

DOCTORAL THESIS

Alexithymia and Relationship Satisfaction

James Ayers

**Thesis submitted in partial fulfilment of the requirements for the degree of
Doctor of Clinical Psychology at the University of Leicester**

2002

(21,350 words)

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ACKNOWLEDGEMENTS

Thanks to Dr Ginny Lawes, Dr Wilson Firth, Maralyn Christie, Keith Turner, Professor Ed Miller and Victoria MacLean for all their support and help with this project.

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ABSTRACT

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The research literature on factors associated with relationship satisfaction and relationship failure suggests that the expression of emotion has a vital role in the maintenance or failure of marriages and cohabiting partner relationships. Relationship failure is a significant clinical concern because of the association with increased suicide risk for separating partners and negative consequences for children of parents whose relationship is characterised by high levels of conflict. Longitudinal follow up studies have been used to clearly describe a destructive style of conflict resolution, based on a lack of communication of emotion between couples who then subsequently divorce or separate. However no research has been carried out to determine how the alexithymic personality trait, which is characterised by an inability to express emotion impacts upon cohabiting partner relationships such as marriages. This study used a clinical sample of men presenting with mental health problems to two adjoining community mental health teams. The study investigated whether the ability of men to express emotion, measured by the Toronto Alexithymia Scale was correlated with their satisfaction levels in cohabiting relationships (measured by the Relationship Assessment Scale). In addition, the hypothesis that alexithymic men may be more vulnerable, through their difficulties in expressing emotion to enter destructive patterns of conflict resolution that lead to relationship failure was also investigated by correlating alexithymia scores with the number of failed previous cohabiting relationships the men had experienced. Results were not statistically significant, as it was only possible to collect a small, homogeneous sample of men that was not sufficient for fairly evaluating the hypotheses of this study. The replication of this preliminary study within a primary care service, where participants may be more numerous, along with the additional incentive of payment for participation is recommended, due to the difficulties encountered in recruiting men to participate in a study about relationship satisfaction.

INTRODUCTION

The current study seeks to explore how alexithymic difficulties in men (problems in recognising and expressing emotion) may influence cohabiting relationships such as marriages in the context of the rising divorce rates now seen in western society.

The concept of alexithymia (and research associated with the concept, such as somatic illness) is firstly reviewed. The importance of the ability to express emotion, as a factor that may be important for the survival or failure of cohabiting relationships is then evaluated in the context of research literature on other factors that are also associated with marital satisfaction and relationship failure. The role of alexithymia as a risk factor for relationship failure and low relationship satisfaction is then discussed.

1 Alexithymia

1.1 The alexithymia construct

In the 1950's psychodynamic psychotherapists (e.g. Horney 1952 and Kelman 1952, cited in Taylor, Bagby & Parker, 1991) began to write about a group of clients who appeared to have great difficulty in identifying and verbalising their emotions. They were regarded as different from 'psychoneurotic' clients and were

also described as frequently presenting with physical illnesses and psychosomatic complaints (physical illnesses with no apparent physical cause).

In 1970, Nemiah & Sifneos (cited in Taylor et al, 1991) introduced the term 'alexithymia' to describe this cluster of characteristics. By 1973, the 'alexithymia concept' encompassed the following features: these clients displayed difficulty in identifying and describing their own emotions. In addition they were unable to differentiate between feelings and sensations of physiological arousal (e.g. bodily sensations associated with anxiety). These clients were observed to also have an absence of imaginative and fantasy processes and an externally orientated cognitive focus (e.g. preoccupation with the minute details of external objects and events). They still demonstrated observable, outward signs of emotion (e.g. tears, rage) but were unable to link them with cognitions that could offer explanation, meaning or insight into their emotional experiences (Nemiah, 1996). The prevalence of alexithymia has been found to be as high as 19% within the normal population (Parker, Taylor & Bagby, 1989).

Alexithymic difficulties involve problems with recognising and expressing emotion. Such difficulties are not known to be related to autism and theory of mind research (Mitchell, 1992) which instead describes the difficulty that these individuals have in understanding the emotions and cognitions of others.

1.2 Aetiology of alexithymia

Several explanations for the causes of alexithymia have been presented in the research literature. Psychodynamic, cognitive, neuropsychological, developmental and cultural perspectives are reviewed below.

1.2.1 Psychodynamic explanations of alexithymia

Early psychodynamic explanations of the causes of alexithymia suggested that the difficulty in expressing emotion represented strong defences against unconscious conflicts. However the lack of effectiveness of psychoanalytic methods in overcoming such 'defences' and uncovering hidden unconscious issues for these clients led to a decline in the credibility of the psychoanalytic etiological explanation of alexithymia (Parker et al, 1989, Taylor et al, 1991). However it is important to note that whilst the actual cause of alexithymia cannot be accounted for by traditional psychoanalytic theories, psychoanalytic theory is still used to explain why alexithymic clients are thought to suffer with psychosomatic problems (see page 21 below for a review of psychosomatic problems and alexithymia).

1.2.2 Cognitive explanations of alexithymia

More recent etiological explanations of alexithymia have suggested that the disorder is caused by a cognitive deficit (Taylor et al, 1991). Clients are unable to link their emotional experiences with explanatory cognitions that would enable them to experience the emotion as a conscious feeling state. This failure to connect emotions with explanatory cognitions may then lead to both an increase in and focus upon the somatic aspects of emotion, which in turn increases physiological arousal. In addition alexithymic individuals may then also be prone to immediate

physical action as a response to unpleasant physiological arousal. This explanation helps to account for the high prevalence of physical illness symptoms found in this client group: emotions, when not understood or expressed verbally via cognitions and language may find expression in terms of physiological arousal and eventual psychosomatic illness (Taylor et al, 1991). The cognitive deficit model however may be criticised for the presumption that explanatory cognitions are necessary for an individual to appreciate or experience a range of emotions. Whilst this presumption underlies clinical approaches such as cognitive behaviour therapy (Teasdale, 1993), the primary role of cognition in the experience of emotion is not necessarily accepted in the field of cognitive science. It may be argued that some forms of emotional processing occur independently of cognition (Teasdale, 1993), or before cognition (Buck, 1988). In addition, the cognitive deficit explanation is unable to account for why alexithymia is not associated with other forms of cognitive deficits, and occurs independently of intelligence levels (Parker et al, 1989).

1.2.3 Neuropsychological explanations of alexithymia.

There has been some research into the neurobiology of alexithymic clients (e.g. Buchanan, Waterhouse & West, 1980, Zeitlin, Lane & O'Leary, 1989). This field of research suggests that there are variations in brain organisation between alexithymic and normal individuals. The neurobiological evidence (focussing on interhemispheric transfer deficits) may provide the beginnings of a biological basis upon which to build explanations of alexithymic deficits.

Modern neurobiological research has suggested that there are hemispheric asymmetries in the brain for the expression and understanding of emotion (Madigan, 1998). Basic physiological and hormonal emotional reactions are the result of activity in sub cortical regions such as the amigdala and thalamus that do not involve the cortex (Carlson, 1992). However more complex emotional reactions at the psychological level are a result of cortical activity. Some theorists argue that such emotional reactions are processed by the right hemisphere whereas others suggest that the right hemisphere regulates negative emotion and the left hemisphere regulates positive emotion (Valence theory, Silberman & Weingartener, 1986, cited by Parr & Hopkins, 2000). Parr & Hopkins (2000) attempted to evaluate the Right Hemisphere and Valence theories of emotional processing by measuring asymmetries in brain temperature changes in chimpanzees. Their results gave partial support to both theories of cortical emotional processing. However studies that have focussed on studying brain activity in human subjects with brain lesions or epilepsy (e.g. Luciano, Devinsky & Perrine, 1993, in a study of EEG patterns in patients with epilepsy) favour the Right Hemisphere theory of emotional processing rather than Valence theory.

Buchanan et al (1980) reviewed early neuropsychological studies of patients with traumatic brain injuries to either the left or right brain hemispheres and found that those with right hemisphere damage showed significant deficits in their comprehension of affect-laden speech. They found similar results for patients who had agenesis of the corpus callosum (effectively separating the hemispheres). This information was used to propose that alexithymic difficulties may have been the result of subtle brain dysfunction in either the right hemisphere or in

interhemispheric transfer capabilities. However Buchanan et al (1980) review other studies that used very low numbers of subjects or single case studies at a time when neuropsychology was still unsophisticated, making such conclusions subject to question. In addition, no specific evidence for how such brain dysfunction is caused in alexithymic clients was postulated. The authors did suggest, however that for alexithymic difficulties to emerge, an interaction between subtle brain dysfunction and a developmental environment in which emotional awareness was not fostered would be necessary.

Zeitlin et al (1989) built upon the theory that alexithymia has a neurobiological explanation centred on interhemispheric transfer deficits. They cited earlier studies on epileptic patients who had undergone cerebral commissurotomies (severing of the corpus callosum) and pointed out their lack of emotional expressiveness, fantasy and symbolisation, characteristic of the alexithymic personality trait. The rationale for such conclusions was based on the theory that emotion is localised in the right hemisphere of most right handed individuals and that verbal expression is based in the left hemisphere. If the two hemispheres are unable to communicate effectively, this would result in an inability to express emotion. Zeitlin et al (1989) tested combat veterans with post traumatic stress disorder (PTSD) and normal subjects on a tactile finger location task, a known indicator of interhemispheric transfer capability for fine rather than gross motor control. In support of their theory it was found that the degree of alexithymia exhibited by subjects was related to their performance on the tactile finger localisation task. Performance on the tactile finger location task was found to be unrelated to PTSD. Their findings suggested that interhemispheric transfer deficit is more likely to be related to

alexithymic difficulties than right hemisphere deficits in general as was suggested as an alternative explanation by Buchanan et al (1980). The validity of Zeitlin et al's (1989) findings depends however, on the extent to which emotional processing is lateralised within the brain and the limits of such functional localisation arguments in general (Carlson, 1992).

No explanation for why alexithymic individuals may have such neurobiological deficits has yet been confirmed. To the present author's knowledge, no further research has been conducted on the subject since Zeitlin et al's (1989) study. It is of interest to note, however that 'theory of mind' research, (which is concerned with the capacity of an individual to understand the cognitions and emotions of other people), (Mitchell, 1992) postulated a neurobiological deficit as the main aetiological factor for such difficulties. In 'theory of mind' research, these neurobiological difficulties are thought to be caused prior to or during birth. However, in alexithymia no research has been carried out to determine if the brain abnormalities described may be the biological expression of a failure in emotional development during later childhood, or the result of earlier birth difficulties.

1.2.4 A developmental theory of alexithymia.

Krystal (1982), writing from a psychodynamic perspective first suggested that alexithymic individuals had failed to complete a process of childhood emotional development involving the progressive desomatisation, differentiation and ability to verbalise emotional experience.

Lane & Schwartz (1987) presented a five-level model of the development of emotional awareness in childhood. This model follows the process of cognitive development proposed by Piaget (cited by Mitchell, 1992). Emotion may be defined as a basic physiological response to an external stimuli that involves autonomic and hormonal changes within the brain and body (Carlson, 1992). There is also a more sophisticated psychological component of emotion that involves the interpretation of these basic physiological reactions to external stimuli as a range of differentiated affects (Carlson, 1992). Lane & Schwartz (1987) suggested that in early infancy (Piaget's sensori motor stage), emotion is entirely linked to the expression of global arousal produced by pleasant or unpleasant bodily sensations (e.g. hunger and pain). The second level of emotional development is characterised by the association between bodily sensations and 'action potentials' that are aimed at maximising pleasure and minimising distress as the infant becomes aware that it is separate from its environment. At the third level (corresponding with Piaget's preoperational cognitive stage and an increasing linguistic ability) the infant begins for the first time to represent emotion not only as a somatic experience but also as a psychological event corresponding to basic, mutually exclusive emotions (e.g. either happy or sad). The fourth level includes the development of greater differentiation of emotional states and the understanding that emotions are not mutually exclusive categories as in the previous level of development. At the fifth level (corresponding with Piaget's formal operational cognitive stage) the individual is able to recognise that a highly differentiated range of emotions can be blended into new combinations in order to describe any subjective experience.

It is possible that patterns of attachment and affective interchange with caregivers or a neurobiological deficit may inhibit the development of these levels of emotional awareness and later result in various degrees of alexithymic difficulties in adulthood. Lane & Schwartz's (1987) theory suggested that some alexithymic individuals may be stuck at a relatively simplistic level of emotional development, able to only represent emotion in terms of bodily sensations or poorly differentiated psychological experiences. The theory begins to explain how some individuals may achieve the formal operational level of cognitive development but remain very unsophisticated in their awareness and differentiation of emotions, as these are separate, although parallel processes. However it is still unclear whether the neurobiological deficits or factors associated with upbringing are responsible for such failures in emotional development.

It is possible that the neurobiological deficits associated with alexithymia exist before an individual begins emotional development in childhood (e.g. due to birth trauma). Alternatively the neurobiological deficits associated with alexithymia may be a biological expression of a failure to develop during childhood the sophisticated capacity for emotional awareness.

1.2.5 An alternative developmental theory of alexithymia

Maltby & Day (1999) argued that masculinity among men is associated with the avoidance of emotional expression as a defence style. It is suggested that alexithymia may form as a result of the adoption of certain defence styles which are part of sex role identity development during childhood. It may be expected from this theory that there would be higher rates of alexithymia for men in the general

population than for women. However both Bagby, Taylor, Parker & Loiselle (1990) and Parker et al (1989) found that there were no significant differences between males and females in alexithymia for normal adult, psychiatric and college student samples. The lack of sex differences for alexithymia reported by these studies suggest that the developmental theory of Maltby & Day (1999) is unsupported.

1.2.6 A cultural explanation of alexithymia

It has been suggested that alexithymia may be the result of cultural values (Kirmeyer, 1987) that discourage emotional expression within some societies, (e.g. British 'stiff upper lip'). It is therefore possible that such dominant cultural attitudes could influence parenting styles that may in turn result in the inhibition of emotional development of children, as suggested by the developmental argument for alexithymic difficulties (Lane & Schwartz, 1987). The argument is that the alexithymia personality trait is a social and cultural phenomenon (Kirmeyer, 1987). However, Kirmeyer's theory requires further testing by cross cultural studies of alexithymia.

1.2.7 Summary of the aetiological theories of alexithymia

Psychodynamic methods, based on the theory that alexithymia is a defence against emotional experience, have met with little success in the treatment of alexithymic difficulties. Cognitive models of emotion suggest that alexithymia may result from an inability to link emotional experiences with cognitive explanations that help to give meaning and understanding to emotional experience. This cognitive deficit model is used to explain why severely alexithymic individuals only recognise

somatic aspects of emotional experience (Taylor et al, 1991). Neurobiological research into patients with brain injury who are subsequently unable to express emotion has led to the suggestion that alexithymia may be the result of subtle brain dysfunction involving an interhemispheric transfer deficit (Zeitlin et al, 1989). Developmental theories of alexithymia suggest that alexithymic individuals have failed to complete the normal process of emotional development during childhood, perhaps as a result of an emotionally impoverished parenting style (Lane & Schwartz, 1987). Neurobiological explanations are unable to confirm whether brain abnormalities predate and prevent the normal process of emotional development in childhood or if these neurobiological abnormalities only reflect such a failure in emotional development. Alexithymia may result from a failure at one or more of several stages of emotional development. This is a promising argument as it is able to account for the varying degrees of severity of impairment seen in alexithymic individuals. An alternative, cultural theory of alexithymia suggests that parenting styles are influenced by social norms that inhibit the expression of emotion and may in turn contribute to alexithymic difficulties in developing children (Kirmeyer, 1987). The cultural theory, however is not as yet supported by cross cultural studies of the prevalence of alexithymia.

It seems likely that alexithymia may be caused by a failure to complete the normal process of emotional development in childhood. This failure in development may be influenced by pre-existing brain dysfunction, or emotionally impoverished parenting that may be exaggerated by social norms that do not foster emotional awareness, or a combination of such factors.

1.2.8 Clinical implications

Alexithymia may be the result of a failure in emotional development, for reasons associated with upbringing, culture and parenting, rather than an immutable cognitive and neurobiological deficit existing before emotional development began. It may therefore be possible to teach alexithymic individuals how to recognise increasingly complex forms of emotional experience. Erickson (2001) suggested that upbringing factors may inhibit emotional development and therefore presents a therapeutic model for enabling men to recognise their emotions and to express them in ways that enhance their relationships. Similarly gestalt psychotherapy is based on the concept of increasing the ability of an individual to recognise their emotions in order to express their needs in relationships more effectively (Clarkson, 1989, Corey, 1996). Both Erickson's (2001) model, and traditional gestalt psychotherapy begin this process by encouraging the client to become aware of their physiological and somatic emotional reactions to events. Literature on alexithymia (e.g. Nemiah, 1996) indicates that such individuals do demonstrate these basic physiological emotional reactions but lack the ability to connect them with events (as stated by the cognitive deficit model of alexithymia). Alexithymic individuals also lack the more sophisticated ability to recognise simple, and then increasingly differentiated emotional states (Taylor et al, 1991).

1.3 Methodology in alexithymia research

A major difficulty in alexithymia research has been the lack of a single, reliable psychometric measure of the disorder (Taylor, Bagby, Ryan & Parker, 1990). Historically the Schalling-Sifneos Personality Scale-Revised (Sifneos, 1986), The Minnesota Multiphasic Personality Inventory (MMPI) alexithymia scale (Kleiger &

Kinsman, 1980) and the Beth Israel Hospital Psychosomatic Questionnaire (Apfel & Sifneos, 1979, cited by Taylor et al, 1990) have all been used whilst attempting to further investigate the alexithymia concept itself and other disorders with which it is associated. The above measures are poor indicators of alexithymia, on the basis that there is little correlation between them suggesting that they do not all measure the same concept (Taylor et al, 1990).

The Toronto Alexithymia Scale (TAS) was created by Bagby, Taylor, Parker & Loiselle (1989) as a single, robust measure of alexithymia upon which future research could converge. It was tested by Taylor, Bagby, Ryan & Parker (1990) and was found to be a 'psychometrically sound measure' with good retest reliability ($r = 0.82$, $p < 0.001$) and high internal consistency (Cronbach's $\alpha = 0.79$). The TAS was also found to predict scores on related psychological concepts (e.g. 'psychological mindedness', $r = -0.334$, $p < 0.001$) demonstrating construct validity. The measure is based on a stable four factor structure: the ability to distinguish emotions from physical sensations; the ability to differentiate between and describe different emotions; frequency of daydreaming behaviour and an externally orientated thinking style (Taylor et al, 1990). The scale is brief and easy to administer and was cross-validated with samples of college students, normal adults and psychiatric patients. Within the sample of 161 normal adults, a score of more than 74 for men (one standard deviation above the mean of 62) is considered to indicate alexithymic difficulties. Within the sample of 214 psychiatric outpatients, a score of more than 79 for men indicated alexithymic difficulties, as the mean scores for this group are slightly higher than for those of the normal population (Bagby, Taylor, Parker & Louiselle, 1989). Taylor et al (1990) claimed

that their measurement based approach to alexithymia, using the TAS has elevated a previously vague concept to the status of a trait personality type. However it is unfortunate that so much of the fundamental research into the alexithymia concept has been carried out by a single group of researchers (Taylor et al). The alexithymia personality trait may therefore require further investigation by independent groups of researchers with less investment in the concept before the claims of Taylor et al (1990) can be fully accepted.

1.4 Areas of research within the alexithymia construct

1.4.1 Validation of the alexithymia concept

Research has been carried out to validate the alexithymia concept. Parker et al (1989) investigated the relationship between alexithymia (measured by the TAS), intelligence (measured by a vocabulary test and Raven's Standard Progressive Matrices), (Raven, Court & Raven, 1977) and sociodemographic variables in a sample of 100 normal adults randomly selected from the general population. Previous studies of the relationship between these variables have generated conflicting results, which Parker et al (1989) attributed to the use of a variety of psychometrically weak measures of alexithymia (e.g. The Shalling-Sifneos Personality Scale and MMPI alexithymia subscales). Parker et al (1989), using the TAS, found that alexithymia was not related to age, educational level, socio-economic status or intelligence. This suggested that the alexithymia concept is not an artefact based on sociodemographic variables and that the concept can be applied to a wide range of samples. Parker et al (1989) found that there is a prevalence of 19% for alexithymia (represented by a score on the TAS of more than

74) within the normal adult population. In addition, the study showed no statistically significant differences between males and females for alexithymia in the normal population.

1.4.2 Alexithymia and somatic illness

In this section research and theory is reviewed that links alexithymia with a susceptibility to somatoform disorders. Somatic illnesses and somatoform disorders may be defined as symptoms and syndromes of physical illness with no demonstrable organic basis (Lolas, 1989).

Lolas (1989) suggested that in accordance with a holistic, biopsychosocial approach, clients who do not express emotion verbally, such as those with alexithymia are more likely to suffer with somatic expressions of emotion; there may be a direct relationship between levels of emotional awareness and susceptibility to somatic illness.

There is physiological evidence to support the concept of somatic illness. During periods of emotional arousal, the adrenal glands secrete a hormone called cortisol that increases glucose metabolism (preparing the organism's muscles to deal with a potential source of threat). However prolonged secretion of such glucocorticoids suppresses the immune system. This suggests that prolonged periods of unresolved emotional stress may make an individual more vulnerable to illness through the suppression of the immune system (Carlson, 1992).

Holistic approaches to somatic illness that consider an interaction between the physiology, psychology and social environment of the individual are very similar to early psychodynamic explanations of somatic problems upon which psychiatric systems of classification for somatic illness are still based. Psychodynamic explanations of somatic illness suggest that emotional distress is suppressed and does not enter conscious awareness, manifesting itself instead as symptoms of physical illness (e.g. Malan, 1979). In psychodynamic and gestalt psychotherapy, the verbalisation of emotion is regarded as having a homeostatic, regulating and cathartic function. If emotion is not expressed verbally, emotional arousal is likely to be expressed through the body, in the form of physical illnesses with no apparent physical cause. Nemiah (1996), in a review of alexithymia and studies seeking to understand the somatic and physical illness based presentations of such clients argued that psychodynamic explanations have been unfairly dismissed. Alexithymic clients are thought to express their emotional distress by presenting with somatic, physical illnesses. This finding may be expected since severely alexithymic clients show awareness of only the subcortical, physiological aspects of emotion rather than the cortical, psychological and verbal aspects.

Clinical implications from the research literature on alexithymia are that treatment aimed at increasing emotional awareness in alexithymic individuals may reduce the risk of presentation with physical and somatic illnesses. It may be that exploratory therapies that actually focus directly upon increasing emotional awareness (Taylor et al, 1991) such as gestalt psychotherapy, are more suitable for this purpose than the psychoanalytic therapies from which theory about the causation of somatoform disorders were actually derived.

Bach & Bach (1996), in a study based on 40 psychiatric inpatients diagnosed with somatoform disorders found that scores on the somatisation scale of the Symptom Check List (SCL90-R), (Derogatis, 1977) were a statistically significant predictor of alexithymia as measured by the TAS. Control subjects, suffering with chronic medical illnesses were used to rule out the hypothesis that alexithymic difficulties may have been a response to the stress of being physically unwell in the inpatients with somatoform disorders, rather than alexithymia actually being the cause of the somatic problems. The results indicated, however that the inpatients with somatoform disorders were significantly more alexithymic than the control subjects, suggesting that alexithymic difficulties may increase vulnerability to somatic problems.

Cohen, Auld & Brooker (1994) examined scores on the hypochondriasis and somatic complaints subscales of the MMPI in groups of psychosomatic, psychiatric and dental patients. It was found that although the alexithymia scores of the psychosomatic and psychiatric groups were higher than those of the dental patients, the alexithymia scores of the psychosomatic and psychiatric groups were similar. This study, unlike that of Bach & Bach (1996) had the benefit of an additional psychiatric control group (in which alexithymia scores are known to be higher than in the normal population), (Bagby et al, 1989). This enabled the alternative conclusion to be reached that alexithymia may actually be a separate construct to somatic illness. Whilst alexithymia was certainly associated with a tendency to report physical symptoms in all groups, this did not mean alexithymia was necessarily associated with genuine psychosomatic disorders.

The above two studies have indicated that there may be a relationship between alexithymia and somatic illness. However it must be noted that such research does not confirm that this relationship is definitely causal, despite indications at the theoretical level that alexithymic difficulties may in fact increase vulnerability to somatic problems (Lolas, 1989). Alexithymic clients may score highly on measures of somatic complaints as a result of their tendency to focus on the physical aspects of emotion (Cohen et al, 1994). This does not necessarily mean that the concepts of alexithymia and somatic illness are the same. Longitudinal studies assessing the occurrence of alexithymic characteristics in clients with and without genuine psychosomatic disorders may therefore be necessary.

1.4.3 Alexithymia and the regulation of emotional distress

Research has suggested that alexithymia is also a risk factor for alcoholism and drug addiction. This research is based on the theory that since alexithymic individuals are unable to understand and express emotion verbally, they may be more likely to engage in behaviours that regulate their emotional arousal levels.

Rybakowski, Ziolkowski, Zasadzka & Brzezinski (1988) studied 100 inpatients at an addictions treatment unit and found that the rate of alexithymia within this sample exceeded that expected for both the normal population and clients presenting with psychosomatic difficulties.

In a study with a similar experimental design, Taylor, Parker & Bagby (1990) found that rates of alexithymia (measured by the TAS) in 44 inpatient substance

abusers who were recently abstinent was 50%, a figure that is significantly higher than that found in the general population (19% prevalence rate, Parker et al, 1989). However it is unclear to what extent the participants in this study, who were able to achieve abstinence are representative of the substance using population in general. It may be hypothesised that alexithymia rates may be even higher in substance abusers who do not achieve abstinence.

Helmers & Mente (1999) also found that alexithymia, measured by the TAS was associated with substance abuse (e.g. cocaine), alcohol use and maladaptive health behaviours (such as poor diet) in 118 men drawn from the normal population. Drug use was particularly associated with the 'difficulty identifying feelings' subscale of the TAS.

1.4.4. Conclusions from areas of research within the alexithymia construct

In summary the general themes within these areas of research into alexithymia are based on the concept that alexithymic individuals, through their emotional deficits are more vulnerable to a focus upon physical illness complaints (Cohen et al, 1994) and behaviours that regulate physiological aspects of emotional distress (e.g. drinking and substance abuse), (Taylor et al, 1990). There is also evidence to suggest that alexithymia is not an artefact of variables such as socio-economic status, intelligence or other demographic characteristics (Parker et al, 1989).

2 Relationship research

The present study is concerned with the question of whether alexithymic individuals, who experience difficulty in recognising and expressing their emotions are at risk of a reduction in relationship satisfaction levels and have a high potential for failure of relationships (e.g. marriages). Therefore relationship research and the clinical implications of relationship failure are reviewed below.

2.1 Clinical implications of relationship failure

There is evidence to suggest that there has been a dramatic increase in divorce and relationship failure in the past two decades (Rogers & Amato, 2000). In the UK one in three first marriages currently ends in divorce.

Pryor & Rodgers (2001) presented divorce rate figures based on the number of divorcing couples as a proportion of the number of married couples in the population at the time of measurement. These figures suggest that divorce rates have been rising in the UK and USA since records began in 1857. Divorce rates are higher in the USA than in the UK. For the period between 1951 and 1996, divorce rates have increased by 400%. The figures, according to Pryor & Rodgers (2001), reflect an interaction between times of legal reform in relation to divorce (e.g. in the UK, no-fault legislation in 1969), economic changes and social factors specific to marital relationships (e.g. divorce becoming more socially acceptable over time).

Relationship breakdown is associated with negative consequences for both the mental and physical health of spouses and is a common reason for seeking therapy (Gottman & Levenson, 1992). Therefore research into the factors that predict relationship failure and marital satisfaction is of considerable clinical concern. The present study investigates the hypothesis that alexithymic individuals, through their difficulties in expressing emotion may be particularly at risk of relationship breakdown and the clinical consequences with which relationship breakdown is associated.

2.1.1 Suicide risk after divorce

Research has shown that men may be at greater risk of committing suicide than women. Kelleher, Keohane, Corcoran, Keely & Neilson (2000) in a study of 100 suicides found that the male to female ratio in the 15 to 44 age group was 4:1. Although more females attempt suicide than males, men tend to use more lethal methods for suicide and are therefore more likely to be successful. In both young (adolescent) and old (elderly) age groups, a marked sex difference in suicide rates is seen (Coren & Hewitt, 1999, Rosenthal, 1981).

There is evidence to suggest that the breakdown of relationships is particularly problematic for men, who do not cope as well after such an event as their female counterparts.

Stack (1992b) studied Finnish couples and reported that following divorce, men are twice as likely to commit suicide as their female counterparts. However factors such as religiosity complicated the relationship between divorce and subsequent

suicide risk in some couples within the sample, as religiosity is a factor that reduces the probability of both suicide and divorce.

Lester (1994) found that marriage was a protective factor against suicide risk in men. This study also reported that divorce was more likely to have a deleterious effect on the suicide rates of men than women. Stack (1992a) studied the relationship between suicide and divorce in Japan in order to shed light on other social variables that may contribute to the link between suicide and divorce in western society. Results suggested that the emphasis placed on marriages and the nuclear rather than extended family in the west may be factors that exacerbate the relationship between divorce and subsequent suicide in American and European society. The emphasis placed on extended family in some cultures may be a protective factor against suicide, since family support is then easily available if a couple separate.

2.1.2 Effects of divorce on children

In addition to the clinical concern of increased suicide risk in men associated with relationship failure, another significant clinical concern is how relationship breakdown affects children who are part of the families that separate. It is possible that the children of alexithymic parents may be particularly at risk if alexithymic parents are unable to maintain long-term relationships.

There is a considerable level of debate within the research literature about whether separation or divorce actually has negative consequences for children. Herbert (1996) suggested that parental separation is one of the most common adverse life

events experienced by children. Herbert (1996) argued that there is evidence that divorce can adversely effect parenting skills of children in later life. Divorce may be interpreted by children as a rejection by the parent who leaves the family. This may be particularly problematic as the highest risk of divorce occurs in the fourth year of marriage, when children are likely to be young and less able to understand the process that is occurring. Common reactions to separation in children are distress and anger towards the parents as well as separation anxiety. The extent of the problems created for children by the separation of their parents is however likely to be mediated by many factors, besides the age of the children when the separation occurs. Factors such as how acrimonious the separation was, and the extent to which children feel their loyalties to each parent are divided by the separation and economic hardship following separation are also likely to mediate the level of clinical need of children effected by parental separation (Amato, 1993, Herbert, 1996).

The debate within the literature on the effects of parental separation on children is primarily concerned with two questions: does parental separation have an adverse effect on children, or is it the characteristics of families that go on to separate that cause poor outcomes for children, rather than the separation event itself? Demo (1993) criticised the research literature in general, stating that it is driven by the ideology that step-families and single parent families are inferior to the traditional nuclear family that does not experience divorce. He suggested instead, that research should focus on longitudinal studies of factors that are known to adversely effect children and families in general rather than be driven by ideological bias (e.g.

parental mental health, parenting skills, socio-economic disadvantage and life events, Pryor & Rodgers, 2001).

Both Amato (1993) and Pryor & Rodgers (2001) presented detailed reviews of the literature about the effects of parental separation. Research into the question of how parental separation effects children is based on different methodologies. Retrospective studies consider children who have clinical problems (e.g. behavioural difficulties or substance abuse) and examine whether these individuals are more likely to have experienced parental separation than control cases. The best studies are longitudinal in nature (Pryor & Rodgers, 2001), and compare the long term outcomes for children whose parents separated during the study with those who did not. Comparisons are also made in terms of outcome for children from intact families, reconstituted (step-families) and single parent families. Outcome measures (mentioned in the following paragraphs) include measures of social and emotional functioning in childhood, behavioural problems and antisocial behaviour, substance abuse, years remaining in education, educational achievement, adult criminality and eventual adult socio-economic attainment.

Results of such studies indicate that children who experience parental separation do have poorer outcomes than children whose parents did not separate (Pryor & Rodgers, 2001). Children who experience multiple transitions (the formation and subsequent separation of both original and later step-families) suffer particularly poor outcomes. Both Amato (1993) and Pryor & Rodgers (2001) stated that although effect sizes are small across the outcome measures, when large

populations are considered the demand placed on child and adult mental health services as a result of individuals experiencing parental separation is very high.

Longitudinal studies of families that go on to separate have revealed that it may not be the separation event itself that is associated with poor mental health outcomes for children. It has been hypothesised that feelings of abandonment and loss after a parent has left the home may be a factor that causes poor outcomes for children (Amato, 1993). However, studies that compare outcomes for children who have lost a parent through death with those losing contact with a parent through separation do not support this theory. Children whose parents separate have poorer outcomes than children who are bereaved by the death of a parent, even though the absence of a parent due to separation does not necessarily mean the loss of this parent from the child's life (Amato, 1993).

Longitudinal studies have indicated that the poor outcomes for children whose parents later separate are often in place before the parental separation (Pryor & Rodgers, 2001). In addition, not all children are adversely effected by parental separation. These findings suggest that other factors are responsible for the poor outcomes for children whose parents separate. A popular theory with research evidence is that family and parental conflict levels before, during and after separation may be one of the main factors that determines the outcomes for children associated with parental separation (Amato, 1993, Pryor & Rodgers, 2001). Parental separation is usually preceded by high levels of parental conflict. In addition varying levels of conflict after separation between parents are also reported. The variation in outcomes for children may in part be explained by the

variation in conflict levels between parents before, during and after separation. Whilst some parental separations are respectful, others may be bitter with children becoming involved in 'loyalty traps' between the separating parents. In addition, the conflict theory for explaining outcomes for children whose parents separate is further supported by the finding from longitudinal research that some children from high conflict families experience improved outcomes after their parents have separated (Amato, 1993, Pryor & Rodgers, 2001).

Research indicates that multiple factors associated with parental separation cause poor mental health and educational attainment outcomes for children, although it may not be the actual separation event itself that causes the poor outcomes. Of these multiple factors, parental conflict before during and after separation has the best empirical support (Pryor & Rodgers, 2001). Therefore the exploration of factors that mediate marital satisfaction levels within relationships (to be conducted later in this review) is of particular clinical relevance to the outcomes for children of parents who are very dissatisfied with their relationships. However it seems likely that although the parental conflict theory is well-supported, no single factor alone can explain the variety of outcomes seen in children. A more realistic conclusion therefore, is that factors associated with a parental separation event serve to exacerbate existing risk factors in children and their families that contribute to poor outcomes on multiple measures of children's well being (Amato, 1993, Pryor & Rodgers, 2001).

2.1.3 Summary of the clinical implications of divorce

In summary, there is evidence to suggest that relationship failure and divorce is a significant clinical concern for services attempting to deal with suicide risk in men (e.g. after relationship failure), (Lester, 1994). In addition relationship failure and divorce is also a clinical concern for services that are likely to deal with the poor mental health outcomes in children from high conflict families whose parents have separated or are likely to separate (Pryor & Rodgers, 2000). The present study explores the possibility that alexithymic individuals may be particularly vulnerable to relationship failure and therefore the clinical problems that are known to be associated with relationship failure.

2.2 Relationship satisfaction and relationship failure

There is an extensive body of research on the topics of marital satisfaction and relationship failure. The literature is based primarily on two areas of inquiry: the factors associated with relationship satisfaction (self-report questionnaire method) and those factors that are predictive of relationship failure (longitudinal, laboratory based studies of interacting couples). It is important to note at this point that marital satisfaction levels do not necessarily predict the chances of separation since many unhappy couples remain married (Gottman, 1991), although these two fields of research are highly interlinked.

The research on marital satisfaction and relationship failure is limited by its consideration of largely only married couples and as such may no longer represent the diversity of relationships seen in contemporary society. The current study seeks to explore how emotional expressiveness (alexithymia) effects relationship

satisfaction and the chances of relationship failure in cohabiting couples, step-families and homosexual relationships in addition to conventional marriages.

2.3 Longitudinal research

A major approach to the study of relationship satisfaction and relationship breakdown is the longitudinal, prospective follow-up study. This method involves taking behavioural, physiological and self-report data from couples interacting in a laboratory setting. This data is then used to compare the couples that remained together and the couples that separated at follow-up. The behavioural, physiological and self-report data can then be used to determine which behaviours, reactions and attitudes are predictive of relationship success and failure. The strengths of this approach are that it introduces an element of objective observation and measurement by the use of behavioural and physiological measures that is otherwise lacking in the subjective self-report method of marital satisfaction research. In addition, the longitudinal follow-up method has been recommended because it considers the spouses not only individually but as an observable, interacting dyad (Gottman & Levenson, 1984). However the method can also be criticised because the use of a laboratory setting to observe couples interacting is highly artificial and may influence couples to interact in a less natural manner. The behavioural observations recorded by experimenters are often subjective and poorly defined (e.g. concepts such as 'defensiveness' or 'emotional withdrawal'). Finally the physiological and behavioural patterns that are claimed to distinguish couples who will separate from those who will not are correlational in nature and not necessarily causative.

Gottman & Levenson, in a series of papers based on their latest longitudinal study have investigated the process of conflict resolution between couples that has been claimed to be predictive of later divorce and separation (Gottman & Levenson, 1984, Gottman & Levenson, 1986, Gottman & Levenson, 1992). During this longitudinal prospective study, 73 married couples were observed in laboratory settings whilst they attempted to discuss and resolve ongoing disputes and difficulties in their relationships. Interactions were video taped and physiological measures of arousal were recorded. Couples were also asked to complete self-report measures of marital satisfaction and The Couples Problems Inventory (Gottman, Markman & Notarius, 1977, cited by Gottman & Levenson, 1992). This inventory was used to help couples select a problem for discussion during the experiment.

In couples who later divorced and separated, Gottman & Levenson (1992) observed a clearly destructive interactional pattern that emerged during the conflict resolution process. Men displayed high levels of physiological arousal at the beginning of the discussions with their spouses. They then demonstrated an emotional withdrawal ('stonewalling') from their partner characterised by decreased eye contact and a lack of non verbal 'active listening' behaviour. The second stage of this interaction was marked by the subsequent emotional withdrawal of the women after initial attempts to re engage their partners in the discussion. Women were observed to then resort to criticism and displayed facial expressions of disgust. Both partners exhibited a 'defensive' denying of responsibility and negative emotional expression during the interaction. 'Neutral affect' during the interactions on behalf of the men was also found to characterise couples who later separated. It was noted by the

authors that the physiological arousal experienced during conflict resolution by the men was higher than that experienced by the women and was therefore likely to have been experienced as more aversive. Withdrawal from the discussion or 'stonewalling' by men during the discussion may be seen as methods for coping with unpleasantly high levels of physiological arousal that begin a destructive style of conflict resolution associated with a subsequent separation risk.

Couples who were found to be still together at follow up had displayed a different pattern of interaction during the laboratory assessment in the beginning of the studies (Gottman & Levenson, 1992). During the discussions within such couples physiological arousal in the men had been initially high. However the interactions were characterised by active listening behaviours, affection and positive emotional expressions by both partners during the conflict resolution that decreased physiological arousal levels. They did not enter into the destructive pattern of interaction seen in couples who later separated (e.g. Gottman & Levenson, 1992).

Gottman (1991), in a review of the research studies stated that the above interactional patterns were used to accurately predict which couples would separate with a 90% accuracy rate within four years.

At the beginning of the longitudinal study, Gottman & Levenson (1984) argued that 'reciprocity of interaction' is particularly important in conflict resolution. If one partner was less emotionally responsive than the other, this was predictive of marital distress. This finding is similar to that of King (1993) who found that reluctance to express emotion on behalf of male partners was associated with low

marital satisfaction for both partners. The asymmetry of emotional responsiveness (typically with the husband being less responsive) observed by Gottman & Levenson (1984) was as clearly associated with distress as the interactions between those couples who displayed equal levels of reciprocal negative emotional expression. They hypothesised that the high physiological arousal created in the men during the discussions was aversive and led to their emotional withdrawal, unresponsiveness and a 'conflict avoiding' interactional style with their spouses.

Bradbury, Fincham & Beach (2000) suggested that the 'stonewalling' behaviours of men, criticising by women and physiological arousal of both partners during conflict resolution are a product of the cognitive attributions of each partner. These frequently misguided and maladaptive attributions during conflict resolution are the subject matter of cognitive interventions for distressed couples who seek marital therapy. In addition, Bradbury et al (2000) suggested that the physiological responses of each partner during conflict resolution are associated with the well-known link between marital dissatisfaction and poor physical health.

2.3.1 Conclusions from longitudinal research

In conclusion, longitudinal studies have attempted to observe the process of conflict resolution used by couples who stay together or later separate. A clear pattern of a destructive conflict resolution process that is predictive of later relationship failure has emerged (Gottman & Levenson, 1992). It is possible that alexithymic individuals, because of their inability to express emotion and their vulnerability to physiological arousal (Taylor et al, 1991) may be more likely to enter this destructive pattern. Alexithymia may therefore be a risk factor for relationship

failure. This argument, based on longitudinal studies of conflict resolution styles in couples will form the basis of the first hypothesis of this study (see hypotheses section).

It is interesting to note that the philosophy associated with the longitudinal research is that external problems affecting a couple (such as financial hardship) are largely irrelevant in predicting whether the couple will remain together or separate. It is how the couple discuss such problems that predicts the chances of them remaining together (Gottman & Levenson, 1992). This is in contrast with the philosophy of studies attempting to isolate which variables affect relationship satisfaction, of which many have attempted to examine the impact of external factors on a cohabiting couple. Bradbury et al (2000), in their recent review of the literature concluded that whilst the environmental context does have an influence on entire cohorts of couples, interpersonal processes within couples (such as conflict resolution) are highly important in determining their response to their environmental context (e.g. socio-economic disadvantage, unemployment and traumatic events).

2.4 Relationship satisfaction research

2.4.1 Methodological issues

The marital satisfaction literature is based on the method of constructing self-report questionnaires that measure relationship satisfaction. These measures are then correlated with other factors (e.g. individual personality variables, attitudes to emotional expression) that have been used to investigate which factors determine

marital satisfaction and dissatisfaction with varying degrees of success. No studies, to the present author's knowledge, have yet attempted to explore how alexithymia is related to relationship satisfaction.

Measures of relationship satisfaction are frequently correlated with a single variable (unidimensional research). However some studies seek to correlate relationship satisfaction with a group of variables (multidimensional research). These research methods can both be criticised as they frequently imply causality on behalf of a variable that is found only to be correlated with marital satisfaction.

Whilst there is a very high level of correlation between the many measures of marital satisfaction (Vaughn & Matyastik Baier, 1999) the self-report questionnaire method can be criticised because it does not fully take into account the interactional dyadic relationship between spouses in the way that longitudinal studies have attempted (Gottman & Levenson, 1984). Measures of marital satisfaction are based on social exchange and equity theory, such that a relationship is rated as satisfactory if it meets or exceeds an individual's internalised standards for a good relationship. In addition a relationship is deemed to be good if the costs are outweighed by perceived benefits (Hewstone, Stroebe & Stephenson, 1996). The method is further criticised for its reliance on subjective self-reports of an individual's perception of their relationship.

An alternative approach to measuring an individual's subjective evaluation of their marital satisfaction is to measure the level of 'adjustment' between a couple (Bradbury et al, 2000). This concept is similar to longitudinal research in the field

that assesses how the couple interact and solve problems as a unit. The study of couple adjustment may be viewed as an attempt, (still using self-report methods) to bridge the gap between relationship satisfaction research and longitudinal, observation-based methods. Spanier (1976) argued that marital adjustment and satisfaction are different constructs. However self-report measures that assess these supposedly separate concepts correlate highly, suggesting that the two concepts are difficult to distinguish in practice (Bradbury et al, 2000, Vaughn & Matyastic Baier, 1999).

Many studies (reviewed below) using measures of marital satisfaction seek to compare satisfaction levels with a single, unidimensional construct such as personality or emotional expression. Whilst this approach has provided some useful research findings, it does not address the important point that marital satisfaction is a highly complex and multidimensional phenomena. Other studies (e.g. Lavee & Olson, 1993) have sought to compare measures of marital satisfaction with multiple variables in order to capture the complexity of the subject and as such represent a highly important contribution to the field.

2.4.2 Unidimensional marital satisfaction research

In this section, research that has attempted to investigate the influence of various single factors upon marital satisfaction is reviewed, along with the limitations of the self-report measures employed by such studies.

2.4.3 Self-report measures used in the literature

There are many self-report measures of marital satisfaction utilised by studies in this area. Some (e.g. The Locke-Wallace Marital Adjustment Test, (MAT), Locke & Wallace, 1959, cited by Bradbury et al, 2000)) attempt to measure the marital adjustment of the couple rather than the marital satisfaction of individuals within the couple, but have high convergent validity with measures of marital satisfaction despite measuring what are argued by some to be different concepts (Vaughn & Matyastik Baier, 1999).

The majority of these measures were designed to assess married couples. Early measures, such as the Dyadic Adjustment Scale (DAS), (Spanier, 1976) are lengthy and consist of multiple subscales or areas of marital satisfaction and adjustment, as well as an overall, global measure of relationship satisfaction. The use of subscales within a measure was for the purpose of examining how a couple may be satisfied in some areas of their relationship but not others. Vaughn & Matyastik Baier (1999) criticise this approach as the subscales of such measures (e.g. the DAS) are so highly intercorrelated that they appear to be measuring aspects of the same higher order factor, therefore there is little purpose in using such subscales. For the purpose of being able to compare the results of studies that have attempted to measure relationship satisfaction in relation to other variables, measures that focus on a global evaluation have been recommended (Bradbury et al, 2000).

More recent scales have been designed to assess contemporary relationships (e.g. cohabiting couples) rather than marriages alone. They tend to be shorter questionnaires without subscales, giving a global measure of satisfaction rather than

identifying separate areas of potential distress (e.g. The Relationship Assessment Scale, RAS), (Hendrick 1988). The total scores for early measures such as the DAS of overall marital adjustment correlate well with the total scores of relationship satisfaction from newer and shorter measures such as the RAS (Vaughn & Matyastik Baier, 1999).

The RAS was selected for use in the present study because of its good reliability and its high level of correlation with other measures of relationship satisfaction, such as the total score on the DAS. The DAS is a measure that is frequently used against which to compare newer measures of relationship satisfaction (Vaughn & Matayastik Baier, 1999). Normative data for the RAS is available for dating college students (mean score 29, Hendrick, 1988) and family therapy clients (mean score 24, Vaughn & Matyastik Baier, 1999). It was also selected for the current study because it was designed to measure a variety of contemporary relationships rather than marriages alone and as such may be more appropriate than older measures for examining the variety of cohabiting partner relationships seen in modern society. In addition, the RAS is a pure measure of subjective relationship satisfaction, and is free from the conceptual confusion between couple adjustment and relationship satisfaction (a limitation of the DAS).

In summary, there are some conceptual problems associated with the design of questionnaires that claim to measure relationship 'satisfaction'. Some measures assess the couples' interactions or 'adjustment' rather than their subjective view of how satisfied they are with the relationship. However it appears that these supposedly separate concepts of adjustment and satisfaction measured by different

questionnaires are in any case highly intercorrelated (Bradbury et al, 2000). There is also the concept of global and specific measures of relationship satisfaction. Some measures seek to split relationship satisfaction into a number of specific subscales whilst others rely on an overall, global score (e.g. the RAS). However lengthy measures of relationship satisfaction (e.g. the DAS) that employ subscales have been shown to correlate highly with more efficient, shorter global measures of satisfaction (e.g. the RAS). Finally there is the concept of 'marital' satisfaction itself; designed before cohabiting (unmarried) partner relationships and same sex partner relationships were fully acknowledged in society. The RAS will be used in the present study as it suffers from none of the above conceptual confusions that have limited earlier self-report measures.

2.4.4 Factors associated with relationship satisfaction

The present study attempts to assess the impact of alexithymic difficulties on relationship satisfaction. In this section, other factors that have been examined as predictors of relationship satisfaction are reviewed to provide a context for the current investigation.

2.4.4.1 Attachment

Roberts (1992) argued that the key element of marital satisfaction is the type of romantic attachment each partner experiences. Attachment theory, based on studies of infants has been used to describe couples' relationship experiences. Roberts (1992) claimed that 'romantic love' has similarities with the bonding process between parents and infants in early childhood. Nonverbal behaviour between

infants and their parents are very similar to the behaviours of couples who are developing a romantic attachment. Roberts (1992) argued that couples can be described as having anxious, avoidant or secure attachments to each other in the same way as the attachments of young infants. Roberts (1992) stated that 'romantic love' is a subjective self-evaluation of one's own emotional attachment to a partner, and that it is this subjective experience that is crucial in the formation and dissolution of partner relationships.

Small (2000) tested the influence of attachment types upon couples' experiences of marital satisfaction using a sample of 87 married couples. It was found that couples with anxious or avoidant romantic attachments rated their relationships as less satisfactory than couples who were securely attached. Couples without secure attachment to each other reported higher levels of regret and frustration on marital satisfaction measures.

Rivera (1999) in a similar study with 40 couples also reported that a secure attachment between a couple was associated with higher levels of relationship satisfaction than an insecure attachment.

Romantic attachment research is well-grounded in established theory by its association with the subject of infant attachment. In addition, the finding that secure attachments are associated with higher levels of relationship satisfaction has been replicated in studies using different measures of attachment and relationship satisfaction. However, claims that 'romantic love' is the major determinant of relationship satisfaction may be over-stated. There are many other factors

associated with marital satisfaction to consider (eg interpersonal processes such as communication and problem solving). Romantic attachment types and their influence on marital satisfaction is a valuable area of research but requires further investigation, particularly in terms of how this variable interacts with the probability of relationship success and failure (Bradbury et al, 2000). In addition it is unclear whether low levels of relationship satisfaction cause insecure attachment, or if it is the insecure attachment that causes low relationship satisfaction.

2.4.4.2 Attitudes

Another factor that has been investigated in relation to marital satisfaction is the level of similarity between the individuals in a couple in terms of their attitudes and values. Attitudes or values may be described as a mental set, based on experience that influences both behaviour and reactions to stimuli and situations in the environment (Mower White, 1982). The concept of measuring attitude similarity as a predictor of marital satisfaction can be commended for its secure theoretical basis in social psychology. Actual or perceived similarity in attitudes between individuals promotes feelings of liking and attraction. This is thought to occur through a process of reinforcement and reward, as agreement with another person allows an individual to confirm his or her own beliefs (Mower White, 1982, Myers, 1999).

McKinley (1997) administered a values questionnaire and the ENRICH Marital Satisfaction Scale (Fournier & Olson, 1986, cited by Lavee & Olson, 1993) to 91 married couples. A significant correlation between value similarities and marital

satisfaction accounting for six percent of the variance in marital satisfaction levels was observed.

Similarly, Vaitkus (1996) found a significant correlation between values and DAS scores that also accounted for six percent of the variance in marital satisfaction scores in 96 couples.

Hendrick (1981) reported that attitudinal similarity was a significant predictor of marital satisfaction in 51 couples. This finding resulted from a study that examined the importance of reciprocal disclosure of personal information and attitude similarity as predictors of marital satisfaction. Willingness to disclose personal information to a spouse (such as information about background and upbringing) as well as attitude similarity were significant predictors of marital satisfaction.

In summary, similarity of attitudes and values may be an important predictor of marital satisfaction accounting for around six percent of the variance in marital satisfaction scores (e.g. Vaitkins, 1996). The amount of variance in common between two variables can be expressed as a percentage by a simple calculation based on a correlation coefficient. However it is acknowledged that a conclusion that one variable causes the variation observed in the other cannot be proved by correlational data alone.

Because of the complexity of marital satisfaction and the number of variables that contribute to it, the finding that one variable such as attitude similarity may account for six percent of the variance in marital satisfaction is an important contribution to

the literature. The association between attitudes and marital satisfaction has been replicated by several studies, using a variety of measures of both variables (as briefly outlined in the above studies), suggesting that this is a robust finding within the literature. In addition the theoretical grounding of attitudinal research in the social psychology of attraction further enhances the importance of this area of research.

2.4.4.3 Personality

The concept of similarity of personality between two individuals in a relationship as a predictor of relationship satisfaction has also been investigated. As in research concerned with attitude similarity and relationship satisfaction, similarity of personality has a theoretical grounding in social psychology. Perceived or actual similarity between individuals is known to promote feelings of liking and attraction (Mower White, 1982, Myers, 1999).

Rogers (1999) administered the NEO-Personality Inventory-Revised (NEO-PI-R) and the DAS to 103 couples. A significant relationship between the similarity of a couple on the Minnesota Multiphasic Personality Inventory-2 (MMPI-2) and relationship satisfaction on the DAS was found.

Richard, Wakefield & Lewak (1990) also found a significant correlation between the MMPI similarity of a couple and their relationship adjustment (measured by The Locke-Wallace Marital Adjustment Test, (MAT), Locke & Wallace, 1959, cited by Bradbury et al, 2000) in 81 married couples. Since the MAT measures marital adjustment rather than satisfaction, this must be viewed as a study of marital

adjustment and personality congruence (although the concepts of marital adjustment and marital satisfaction overlap). Of the 566 MMPI test items, similarity between spouses on 55 items was predictive of marital adjustment levels. Of the 511 remaining test items on the MMPI, similarity between spouse's responses were not associated with marital adjustment levels. This would suggest that few aspects of personality similarity are actually important for marital satisfaction. The authors claim that these 55 test items may be viewed as a marital adjustment subscale on the MMPI against which the scores of spouses can be compared. The 55 items that were important for marital adjustment were largely related to how an individual viewed the dynamics of their family of origin, and test items measuring personality disorders.

In addition to the above research concerned with similarity of personality and marital satisfaction, research has also been carried out to investigate how individual personality traits such as extraversion effect marital relationships. This has resulted in conflicting findings.

Watson, Hubbard & Wiese (2000) found that self and partner-rated extraversion was consistently correlated with high relationship satisfaction in a study of 74 married and 136 dating couples using three different measures of marital satisfaction. It was hypothesised that the relationship between extraversion and marital satisfaction is mediated by the high levels of positive affect expressed by extraverted individuals that help prevent a negative pattern of conflict resolution from developing.

This study similarly found that high self-rated neuroticism was associated with lower levels of relationship satisfaction due to the increased rate of expression of negative affect by such individuals that are associated with destructive conflict resolution processes in longitudinal research studies (Gottman & Levenson, 1992). However Gottman & Levenson (1992) found that men who separated or divorced their partners were more likely to have high extraversion scores than men who stayed married. These findings serve to illustrate the imperfect relationship between marital satisfaction and the factors associated with relationship failure. It is also unclear what confounding affects personality traits such as extraversion may therefore have when examining other factors associated with marital satisfaction levels.

2.4.4.4 Additional variables

In addition to research examining the effects of attachment types, attitude similarity, similarity of personality and individual personality characteristics on relationship satisfaction, other variables based on the effects of time and changes in social roles of the sexes have also been investigated in relation to relationship satisfaction. These variables are important, as they influence relationship satisfaction to a greater or lesser extent, depending on the age of a sample in any given study.

Rogers & Amato (2000) tested the hypothesis that changes in gender roles within society over the last 30 years may be associated with a decline in the success of marriages and levels of marital satisfaction. They compared couples who married between 1964 and 1980 with couples who married between 1981 and 1997 on five

measures of marital satisfaction. A sample size of 1,500 couples and multiple measures of marital satisfaction made this one of the methodologically more commendable studies within the literature. It was found that the more recent cohort of couples reported less traditional gender roles within their relationships (e.g. husbands doing more housework and having less influence on decisions within the relationship, wives contributing more to the household income and having a greater influence on relationship decisions than was reported in the earlier cohort). It was found that these changes in gender roles were associated with more marital discord and less relationship satisfaction. This finding is similar to that reported by Gottman & Levenson (1992) who found that the divorce rate amongst more contemporary cohorts was higher. Therefore it appears that more recent marriages are both more likely to be characterised by low marital satisfaction and to end in separation, possibly as a result of gender role changes in society. This would lead to the hypothesis for this study that older participants are likely to experience higher levels of marital satisfaction than younger participants.

Vaillant & Vaillant (1993) carried out a longitudinal study of relationship satisfaction in married couples over a period of forty years, using a sample of 168 men and their spouses who were part of the 268 college students selected for multidisciplinary longitudinal studies by Harvard University in 1938. A prospective, self report questionnaire design was used, that included a modified version of the Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959) in which scores were summed to provide a global, rather than subscale-based measure. It was found that marital satisfaction dropped sharply during the first ten years of marriage. After this period marital satisfaction continued to decline, but at

a lower rate. Many longitudinal studies of marital satisfaction have been retrospective in design, leading to the erroneous conclusion that marital satisfaction decreases for the first years of marriage, but later increases again (Spanier & Lewis, 1980). The study by Vaillant & Vaillant (1993) leads to the hypothesis for the current study that the longer the relationship, the lower the reported levels of marital satisfaction will be.

It would also appear that marital discord is not a phenomena that is confined only to western culture. Kamo (1994) compared Japanese and North American couples on measures of marital satisfaction. It was found that similar factors were associated with marital satisfaction in both cultures, particularly emotional expression and problem solving interactions, although in Japanese couples the husband's level of income was more important to their spouse than in North American couples.

2.4.5 Emotional expressiveness and relationship satisfaction research

Perhaps the most promising single factor that has been investigated in isolation in terms of its influence upon marital satisfaction is emotional expressiveness. This factor is of particular importance to the present study, which will attempt to determine how alexithymic individuals who cannot express emotion experience relationships. The ability and willingness of individuals to express emotion is important as it has implications both for marital satisfaction (King, 1993) and for the likelihood of relationship failure, as longitudinal studies have shown (Gottman & Levenson, 1992).

King (1993) studied emotional expressiveness as an individual difference in the context of relationship satisfaction research. It was found that emotional expressiveness (measured by the Emotional Expressiveness Scale, King & Emmons, 1990) was associated with higher relationship satisfaction (measured using the DAS) for both partners in the relationship. This finding was not unusual, in that there is generally little discrepancy in relationship satisfaction ratings when both partners are asked about the perceived quality of their relationship (Hendrick, 1988). Women were found to value emotional expressiveness more than men, and those men who were ambivalent about expressing emotion were therefore more likely to have female partners who were experiencing low levels of relationship satisfaction. This study suggested that there is evidence to support the hypothesis that emotional expressiveness is an important factor in the experience of marital satisfaction.

2.4.6 Multidimensional relationship satisfaction research

Lavee & Olson (1993) used a computerised system (ENRICH), (Fournier & Olson, 1986, cited in Lavee & Olson, 1993) to categorise marital relationships based on multiple variables (eg conflict resolution, finances, communication style and sexual relationship). These variables were then compared with measures of marital satisfaction. It must be noted, however that this method relied entirely upon self-report measures. Over 8000 couples took part in the research. Cluster analysis was used to analyse the data, resulting in seven couple 'typologies'. The results indicated that five of the seven couple types experienced mixed levels of relationship satisfaction (51%), whilst one type experienced very low satisfaction (40%) and another very high levels of satisfaction (9%) across the multiple

variables. Couples who experienced mixed levels of satisfaction did so in relation to different variables. The satisfaction of some couples was related to good communication and problem solving skills, others with the expression of affection and their sexual relationship. These results suggest that no one variable is likely to predict marital satisfaction alone. In addition, different groups of couples achieve marital satisfaction according to different variables. The authors suggested that there is more than one way for couples to achieve marital satisfaction, and that attempts to find single predictive variables in isolation are therefore unlikely to be successful.

The above study by Lavee & Olson (1993) identified two subtypes of couples within the mixed satisfaction group who closely fitted the two extremes of conflict resolution style outlined by Gottman (eg 1991). These couple types emerged distinctly from the cluster analysis, lending support to Gottman's research. However, conflict resolution style alone did not predict marital satisfaction levels across all couple types; other variables are also important for marital satisfaction, although Gottman & Levenson's (1992) research may still be regarded as describing the conflict resolution behaviour of couples who are likely to separate.

2.4.7 Influence of mental health problems on relationship satisfaction

There has been some research that suggests marital disharmony may be a risk factor for mental health problems such as depression.

Katz, Beach & Joiner (1999) found that people in close relationships with a depressed other may themselves be at risk of developing depression. Similarly,

Beach & O'Leary (1993) found that marital satisfaction levels in newlywed couples prior to and after marriage could be used to predict later depressive symptomatology for both spouses.

The study by Beach & O'Leary (1993) has important implications for the design of the current study. The current study will attempt to infer from the self-report of male participants how happy the participant and their partner are, without access to how the participant's partner may actually view the relationship. It is expected that alexithymic men will be unable to express the positive emotion necessary to maintain relationship satisfaction in their partners and will also be unable to avoid the destructive conflict resolution processes outlined by Gottman & Levenson's (1992) study due to their alexithymic difficulties. However since only the male participant's relationship satisfaction will be measured, there is a presumption that this also gives a reflection on how happy their partner is with the relationship. There is considerable evidence to support this presumption. In couples drawn from the normal population there is a very high level of correlation between partners on how they rate satisfaction with their relationship (Beach & O'Leary, 1993, Hendrick, 1988, King, 1993).

The current study has taken participants from a population with common mental health problems (such as anxiety and depression) rather than severe mental illnesses (a distinction made by the Department of Health (2000), in The National Service Framework for Mental Health). It is therefore necessary to evaluate how such mental health problems may influence the normally high correlation between two partners' perception of the quality of their relationship. Beach & O'Leary (1993)

found that there was no evidence that depression in one partner influences the non-depressed partners' perception of the relationship. However, depressed partners were found to view the relationship less positively than their non-depressed partner. This leads to the prediction for the current study that male participants with a diagnosis of depression may be under-rating relationship satisfaction in relation to how their partners may view the relationship.

There is little other research that helps to indicate how mental health problems directly effect relationship satisfaction. Vinokur, Price & Caplan (1996) carried out a longitudinal study on the effects of financial strain on 815 unemployed cohabiting partners. They hypothesised that financial strain would cause depression in one or both partners that would then lead to reduced social support between partners and the beginnings of the negative pattern of interaction described by Gottman & Levenson (1992) that leads to separation. However instead they found that the link between depression and relationship satisfaction was spurious: depressive symptomatology did not effect relationship satisfaction independently of financial strain. The undermining and withdrawal of support between the couples was associated with an inability to amicably settle relationship problems created by the financial strain.

Depression has been studied directly within the context of marital satisfaction. Cram & Noreen (2000) investigated the hypothesis that depressed partners would make negative causal attributions about their non-depressed partners' behaviour with a resulting loss of marital satisfaction for the couple. However their findings did not support this hypothesis.

Trait anxiety has also been studied in relation to marital satisfaction. Caughlin, Huston & Houts (2000) found that although individuals with high trait anxiety did not have partners who experienced marital dissatisfaction, the anxious partners were themselves unhappy with the relationship. This is similar to the findings of Beach & O'Leary (1993), in that mental health problems such as depression or anxiety may cause the partner with such difficulties to under-rate relationship satisfaction in comparison to their partners.

An aim of this study was to investigate the impact of emotional expressiveness on relationship satisfaction in men with common mental health problems rather than in those suffering with enduring mental health difficulties such as psychosis. This decision was partly in order to be able to study a more homogeneous sample in which conclusions about emotional expressiveness and relationship satisfaction would not be confounded by a variety of different mental health problems within the sample of men. In addition there is no research, to the authors knowledge (following exhaustive literature searches) about how psychotic illnesses effect relationship satisfaction.

3 Alexithymia and relationship satisfaction

The longitudinal follow up method has clearly demonstrated a pattern of interaction between couples who are likely to separate (Gottman & Levenson, 1992). Both unidimensional marital satisfaction research (e.g. King, 1993) and longitudinal research has demonstrated that within any attempts by a couple to solve and discuss

problems, the nature of emotional expression appears to greatly influence marital satisfaction levels and the likelihood of separation. Research by Gottman & Levenson (1984) suggested that it is important that partners have a symmetry of emotional responsiveness in order to prevent the generation of negative effect during conflict resolution. The concept underlying this research is that asymmetry of emotional responsiveness, perhaps due to an inability to express emotion on behalf of one partner leads directly to feelings of negative affect between the couple that then trigger the well established destructive conflict resolution style. Findings from unidimensional marital satisfaction research support this concept. King (1993) also suggested that inability or ambivalence towards emotional expression is a correlate of poor relationship satisfaction.

However, the findings of multidimensional marital satisfaction research indicate that many other factors are likely to influence marital satisfaction levels besides conflict resolution processes, although these factors are important (Lavee & Olson, 1993). There may also be more than one way in which couples are able to achieve satisfaction despite their conflict resolution style. This concept is further supported by findings from unidimensional marital satisfaction research, in that romantic attachment types (Small, 2000), gender roles within the relationship (Caughlin et al, 2000) and similarity of attitudes and personality (e.g. McKinley, 1997, Rogers, 1999) are also associated with marital satisfaction levels. At this point it is useful to remember that the relationship between marital satisfaction and the probability of separation is not a perfect one (Gottman, 1991). Marital satisfaction may be achieved as a result of multiple factors. However it is likely that these multiple factors may then contribute to the generation of the positive or negative affects

within relationships that have such a profound influence on conflict resolution processes.

Emotional expression within relationships has an important role in both the experience of marital satisfaction (King, 1993) and the process of conflict resolution that is associated with relationship failure (Gottman & Levenson, 1992). The study of the alexithymia personality construct (a trait describing an inability to recognise or express emotion) in relation to marital processes may therefore be of value in connecting the separate research fields of marital satisfaction and relationship failure prediction.

Individuals with alexithymia are known to suppress anger responses, avoid conflict and express their emotions in purely somatic ways (Taylