	Expand on points at interview	Brief answers	97	H	Agree

<p>an understanding of expectations within the recruitment process.</p> <p>Is this not in part reflected within the communication skills category?</p>	16.23	Aware of what role involved	Hadn't got a clue about the job	83	M	Agree
	17.14	Done research on company	Don't know about the company	-	-	Agree
	17.15	Can communicate whether good at relevant aspects of job	Don't have the social skills to communicate about themselves	-	-	Communication skills
	18.16	Got the potential to develop	Not got the basics	57	L	Knowledge and skills
	18.22	Recognise got to evidence skills	It's now my turn	91	H	Agree
	18.33	Made an effort	Unprepared for interview	89	M	Agree
	18.38	Looking for a match between role and career stage	No Recognition of skill & knowledge needed for role	89	M	Agree
	19.4	First in a good field of candidates	Performed the best out of a poor bunch	86	H	Misc- not employability, context
	19.10	Clear on what job involves and can work to that	Mismatch between job and person	63	L	Agree
	19.17	Can draw parallels with experience and role	Don't know how to write applications	71	M	Agree
	19.21	Rapport with interviewer	Clam up	77	H	Misc- confidence, personable
	19.22	Seem comfortable and relaxed	Nerves get to them	74	M	confidence
	19.26	Elaborate	Sketchy on the details	74	M	Agree
	19.27	Meet the standards of the role	Doesn't fit the core of the role	80	H	Knowledge and experience

		19.29	Gone the extra step	Not distinguishable from other candidates	77	H	Misc- not employability, context
		19.37	Willing to learn and eager to train	Doesn't demonstrate a willingness	63	L	Professional development
		19.40	Used really good examples	Don't offer examples	80	H	Agree
		20.11	Know about the company	Bog standard letter. Not done research	86	M	Agree
		20.20	Good in interview	Random, lack common sense	89	H	Agree
		20.24	Good addition to the team	The same as everyone else	86	M	Misc-not employability context
		20.45	Prepared to answer questions	Not prepared for questions on the basics of the job	80	L	Agree
		H5.12	Thought about what they want to do	Exploring options left till last minute	97	H	Strategic
		H5.14	Taken advantage of opportunities	See their degree as enough	86	M	Strategic and proactive
		H9.4	Well-focused, done homework	Unprepared, rabbit in head lights	89	H	Agree
		H9.6	Shine out/wow factor	Just waving a piece of paper	86	I	Agree
		H9.8	Directing where conversations go	Hiding their wow factor	92	h	confidence
		H12.4	Have an understanding of employers expectations	Not considered employers expectations	92	I	Agree

		H12.5	Understanding of recruitment process	Not applying or having experience	83	I	Agree
	Business awareness An awareness of the world of business.	10.25	Experienced in company with great reputation	Not known in their field	83	H	Knowledge and experience overlap with business awareness and address in categories
		19.5	Used to working in that environment	Doesn't fit in that environment	63	L	Knowledge and experience as above
		19.18	Have an understanding of the environment	No awareness or experience of environment	74	M	Knowledge and experience as above
		19.28	Awareness of what's going on in the sector	Not done research on job and institution	74	M	Agree
		20.4	Used to structure of work	Working environment new to them	89	H	Agree
		20.43	Understand that they have to jump through hoops	Wont modify self to fit with mould of organisation	86	M	Agree
		H9.2	Commercial	No Idea what's happening in the wider world	86	I	Agree
		H9.20	Experience in a professional environment	No professional experience	89	H	Knowledge and experience as above
		H12.3	Aware of changes that might be coming (in the labour market)	Unengaged	92	I	Agree
Movement: A tendency to make changes to values, skills, behaviours, in response to external	Adaptable Can make self-suitable for new roles or purpose. Long term modification or adjustment transferable skills.	10.19	Can go into new job and start straight away	Struggle to start	63	L	proactive
		16.3	Hit the floor running	Have to put work into them	89	H	Independence
		H5.13	Independent, prepared to move	Family, friend orientated	71	L	Agree
		H7.7	Mature about what want	Wont explore more options	90	I	Agree

demands.		H12.22	More flexible	Restrained by personal preferences (local)	-	-	Agree
	Flexible – Rigid Short term. Useful within a wide and changing spectrum of settings without making significant changes. Includes limits to hours where can only work certain hours Discussed difficulty in distinguishing between adaptive and flexible. Combine into single category.	8.1	Reliable	Not responding	86	L	hardworking
		10.33	Happy to adapt and flex when needed	Likes rules and regulations. Rigid and fixed.	83	H	Agree
		19.39	Safe pair of hands	A risk	80	H	Knowledge and experience
		20.2	Can buddy up with someone new and go with it	That's not my job	91	H	Agree
		20.9	Trustworthy	Can't give extra responsibility	86	M	Independent
		H7.10	Is prepared to try anything	Single minded	87	L	Agree
Professional development	Willingness and/or effort to engage in staff development. Illustrate a degree of openness – -thus place within the same superordinate category to enhance reliability.	16.21	Tries to better self	Will do her job and nothing else	94	H	Agree
		17.12	Can demonstrate an intention to learn	Can't demonstrate learning	-	-	Agree
		18.3	Willing to learn	"I know everything"	91	H	Agree
		19.33	Desire to progress	Active choice not to gain experience	71	M	Agree
		20.10	Will look for solutions to professional development	Find it difficult to identify and develop weaknesses	83	M	Agree
		20.16	Recognises areas for development and make effort to develop	Can't identify or rectify weaknesses	83	M	Agree
		20.28	Push themselves	Sound off about personal development but can't be bothered	69	L	Agree
		H5.3	Open to learning and will continue to learn	Do the bare minimum, going through the motions	94	H	Agree
		H12.8	Willing to learn	Not demonstrated/aren't learning	78	L	Agree
Strategic	Places their present responsibilities within the context of long term goals (in	3.19	Reactive	Planning and prioritising	86	L	Agree
		10.3	Takes calculated risks	Doesn't take risks	83	H	Agree
		10.34	Willing to take the risk	Worried about his job	77	M	Agree

	this respect considering the future), in order to prioritise their resources.' to achieve an effective result. Separate out into specific planning, time-management skills to strengthen reliability of this category.	16.20	Puts self forward	That's not my role	91	H	proactive
		17.17	Can work on multiple things at once	Single track kind of work	-	-	flexible
		17.20	Methodical	Scatty	-	-	Agree
		H5.6	Good Planning and organisation skills	Disorganised and poor planning	86	M	Agree
		H12.11	Good life management skills	Don't have a plan	-	-	Agree
Creative	Come up with novel ideas or solutions.	10.5	Come up with options	Come up with problems	94	H	Agree
		10.20	Not into blame. Problem solver	Quick to blame someone else	86	H	Agree
		16.12	Get up and go	Not forthcoming with ideas	89	H	Agree
		19.45	Creative/innovative	Happy to keep status quo	80	H	Agree
Evidence- based	Can apply knowledge to relevant settings.	10.22	Put theory into practice	Like theory but don't get on and do anything. No action taken	89	H	Agree
		10.23	Keen on evidence-based practice	Tries random stuff	74	L	Agree
		H9.3	Applying their knowledge to the role	Purely academic cant apply knowledge	94	H	Agree
		H12.10	Will act on experience	Not recognising opportunities	-	-	Misc proactive
Proactive	An interest in or tendency towards creating or controlling a situation for themselves, rather than requiring other people or circumstances to direct their behaviour. <i>A focus on moving things forward. ' Involves going beyond independence working to taking the initiative (independence/autonomous, taking the initiative, therefore becomes less clear. Return to taking responsibility category)</i>	3.12	Not taking ownership	A safe pair of hands	89	M	Independent
		3.15	Moaner	Problem-solver	91	H	Agree
		8.2	Took responsibility	Blaming problems on someone else	89	H	Agree
		8.3	Take things on	More influenced by external responsibility	89	H	Agree
		8.13	Don't have to tell what to do will think for themselves	Have to tell them everything and will question it	83	L	Agree
		10.12	Likes coming up with ideas that are practical	Just follows others	77	M	Agree
		10.35	Using common sense	Doesn't know what common sense is	80	M	Agree
		17.7	Proactively helpful	Will not do what asked	-	-	Agree
		18.18	Realise own potential	Comfortable how are	77	L	Agree
		18.23	Rely on them	Don't offer to do anything	83	L	Agree
		18.25	Resolve the problem	It's not my problem, I told someone else	83	L	Agree

		19.13	Will see if they can fix problems	Would get manager	80	H	Agree
		19.41	Can be autonomous	Has to be directed constantly	74	M	Agree
		20.8	Can work under their own steam	Have to be micro managed	91	H	Agree
		20.38	Seek out new responsibility	Have to be coheresed or bribed	77	L	Agree
		H5.8	Proactivity	Have to be told	89	M	Agree
Professionalism	Appropriate controlled, behaviour presenting to others a commitment and/or membership to the company commitment. Include appearance	8.5	Good time management	poor time management	66	L	Strategic
		10.8	Will take responsibility	Palm stuff off on others	83	H	Proactive? independent
		16.22	Professional, Polite	Too relaxed	83	M	Agree
		18.2	Reliable	Would ring up on the day and say not coming in	97	H	Agree
		19.8	Moderate responses	Overreact	63	L	Agree
		19.12	Professional	Immature	63	L	Agree
		19.15	Deal with issues behind closed doors	Disagree with colleagues in front of others	63	L	Agree
		19.16	Appropriate and polite	Let issues show outwardly	63	L	Agree
		20.1	Role model	Have to speak to about behaviour in office	89	H	Agree
Independent-dependent	Free from outside control of ones choices. Not subject to others authority or management. Changing to Taking a level of ownership which induces a feeling of accountability for something' RETURN TO- DIVIDE BACK INTO, RELIABILITY AND RESPONSIBILITY – independent fits into proactive – able to get going, start quickly. – lose reliability as fulls into prioritising and commitment. Keep responsibility.	8.10	Happy to take orders	Views on who should be leaders and who shouldn't	89	H	collaborative
		10.6	Organised at the right level	Makes work, micromanaging	86	H	Agree
		10.36	Run with general ideas	Detail focused, hung up on one detail.	83	H	strategic
		16.2	Can work on own	Have to keep asking	91	H	Agree
		17.25	More of a thinker	Does something because told to do it.	-	-	Agree
		18.17	Ambition:	Always something that holds them back	91	H	Agree
		18.20	Confident and secure in what do	Won't make a decision for themselves	91	H	confidence
		20.17	Detached	Too much one of the guys	71	L	professional
Communication	The ability to receive	3.9	My way	Open to ideas, open to	89	M	collaborative

skills	information in an engaged manner, and respond to this with a thoughtful presentation of appropriate information, adapted for the present context. Discussion of this not so much being communication as knowing what to communicate.			communication			
		3.14	Blunt, poor communication	Customer service mind-set	89	M	Agree
		3.18	Waffling, unclear	Being concise. Sell an idea	89	M	Agree
		8.12	Respond to correspondents quite quickly	2 or 3 times before get a response	86	H	Agree
		10.11	Makes sure understands, gets feedback.	Doesn't check	74	L	Agree
		17.5	Can communicate with different types of people	Incapable of adapting message for different people	-	-	Agree
		18.32	Will get views and discuss with people	Know better than everyone else	89	M	Agree
		19.3	Able to disagree with others	Just do it	86	H	Independent?
		20.41	Question if not sure	Not confident to speak out	86	M	confidence
		H5.4	Good communication (speaking and listening to others)	Dominate the conversation or don't get their point across	94	H	Agree
		H5.17	Show you're interested, listening and engaging	Lazy demeanour (dragging feet)	94	H	Agree
		H5.18	Articulate	Laid back speak	97	H	Agree
		H7.1	Communicate well	Less articulate, less able to present their evidence	93	H	Agree
		H7.2	Communicate with confidence	Unable to put across consistently what offer and experience have	93	H	Agree
		H9.19	Listening and analysing what is being said	Tendency to be impulsive	69	L	Agree
		H12.20	Will communicate appropriately in interview	Quiet, shy, short answers	-	-	Agree
Misc		17.4	Selfless	Selfish	-	-	agree
		16.24	Seen them work	Take a chance	83	M	JT says – experience of employee
		18.27	Relaxed	Highly strung	74	L	JT says– Interpersonal or resilience

	20.13	To grips with the culture	Language and cultural barriers	80	L	agree
	H12.13	Engage with things they can reflect on	Have no thought about the future	-	-	Independent
	H12.18	Clear career path	No direction	-	-	JT says– strategic or commitment.

Appendix F Ethical approval stage three

Appendix F1. Original approval



University Ethics Sub-Committee for Psychology

08/09/2016

Ethics Reference: 8450-sw309-neuroscience,psychologyandbehaviour

TO:

Name of Researcher Applicant: Stella Williams

Department: Psychology

Research Project Title: Initial validation of an employability measurement tool

Dear Stella Williams,

RE: Ethics review of Research Study application

The University Ethics Sub-Committee for Psychology has reviewed and discussed the above application.

1. Ethical opinion

The Sub-Committee grants ethical approval to the above research project on the basis described in the application form and supporting documentation, subject to the conditions specified below.

2. Summary of ethics review discussion

The Committee noted the following issues:

All potential ethics issues have been addressed.

3. General conditions of the ethical approval

The ethics approval is subject to the following general conditions being met prior to the start of the project:

As the Principal Investigator, you are expected to deliver the research project in accordance with the University's policies and procedures, which includes the University's Research Code of Conduct and the University's Research Ethics Policy.

If relevant, management permission or approval (gate keeper role) must be obtained from host organisation prior to the start of the study at the site concerned.

4. Reporting requirements after ethical approval

You are expected to notify the Sub-Committee about:

- Significant amendments to the project
- Serious breaches of the protocol
- Annual progress reports
- Notifying the end of the study

5. Use of application information

Details from your ethics application will be stored on the University Ethics Online System. With your permission, the Sub-Committee may wish to use parts of the application in an anonymised format for training or sharing best practice. Please let me know if you do not want the application details to be used in this manner.

Best wishes for the success of this research project.

Yours sincerely,

Prof. Panos Vostanis

Chair

Appendix F2. Amendment approval



University Ethics Sub-Committee for Psychology

08/09/2016

Ethics Reference: 8450-sw309-neuroscience,psychologyandbehaviour

TO:

Name of Researcher Applicant: Stella Williams

Department: Psychology

Research Project Title: Initial validation of an employability measurement tool

Dear Stella Williams,

RE: Ethics review of Research Study application

The University Ethics Sub-Committee for Psychology has reviewed and discussed the above application.

1. Ethical opinion

The Sub-Committee grants ethical approval to the above research project on the basis described in the application form and supporting documentation, subject to the conditions specified below.

2. Summary of ethics review discussion

The Committee noted the following issues:

The amendment has been approved.

3. General conditions of the ethical approval

The ethics approval is subject to the following general conditions being met prior to the start of the project:

As the Principal Investigator, you are expected to deliver the research project in accordance with the University's policies and procedures, which includes the University's Research Code of Conduct and the University's Research Ethics Policy.

If relevant, management permission or approval (gate keeper role) must be obtained from host organisation prior to the start of the study at the site concerned.

4. Reporting requirements after ethical approval

You are expected to notify the Sub-Committee about:

- Significant amendments to the project
- Serious breaches of the protocol
- Annual progress reports
- Notifying the end of the study

5. Use of application information

Details from your ethics application will be stored on the University Ethics Online System. With your permission, the Sub-Committee may wish to use parts of the application in an anonymised format for training or sharing best practice. Please let me know if you do not want the application details to be used in this manner.

Best wishes for the success of this research project.

Yours sincerely,

Prof. Panos Vostanis

Chair

Appendix G. Think aloud survey

Participant Consent Form

BACKGROUND INFORMATION

Title: Initial validation of an employability measurement tool

Researchers: Stella Williams, Catherine Steele and John Maltby from the University of Leicester and Lorna Dodd from Newman University

Purpose of data collection: PhD thesis

1. Proposed aim

The aim of this activity is to understand how you interpret a scale aimed at measuring employability.

2. Detailed methodology

Participants will be presented with the scale and its associated instructions. You will be asked to verbalise your thought process while trying to understand and respond to this scale.

For example, an item may be 'when did you last attend university?'. You may then say, 'I am here now, but before today I was last here yesterday as I was meeting up with a friend'.

This verbalising helps illustrate your interpretation of the scale, and signal whether this interpretation is in line with the intended meaning of the scale and its items.

During this process the researcher will take notes relating to your interpretations. At times you may be asked questions relating to your thought process, to better understand your interpretation. The researcher cannot provide additional information to aid in your understanding of the scale.

Verbalisations will be audio recorded. This audio recording will be deleted once a summary of interpretations which are contrary to the intent of the researcher, are documented.

3. Key considerations you will need to make before starting the study.

There are no anticipated risks to participating in this study. If at any point you feel you would like to end your participation, you are free to do so, without explanation.

While involvement in this research study is expected to offer a valuable learning opportunity related to understanding scale development processes, withdrawal from, or a decline to participate in, this study will have no adverse effects on your degree.

No personal information will be required. Consent forms will be stored separately from verbalisation summaries, and audio files. Audio files will be kept on a password protected computer, only accessible to the researcher. These audio files will be deleted once a summary has been documented. Summaries will only be available to the researcher, her supervisory team and external examiner.

The results of this questionnaire will be used to assess the appropriateness of item and instruction wording. Ineffective wording will be modified prior to further piloting. This will form part of the validation pre-tests and will be reported within the final paper, to be published within an academic journal. The process and findings will also be reported within a chapter of the lead researchers PhD submission. Participants will have access to any and all of these outputs, upon request.

Please make a note of your participant number, should you wish to withdraw at a later stage this number will be used to track your data.

CONSENT STATEMENT

10. I understand that my participation is voluntary and that I may withdraw from the research at any time up until 21st January 2017 without giving any reason. I understand that I can withdraw at any point during the data collection by indicating a wish to do so, without reason. I understand that to withdraw after I have completed the interview, I can contact Ms Stella Williams on SW309@le.ac.uk stating my Personal Identification Number.
11. My data are to be held confidentially by the named researchers.
12. This consent form will be kept separately from my data in a locked cabinet for up to a period of five years. After this the consent forms will be deleted using the University of Leicester's Waste Management Team's procedures for destroying confidential material.
13. My data will be combined with that of other participants when the data collecting part of the study has been completed. This will become coded data. At this point I understand that the only identifier to the data that exists is the Personal Identification Number provided at the start of the interview so I am able to withdraw at a later stage.
14. In accordance with the requirements of some scientific journals and organisations, I understand that the coded data will be kept in electronic form for up to five years. After this time they will be deleted using the University of Leicester's Waste Management Team's procedures for destroying confidential material on digital storage media.
15. In accordance with the requirements of some scientific journals and organisations, I understand that my coded data may be shared with other competent researchers. I understand that my coded data may also be used in other related studies. My name and any other identifying details of taking part in the study will not be shared with anyone.
16. The overall findings may be submitted for publication in a scientific journal, or presented at scientific conferences.
17. This study will take approximately 4 weeks to complete.
18. I will be able to obtain general information about the results of this research by giving the researcher my email address now as detailed below.

I am giving my consent for data to be used for the outlined purposes of the present study

All questions that I have about the research have been satisfactorily answered.

I agree to participate.

Participant's signature: _____ Date: _____

If you would like to receive a summary of the results by e-mail, when this is available, please provide your email address: _____

Please note that this form will be kept separately from your data.

Employability Assessment Scale (EAS)

This scale is designed to understand your current employability. This is done by identifying what general competencies you possess, which are required for success in any role. As such, this scale relates to your employability in general, rather than specific to any particular job vacancy or position held.

You will be presented with a series of statements and asked to indicate, either, how true each of these statements are, for you, or how much you agree with these items. Consider **yourself in general**, rather than specific situations or contexts.

It is important that you are honest during this process, to get the most from these results. There are no right or wrong answers. All responses will remain anonymous.

General information about you and your studies

What is your present year of study (e.g. year one, two, three or four):

Gender: Male Female Other

What is your date of birth.....

What university are you studying at?
.....

What is your subject area?.....

Which of the following best describes you.....?

- a. I am currently in employment

What is your current job title?.....

How many hours per week do you work, on average?.....

- b. I am currently volunteering

What is your current job title?.....

How many hours per week do you work, on average?.....

- c. I have previous work experience (either paid or unpaid)

- d. I have previous volunteering experience

- e. I have no previous work or volunteering experience.

Please rate the below criterion of career success in terms of their **importance to you**, using the following response format: 0 = not at all important, 1 = slightly important, 2 = neutral (neither important nor unimportant), 3 = important, 4 = very important, 5 = extremely important.

	not at all important	slightly important	neutral (neither important nor unimportant)	important	very important	extremely important
Being continuously promoted to a higher level in an organization	0	1	2	3	4	5
Making enough money to promote the well-being of my family	0	1	2	3	4	5
Obtaining power and can control or influence others.	0	1	2	3	4	5
My talents and potential capacities being fully utilized in his or her career.	0	1	2	3	4	5
Being enthusiastic and passionate about my work.	0	1	2	3	4	5
Being continuously engaged in challenging work.	0	1	2	3	4	5
Linking my job and being happy during work.	0	1	2	3	4	5
Having time to enjoy my life in my career.	0	1	2	3	4	5
Being able to take care of my family while developing my career.	0	1	2	3	4	5
Maintaining a good physical condition in my career.	0	1	2	3	4	5

Please rate the degree to which the below statements are **true** of you, on a scale of 5 – completely true, 4 – Mostly true, 3 – Halfway, 2 – Somewhat true, 1 – Slightly true, 0 – Not at all true.

	Not at all true	Slightly true	Somewhat true	Halfway	Mostly true	Completely true
I have been continuously promoted to higher level in an organization	0	1	2	3	4	5
I can make enough money to promote the well-being of my family	0	1	2	3	4	5
I have obtained power and can control or influence others.	0	1	2	3	4	5
My talents and potential capacities are fully utilized in my career.	0	1	2	3	4	5
I am enthusiastic and passionate with my work.	0	1	2	3	4	5
I have been continuously engaged in challenging work.	0	1	2	3	4	5
I like my job and am happy during work.	0	1	2	3	4	5
I have time to enjoy my life in my career.	0	1	2	3	4	5
I can take care of my family while developing my career.	0	1	2	3	4	5
I can maintain a good physical condition in my career.	0	1	2	3	4	5

Please rate the degree to which the below statements are true of you on a scale of 5 – completely true, 4 – Mostly true, 3 – Halfway, 2 – Somewhat true, 1 – Slightly true, 0 – Not at all true.

	Not at all true	Slightly true	Somewhat true	Halfway	Mostly true	Completely true
I know when to draw the line under a task, and move on.	1	2	3	4	5	1
I am sensitive to others.	1	2	3	4	5	1
I have good written communication skills.	1	2	3	4	5	1
I have good verbal communication skills.	1	2	3	4	5	1
I like to focus on the future.	1	2	3	4	5	1
When someone is talking I give my full attention.	1	2	3	4	5	1
I try to stay informed of developments in areas I am interested.	1	2	3	4	5	1
I often turn away from responsibility for things at work.	1	2	3	4	5	1
I try to be the person that does everything.	1	2	3	4	5	1
I am a poor organiser.	1	2	3	4	5	1
I often find it hard to understand others viewpoint when it does not match mine.	1	2	3	4	5	1
I find it hard to structure written answers.	1	2	3	4	5	1
I can articulate my point well, when talking with others.	1	2	3	4	5	1
I consider my end goal before making decisions.	1	2	3	4	5	1
I make sure I am aware of the nature and scope of a company, prior to providing them with a job application.	1	2	3	4	5	1
I like to follow up on things people have discussed previously.	1	2	3	4	5	1
I avoid taking on responsibility when I can.	1	2	3	4	5	1
I can identify my strengths in a given situation.	1	2	3	4	5	1
I am good at putting myself in others shoes.	1	2	3	4	5	1
When writing, I can articulate my point well.	1	2	3	4	5	1
I am concise in my points, when engaged in verbal discussions.	1	2	3	4	5	1
I am a strategic thinker, meaning I act in a way that will best achieve my long-term goals in any given context.	1	2	3	4	5	1
I often enter an interview, with no clear idea of what the company does.	1	2	3	4	5	1

I often find I am interrupting people while they are talking.	1	2	3	4	5	1
I am often honest about the mistakes I make at work, to my manager.	1	2	3	4	5	1
I find it hard to identify my weaknesses in a given situation.	1	2	3	4	5	1
I can rarely identify the reasons behind people's actions.	1	2	3	4	5	1
When writing, I am concise in my points.	1	2	3	4	5	1
When working (either paid or voluntary, if you are not currently in employment), I find it hard to talk to people within management roles.	1	2	3	4	5	1

	Not at all true	Slightly true	Somewhat true	Halfway	Mostly true	Completely true
I like to live in the moment.	1	2	3	4	5	1
I am aware of the latest developments in the areas I am considering working in.	1	2	3	4	5	1
When asked to give a verbal answer, I often take a while to get to my point.	1	2	3	4	5	1
I prefer to ask others to make final decisions.	1	2	3	4	5	1
I believe reflection, that is the act of considering your own experiences to improve the way you work, is an important part of learning.	1	2	3	4	5	1
I regularly adapt what I am doing, to accommodate other's needs.	1	2	3	4	5	1
It can be hard to communicate what I want, when restricted to putting it in writing.	1	2	3	4	5	1
I find it hard to communicate my point during conversations on unexpected topics.	1	2	3	4	5	1
I have thought about what I want to do as a career.	1	2	3	4	5	1
I like to be sure of a company's values, or mission statement, prior to making a decision to work with them.	1	2	3	4	5	1
I frequently stumble over my words, when talking to others.	1	2	3	4	5	1
I can work under my own steam.	1	2	3	4	5	1
I find it difficult to link my experience to job vacancies.	1	2	3	4	5	1
I am often unsure of the expectations placed on me by others.	1	2	3	4	5	1

I apply English grammar rules accurately within my writing.	1	2	3	4	5	1
I tend to talk to my supervisors, customers/clients, friends and colleague, in the same manner.	1	2	3	4	5	1
I often leave exploring options until the last minute.	1	2	3	4	5	1
I don't think it is important to know where your role fits into the company as a whole.	1	2	3	4	5	1
I ensure that I communicate points in a timely manner.	1	2	3	4	5	1
When at work, if left to my own devices, I will do what is needed but nothing more.	1	2	3	4	5	1
I think reflecting on why something didn't work is important.	1	2	3	4	5	1
I frequently take on board others feedback.	1	2	3	4	5	1
I would describe myself as a good writer	1	2	3	4	5	1
I am a good listener.	1	2	3	4	5	1
I am good at prioritising.	1	2	3	4	5	1
I like to know where my job role fits in relation to the team I work in.	1	2	3	4	5	1
I frequently forget to include relevant information in my communications.	1	2	3	4	5	1
I make very few errors in my writing.	1	2	3	4	5	1

	Not at all true	Slightly true	Somewhat true	Halfway	Mostly true	Completely true
I often find I am procrastinating.	1	2	3	4	5	1
This is an attention item. Please select 4.	1	2	3	4	5	1
I like to know where my job role fits in relation to the company's function.	1	2	3	4	5	1
I like to wait to be told to do something.	1	2	3	4	5	1
I have a blind spot when it comes to my strengths and weaknesses.	1	2	3	4	5	1
I prioritise my energy towards the most important outcomes.	1	2	3	4	5	1
I ensure I am aware of the relevant codes of conduct for any place I work.	1	2	3	4	5	1

It is important to never blame others for something that is ultimately your responsibility.	1	2	3	4	5	1
I am realistic about what jobs would be suitable for me.	1	2	3	4	5	1
I rarely have a plan.	1	2	3	4	5	1
I like to take on extra responsibility.	1	2	3	4	5	1
I have a good level of self-awareness. Being aware of my strengths and limitations.	1	2	3	4	5	1
I find it hard to prioritise.	1	2	3	4	5	1
I can be left to it, to complete a task.	1	2	3	4	5	1
I like to complete tasks in the order in which I receive them.	1	2	3	4	5	1
I often need a shove to get started.	1	2	3	4	5	1
I often get hung up on details that don't matter.	1	2	3	4	5	1

Please indicate the extent to which you agree with each of the following statements by using the following scale: 1= strongly disagree, 2= disagree, 3= neutral, 4 = agree, 5 = strongly agree.

	strongly disagree	disagree	neutral	agree	strongly agree
In uncertain times, I usually expect the best.	1	2	3	4	5
Team members usually pull together, rather than seeking individual glory.	1	2	3	4	5
I tend to bounce back quickly after hard times	1	2	3	4	5
I am confident I get the success I deserve in life.	1	2	3	4	5
Sometimes I feel depressed.	1	2	3	4	5
If something can go wrong for me, it will.	1	2	3	4	5
Decisions taken by groups are better than those taken by individuals.	1	2	3	4	5
I have a hard time making it through stressful events	1	2	3	4	5
When I try, I generally succeed.	1	2	3	4	5
Sometimes when I fail I feel worthless.	1	2	3	4	5
I'm always optimistic about my future.	1	2	3	4	5
If the group is slowing me down, it is better to leave it and work alone.	1	2	3	4	5
It does not take me long to recover from a stressful event.	1	2	3	4	5
I complete tasks successfully.	1	2	3	4	5
Sometimes, I do not feel in control of my work.	1	2	3	4	5
I hardly ever expect things to go my way.	1	2	3	4	5
It is often difficult working together with other people.	1	2	3	4	5
It is hard for me to snap back when something bad happens.	1	2	3	4	5

Please indicate the extent to which you agree with each of the following statements by using the following scale: 1= strongly disagree, 2= disagree, 3= neutral, 4 = agree, 5 = strongly agree.

	strongly disagree	disagree	neutral	agree	strongly agree
Overall, I am satisfied with myself.	1	2	3	4	5
I am filled with doubts about my competence.	1	2	3	4	5
I rarely count on good things happening to me.	1	2	3	4	5
Team work is always the best way of getting results.	1	2	3	4	5
I usually come through difficult times with little trouble.	1	2	3	4	5
I determine what will happen in my life.	1	2	3	4	5
I do not feel in control of my success in my career.	1	2	3	4	5
Overall, I expect more good things to happen to me than bad.	1	2	3	4	5
It is often more productive to work on your own.	1	2	3	4	5
I tend to take a long time to get over set-backs in my life.	1	2	3	4	5
I am capable of coping with most of my problems.	1	2	3	4	5
There are times when things look pretty bleak and hopeless to me.	1	2	3	4	5
Involvement in joint projects at work is very satisfying.	1	2	3	4	5
It is more enjoyable to be responsible for your own efforts at work.	1	2	3	4	5

HEXACO-60

On the following pages, you will find a series of statements about you. Please read each statement and decide how much you agree or disagree with that statement. Then indicate your response using the following scale: 1= strongly disagree, 2= disagree, 3= neutral, 4 = agree, 5 = strongly agree.

Please answer every statement, even if you are not completely sure of your response.

	strongly disagree	disagree	neutral	agree	strongly agree
I would be quite bored by a visit to an art gallery.	1	2	3	4	5
I plan ahead and organize things, to avoid scrambling at the last minute.	1	2	3	4	5
I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.	1	2	3	4	5
I'm interested in learning about the history and politics of other countries.	1	2	3	4	5
I often push myself very hard when trying to achieve a goal.	1	2	3	4	5
If I knew that I could never get caught, I would be willing to steal a million dollars.	1	2	3	4	5
I would enjoy creating a work of art, such as a novel, a song, or a painting.	1	2	3	4	5
When working on something, I don't pay much attention to small details.	1	2	3	4	5
Having a lot of money is not especially important to me.	1	2	3	4	5
I think that paying attention to radical ideas is a waste of time.	1	2	3	4	5
I make decisions based on the feeling of the moment rather than on careful thought.	1	2	3	4	5
I think that I am entitled to more respect than the average person is.	1	2	3	4	5
If I had the opportunity, I would like to attend a classical music concert.	1	2	3	4	5
When working, I sometimes have difficulties due to being disorganised.	1	2	3	4	5
If I want something from someone, I will laugh at that person's worst jokes.	1	2	3	4	5

	strongly disagree	disagree	neutral	agree	strongly agree
I've never really enjoyed looking through an encyclopedia.	1	2	3	4	5
I only do the minimum amount of work needed to get by.	1	2	3	4	5
I would never accept a bribe, even if it were very large.	1	2	3	4	5
People have often told me that I have a good imagination.	1	2	3	4	5
I always try to be accurate in my work, even at the expense of time.	1	2	3	4	5
I would get a lot of pleasure from owning expensive luxury goods.	1	2	3	4	5
I like people who have unconventional views.	1	2	3	4	5
I make a lot of mistakes because I don't think before I act.	1	2	3	4	5
I want people to know that I am an important person of high status.	1	2	3	4	5
I don't think of myself as the artistic or creative type.	1	2	3	4	5
People often call me a perfectionist.	1	2	3	4	5
I wouldn't pretend to like someone just to get that person to do favours for me.	1	2	3	4	5
I find it boring to discuss philosophy.	1	2	3	4	5
I prefer to do whatever comes to mind, rather than stick to a plan.	1	2	3	4	5
I'd be tempted to use counterfeit money, if I were sure I could get away with it.	1	2	3	4	5

Scale taken from: Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of personality assessment*, 91(4), 340-345.

Please indicate the extent to which you agree with each of the following statements by using the following scale: 1= strongly disagree, 2= disagree, 3= neutral, 4 = agree, 5 = strongly agree.

	strongly disagree	disagree	neutral	agree	strongly agree
I achieve high grades in relation to my studies.	1	2	3	4	5
I regard my academic work as top priority.	1	2	3	4	5
Employers are eager to employ graduates from my university.	1	2	3	4	5
The status of this university is a significant asset to me in job seeking.	1	2	3	4	5
Employers specifically target this university in order to recruit individuals from my subject area(s).	1	2	3	4	5
My university has an outstanding reputation in my field of study.	1	2	3	4	5
A lot more people apply for my degree than there are places available.	1	2	3	4	5
My chosen subject(s) rank(s) highly in terms of my social status.	1	2	3	4	5
People in the career I am aiming for are in high demand in the external labour market.	1	2	3	4	5
My degree is seen as leading to a specific career that is generally perceived as highly desirable.	1	2	3	4	5
There is generally a strong demand for graduates at the present time.	1	2	3	4	5
There are plenty of job vacancies in the geographical area where I am looking.	1	2	3	4	5
I can easily find out about opportunities in my chosen field.	1	2	3	4	5
The skills and abilities that I possess are what employers are looking for.	1	2	3	4	5
I am generally confident of success in job interviews and selection events.	1	2	3	4	5
I feel I could get any job so long as my skills and experience are reasonably relevant.	1	2	3	4	5

How many promotions you have received within your current organisation?	
How many promotions you have received within your entire career?	
<i>Note: promotion is defined as 'any increase in hierarchical level and/or any significant increase in job responsibilities or job scope you have experienced'.</i>	
What is your current gross income per month (before tax)?	
How many periods of unemployment of longer than one month, have you experienced in your entire career?	

Thank you for completing this scale, your time has been greatly appreciated.

Appendix H. Administrative sample final survey

Participant Consent Form

BACKGROUND INFORMATION

Title: Initial validation of an employability measurement tool

Researchers: Stella Williams, Catherine Steele and John Maltby from the University of Leicester and Lorna Dodd from Newman University

1. Proposed aim

The aim of this activity is to gain information around the structure of employability, as informed by interactions between items on this scale.

2. Detailed methodology

Completion of this scale is expected to take approximately 20 minutes. Participants will be presented with a total of 154 items, relating to employability, employment outcomes and career success. For each item participants will be asked to indicate which response best represents their current situation.

3. Key considerations you will need to make before starting the study.

There are no anticipated risks to participating in this study. If at any point you feel you would like to end the questionnaire you are free to do so. Completion, or non-completion, of this research will have no adverse effect on individuals' grades for any assessments. While it is believed the task on which this activity is based i.e. to consider your own employability, may have benefits on individual's employability development, completion of this task does not have to equate with submission of data for the purposes of research.

If you do not wish for your data to be utilised for research purposes, please do not return this survey.

It is anticipated that your responses to this scale will aid in informing you of weaknesses within your current employability profile, informing future personal and professional development. The results of this questionnaire will be combined in order to explore the structure of employability, and validity of the scale as a measure of employability.

This data will form part of the validation process and will be reported as such within a paper to be published within an academic journal, and also a chapter of the lead researchers PhD submission. Participants will have access to any and all of these outputs upon request.

As a thank you for participating in this research you will be given the opportunity to enter into a draw to win 1 of 8 £25 Amazon or M & S vouchers. To enter this draw please click on the link at the end of the survey and provide your university email address. Only university emails addresses will be accepted for entry into this draw.

Please retain this sheet for your records.

CONSENT STATEMENT

19. I understand that my participation is voluntary and that I may withdraw from the research at any time up until and including 30th April 2017 without giving any reason. I understand that I can withdraw at any point during the data collection without reason. I understand that to withdraw after I have completed the scale, I can contact Ms Stella Williams on SW309@le.ac.uk stating my Personal Identification Number.
20. My data are to be held confidentially by the named researchers.
21. My data will be combined with that of other students when the data collection has been completed. This will become coded data. At this point I understand that the only identifier to the data that exists is the Personal Identification Number provided at the start of the survey so I am able to withdraw at a later stage.
22. In accordance with the requirements of some scientific journals and organisations, I understand that the coded data will be kept in electronic form for up to five years. After this time they will be deleted using the University of Leicester's Waste Management Team's procedures for destroying confidential material on digital storage media.
23. In accordance with the requirements of some scientific journals and organisations, I understand that my coded data may be shared with other competent researchers. I understand that my coded data may also be used in other related studies. Any identifying details of taking part in the study will not be shared with anyone.
24. The overall findings may be submitted for publication in a scientific journal, or presented at scientific conferences.
25. I will be able to obtain general information about the results of this research by contacting the researcher via the email address provided in consent statement one.

I am giving my consent for data to be used for the outlined purposes of the present study

All questions that I have about the research have been satisfactorily answered.

I agree to participate.

Participant's signature: _____ Date: _____

Please note that this form will be kept separately from your data.

Employability Assessment Scale (EAS)

This scale is designed to understand your current employability. Consider **yourself in general**, rather than specific situations or contexts. Note, the statements are not asking you about the importance of these competencies for your current role, but your level of competency in these areas. Furthermore, responses should relate to your views, rather than workplace practices. E.g. you may see dress code as not important, even if your workplace requires you follow a strict dress code.

It is important that you are honest during this process, to get the most from these results. There are no right or wrong answers. All responses will remain anonymous.

General information about you and your studies

1. What is your present year of study (e.g. year one, two, three or four)?

.....

2. What university are you currently studying at?

.....

3. What degree programme are you currently on (e.g. single honours psychology)?

.....

4. What is your gender?

- ☐ Male
☐ Female
☐ Gender Queer
☐ Prefer not to disclose

5. What is your month and year of birth? (mm/yyyy).....

6. Are you currently involved in ANY volunteering?

- ☐ Yes
☐ No, but I have previously.
☐ No. I have never done volunteer work.

7. Are you currently in paid employment?

- ☐ Yes
☐ No, but I have been previously. (Please go to question 12)
☐ No. I have yet to enter paid employment. (Please go to question 16)

8. What is your current job title(s)?

.....

	<i>Enter response below</i>
9. Approximately, how many hours in <u>total</u> are you employed and/or volunteering for a week? If you are on a zero hours contract please state this and the average hours per week you do.	
10. Approximately what is your current gross income per year? (include any student loans or bursaries in brackets) If you are on a zero hours contract please state your hourly rate.	
11. Since the age of 18, approximately how many periods of <u>un</u> employment of longer than one month, have you experienced? (This excludes any unpaid or paid leave taken from a role e.g. sick leave maternity leave).	

The next two questions relate to promotions within any paid employment. If you have more than one current job role, please consider both in combination. *Note: promotion is defined as 'any increase in hierarchical level and/or any significant increase in job responsibilities or job scope you have experienced'.*

	<i>Enter response below</i>
12. Approximately, how many promotions have you received within your current organisation(s)?	
13. Approximately, how many promotions have you received within your entire working life?	

14. Please rate the below criterion of career success in terms of their importance to you.

	Not at all important	Slightly important	Moderately important	Important	very important	Extremely important.
Being able to take care of my family and/or myself while working.	0	1	2	3	4	5
Earning enough money to promote the well-being of my family and/or myself.	0	1	2	3	4	5
Obtaining power and can control or influence others.	0	1	2	3	4	5
Having my talents and potential capacities being fully utilized in my career.	0	1	2	3	4	5
Being enthusiastic and passionate about my work.	0	1	2	3	4	5
Being engaged in stimulating work.	0	1	2	3	4	5
Liking my job and being happy during work.	0	1	2	3	4	5
Having time to enjoy my life alongside my career.	0	1	2	3	4	5
Maintaining my health during my career.	0	1	2	3	4	5
Being promoted to a higher level. (Note: promotion is defined as 'any increase in hierarchical level and/or any significant increase in job responsibilities or job scope you have experienced'.)	0	1	2	3	4	5

15. Please rate the degree to which the below statements are true of you at the moment, in your current paid job role(s).

	Not at all	Slightly true	Somewhat true	Halfway	Mostly true	Completely
I can take care of my family and/or myself while working.	0	1	2	3	4	5
I earn enough money to promote the well-being of my family and/or myself.	0	1	2	3	4	5
I have obtained power and can control or influence over others.	0	1	2	3	4	5
My talents and potential capacities are fully utilized in my career.	0	1	2	3	4	5
I am enthusiastic and passionate with my work.	0	1	2	3	4	5
I have been engaged in stimulating work.	0	1	2	3	4	5
I like my job and am happy during work.	0	1	2	3	4	5

I have time to enjoy my life alongside my career.	0	1	2	3	4	5
I can maintain my health during my career.	0	1	2	3	4	5
I have been promoted to a higher level.	0	1	2	3	4	5

16. Please rate the degree to which the below statements are true of you **within employment** (considering both current and/or past employment). If you have never worked, consider how you would expect to behave or perform.

Remember, the statements are not asking you about the importance of these competencies for your current role, but your level of competency in these areas.

	Not at all true	Slightly true	Somewhat true	Halfway (50/50)	Mostly true	Completely true
I know when to draw the line under a task, and move on.	0	1	2	3	4	5
I am sensitive to others.	0	1	2	3	4	5
I am able to build rapport with most strangers.	0	1	2	3	4	5
I often find it easy to talk to new people.	0	1	2	3	4	5
I consider the future impact of what I am doing now.	0	1	2	3	4	5
When someone is talking to me I give my full attention.	0	1	2	3	4	5
I try to stay informed of developments relevant to my role at work.	0	1	2	3	4	5
This is an attention check. Please select 'somewhat true' for this item.	0	1	2	3	4	5
I am a poor organiser.	0	1	2	3	4	5
I often find it hard to understand others viewpoint when they do not match mine.	0	1	2	3	4	5
I frequently find it hard to structure written responses to queries or questions.	0	1	2	3	4	5

	Not at all true	Slightly true	Somewhat true	Halfway (50/50)	Mostly true	Completely true
I can articulate my point well, when talking with others.	0	1	2	3	4	5
Before I act, I consider what I will achieve from this action.	0	1	2	3	4	5
I make sure I am aware of the nature of a company, prior to providing them with a job application. (Remember, if you have never applied for a job, consider what you feel you WOULD do).	0	1	2	3	4	5
I avoid taking on responsibility when I can.	0	1	2	3	4	5
I can frequently identify my strengths.	0	1	2	3	4	5
I am good at putting myself in others shoes.	0	1	2	3	4	5
When writing, I can articulate my point well.	0	1	2	3	4	5
I am concise in my points, when engaged in verbal discussions at work.	0	1	2	3	4	5
I act in a way that will best achieve my goals at work.	0	1	2	3	4	5
I often enter an interview, with no clear idea of what the company does.	0	1	2	3	4	5

Continue to rate the degree to which the below statements are true of you **at work**. If you have never worked, consider how you would expect to behave or perform.

	Not at all true	Slightly true	Somewhat true	Halfway (50/50)	Mostly true	Completely true
I often find I am interrupting people while they are talking.	0	1	2	3	4	5
When I make a mistake at work I take responsibility for this mistake.	0	1	2	3	4	5
I find it hard to identify my weaknesses when applying for jobs.	0	1	2	3	4	5
I am concise in my points on application forms.	0	1	2	3	4	5
I find it hard to talk to people within management roles.	0	1	2	3	4	5
I live in the moment rather than plan ahead.	0	1	2	3	4	5
When asked to give a verbal answer, I often take a while to get to my point.	0	1	2	3	4	5
When in a group I prefer to leave others to take responsibility for final decisions.	0	1	2	3	4	5
I prefer to leave others to take responsibility for final decisions regarding my independent work	0	1	2	3	4	5
I believe considering your experiences to improve the way I work, is an important part of learning.	0	1	2	3	4	5
I am frequently sensitive to the needs of others when considering how I work.	0	1	2	3	4	5

	Not at all true	Slightly true	Somewhat true	Halfway (50/50)	Mostly true	Completely true
I make sure I am aware of the scope of a company (the extent of their operation), prior to providing them with a job application.	0	1	2	3	4	5
I write clearly, communicating my point well, in application forms.	0	1	2	3	4	5
I find it hard to communicate my point when put on the spot, even when the topic is familiar.	0	1	2	3	4	5
I have thought about what I want to do as a career.	0	1	2	3	4	5
I like to be sure of a company's values, or mission statement, prior to making a decision to work with them.	0	1	2	3	4	5
I frequently stumble over my words, when talking to others.	0	1	2	3	4	5
I can frequently motivate myself to work.	0	1	2	3	4	5
I find it difficult to link my experience to job vacancies.	0	1	2	3	4	5
I am often unsure of the expectations placed on me by others, leading me to not know what they want me to do.	0	1	2	3	4	5
I tend to talk to my customers/clients, friends and colleagues, in the same manner, even when I know I shouldn't.	0	1	2	3	4	5
I often leave deep consideration of decisions around my work until the last minute.	0	1	2	3	4	5

Continue to rate the degree to which the below statements are true of you **at work**. If you have never worked, consider how you would expect to behave or perform.

	Not at all true	Slightly true	Somewhat true	Halfway (50/50)	Mostly true	Completely true
I tend to talk to my supervisors, friends and colleagues, in the same manner, even when I know I shouldn't.	0	1	2	3	4	5
I think it is important to know where my role fits into the company as a whole.	0	1	2	3	4	5
I ensure that I respond to requests for information in a timely manner.	0	1	2	3	4	5
When at work I will do what is needed but nothing more.	0	1	2	3	4	5
I think reflecting on why something didn't work is important.	0	1	2	3	4	5
I frequently take on board others' constructive feedback.	0	1	2	3	4	5
I am a good listener.	0	1	2	3	4	5
I frequently forget to include relevant information in my communications.	0	1	2	3	4	5
I feel I am clear on what most application forms want me to say.	0	1	2	3	4	5
I often find I am procrastinating (putting things off).	0	1	2	3	4	5
I like to take the initiative, rather than wait to be told what to do.	0	1	2	3	4	5

	Not at all true	Slightly true	Somewhat true	Halfway (50/50)	Mostly true	Completely true
I ensure I am aware of the relevant codes of conduct (workplace rules) for any place I work.	0	1	2	3	4	5
I think it is important to not blame others for something that is my responsibility.	0	1	2	3	4	5
This is an attention item. Please select 'Slightly true'.	0	1	2	3	4	5
I can identify if a job description relates to a potentially suitable job for me.	0	1	2	3	4	5
I like to take on extra responsibility when my workload allows for this.	0	1	2	3	4	5
I find it hard to prioritise those things I know I should.	0	1	2	3	4	5
I can be left alone to complete a task.	0	1	2	3	4	5
I often complete tasks in the order in which I receive them.	0	1	2	3	4	5
I often need a shove to get started.	0	1	2	3	4	5
I often get hung up on details.	0	1	2	3	4	5

17. The following statements relate to your views in general, rather than specifically to work.
Please indicate the extent to which you agree with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
In uncertain times, I usually expect the best.	1	2	3	4	5
Team members usually pull together, rather than seeking individual glory.	1	2	3	4	5
I tend to bounce back quickly after hard times	1	2	3	4	5
I am confident I get the success I deserve in life.	1	2	3	4	5
Sometimes I feel depressed.	1	2	3	4	5
If something can go wrong for me, it will.	1	2	3	4	5
Decisions taken by groups are better than those taken by individuals.	1	2	3	4	5
I have a hard time making it through stressful events	1	2	3	4	5
When I try, I generally succeed.	1	2	3	4	5
Sometimes when I fail I feel worthless.	1	2	3	4	5
I'm always optimistic about my future.	1	2	3	4	5
If the group is slowing me down, it is better to leave it and work alone.	1	2	3	4	5
It does not take me long to recover from a stressful event.	1	2	3	4	5
I complete tasks successfully.	1	2	3	4	5

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Sometimes, I do not feel in control of my work.	1	2	3	4	5
I hardly ever expect things to go my way.	1	2	3	4	5
It is often difficult working together with other people.	1	2	3	4	5
It is hard for me to snap back when something bad happens.	1	2	3	4	5
Overall, I am satisfied with myself.	1	2	3	4	5
I am filled with doubts about my competence.	1	2	3	4	5
I rarely count on good things happening to me.	1	2	3	4	5
Team work is always the best way of getting results.	1	2	3	4	5
I usually come through difficult times with little trouble.	1	2	3	4	5
I determine what will happen in my life.	1	2	3	4	5
I do not feel in control of my success in my career.	1	2	3	4	5
Overall, I expect more good things to happen to me than bad.	1	2	3	4	5
It is often more productive to work on your own.	1	2	3	4	5
I tend to take a long time to get over set-backs in my life.	1	2	3	4	5

Continue to indicate the extent to which you agree with each of the following statements.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I am capable of coping with most of my problems.	1	2	3	4	5
There are times when things look pretty bleak and hopeless to me.	1	2	3	4	5
Involvement in joint projects at work is very satisfying.	1	2	3	4	5
It is more enjoyable to be responsible for your own efforts at work.	1	2	3	4	5
I would be quite bored by a visit to an art gallery.	1	2	3	4	5

18. On these last pages, you will find a series of statements about you. Please read each statement and decide how much you agree or disagree with that statement.

Please answer every statement, even if you are not completely sure of your response.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I plan ahead and organize things, to avoid scrambling at the last minute.	1	2	3	4	5
I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed.	1	2	3	4	5
I'm interested in learning about the history and politics of other countries.	1	2	3	4	5
I often push myself very hard when trying to achieve a goal.	1	2	3	4	5
If I knew that I could never get caught, I would be willing to steal a million dollars.	1	2	3	4	5
I would enjoy creating a work of art, such as a novel, a song, or a painting.	1	2	3	4	5
When working on something, I don't pay much attention to small details.	1	2	3	4	5
Having a lot of money is not especially important to me.	1	2	3	4	5
I think that paying attention to radical ideas is a waste of time.	1	2	3	4	5
I make decisions based on the feeling of the moment rather than on careful thought.	1	2	3	4	5
I think that I am entitled to more respect than the average person is.	1	2	3	4	5
If I had the opportunity, I would like to attend a classical music concert.	1	2	3	4	5
When working, I sometimes have difficulties due to being disorganised.	1	2	3	4	5
If I want something from someone, I will laugh at that person's worst jokes.	1	2	3	4	5
I've never really enjoyed looking through an encyclopedia.	1	2	3	4	5

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I only do the minimum amount of work needed to get by.	1	2	3	4	5
I would never accept a bribe, even if it were very large.	1	2	3	4	5
People have often told me that I have a good imagination.	1	2	3	4	5
I always try to be accurate in my work, even at the expense of time.	1	2	3	4	5
I would get a lot of pleasure from owning expensive luxury goods.	1	2	3	4	5
I like people who have unconventional views.	1	2	3	4	5
I make a lot of mistakes because I don't think before I act.	1	2	3	4	5
I want people to know that I am an important person of high status.	1	2	3	4	5
I don't think of myself as the artistic or creative type.	1	2	3	4	5
People often call me a perfectionist.	1	2	3	4	5

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I wouldn't pretend to like someone just to get that person to do favours for me.	1	2	3	4	5
I find it boring to discuss philosophy.	1	2	3	4	5
I prefer to do whatever comes to mind, rather than stick to a plan.	1	2	3	4	5
I'd be tempted to use counterfeit money, if I were sure I could get away with it.	1	2	3	4	5
I achieve high grades in relation to my studies.	1	2	3	4	5
I regard my academic work as top priority.	1	2	3	4	5
Employers are eager to employ graduates from my university.	1	2	3	4	5
The status of this university is a significant asset to me in job seeking.	1	2	3	4	5
Employers specifically target this university in order to recruit individuals from my subject area(s).	1	2	3	4	5

19. Is there anything that has not been covered by this scale, which you feel is relevant to understanding your employability? Feel free to continue on a separate sheet.

--

Thank you for completing this scale, your time has been greatly appreciated.

Prize Draw

If you would like to be entered into a draw to win one of eight £25 vouchers, please select your preference and provide your email address. Note, you need to have access to this email address May of 2017. Entry is conditional on completion of the scale, but NOT the nature of your responses.

I would like to receive a:

- ☐ Amazon gift voucher
- ☐ Marks and Spencer's gift voucher

If I win, please send my voucher to the following email address:

.....

If you have any questions or comments relating to this survey, please email me stella.williams@newman.ac.uk

To return your survey please place the survey, consent form, and prize draw details, into the supplied envelop and seal this.

End of Survey

Appendix I. Normality statistics for initial ANCOVA exploring differences in strength scores for each study group.

Tests of Normality						
	Study Status	Kolmogorov-Smirnov ^a			Shapiro-Wilk	
		Statistic	df	Sig.	Statistic	df
Positive Self Evaluations	Never studied at HE	.227	15	.037	.898	15
	Year one	.124	46	.073	.957	46
	Year Two	.138	22	.200 [*]	.947	22
	Year three or above	.116	42	.179	.957	42
	Graduated	.175	65	.000	.943	65
Signalling Fit	Never studied at HE	.218	15	.052	.930	15
	Year one	.201	46	.000	.863	46
	Year Two	.171	22	.092	.873	22
	Year three or above	.170	42	.004	.927	42
	Graduated	.184	65	.000	.837	65
Verbal Communication	Never studied at HE	.200	15	.110	.860	15
	Year one	.081	46	.200 [*]	.976	46
	Year Two	.086	22	.200 [*]	.963	22
	Year three or above	.169	42	.004	.901	42
	Graduated	.153	65	.001	.938	65
Planning	Never studied at HE	.173	15	.200 [*]	.896	15
	Year one	.136	46	.033	.943	46
	Year Two	.266	22	.000	.863	22
	Year three or above	.160	42	.009	.899	42
	Graduated	.144	65	.002	.945	65
Honesty	Never studied at HE	.125	15	.200 [*]	.952	15
	Year one	.089	46	.200 [*]	.971	46
	Year Two	.130	22	.200 [*]	.938	22
	Year three or above	.182	42	.001	.924	42
	Graduated	.114	65	.035	.961	65
Openness	Never studied at HE	.190	15	.149	.888	15
	Year one	.108	46	.200 [*]	.957	46
	Year Two	.102	22	.200 [*]	.970	22
	Year three or above	.129	42	.078	.947	42
	Graduated	.169	65	.000	.929	65
Resilience	Never studied at HE	.214	15	.062	.857	15
	Year one	.120	46	.092	.960	46
	Year Two	.112	22	.200 [*]	.969	22
	Year three or above	.216	42	.000	.910	42

	Graduated	.223	65	.000	.885	65
Working Cooperatively	Never studied at HE	.186	15	.173	.915	15
	Year one	.119	46	.108	.957	46
	Year Two	.193	22	.032	.910	22
	Year three or above	.138	42	.043	.961	42
	Graduated	.171	65	.000	.933	65
	Never studied at HE	.152	15	.200 [*]	.961	15
Conscientiousness	Year one	.124	46	.073	.967	46
	Year Two	.155	22	.184	.913	22
	Year three or above	.110	42	.200 [*]	.961	42
	Graduated	.140	65	.003	.942	65
Sensitivity to Others	Never studied at HE	.246	15	.015	.913	15
	Year one	.107	46	.200 [*]	.954	46
	Year Two	.211	22	.012	.787	22
	Year three or above	.129	42	.075	.927	42
	Graduated	.149	65	.001	.953	65
Approximately, what is your current gross income per year? (Please include any student loans or bursaries in brackets)	Never studied at HE	.144	15	.200 [*]	.963	15
	Year one	.173	46	.001	.816	46
	Year Two	.293	22	.000	.586	22
	Year three or above	.226	42	.000	.845	42
	Graduated	.213	65	.000	.776	65
Approximately, how many promotions have you received within your current organisation(s)?	Never studied at HE	.348	15	.000	.641	15
	Year one	.362	46	.000	.374	46
	Year Two	.424	22	.000	.589	22
	Year three or above	.343	42	.000	.403	42
	Graduated	.324	65	.000	.591	65
Approximately, how many promotions have you received within your entire working life?	Never studied at HE	.257	15	.009	.850	15
	Year one	.356	46	.000	.379	46
	Year Two	.300	22	.000	.725	22
	Year three or above	.330	42	.000	.621	42
	Graduated	.298	65	.000	.632	65
Since the age of 18, approximately how many periods of unemployment of longer than one month, have you experienced?	Never studied at HE	.343	15	.000	.751	15
	Year one	.460	46	.000	.568	46
	Year Two	.399	22	.000	.678	22
	Year three or above	.309	42	.000	.769	42
	Graduated	.312	65	.000	.738	65

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction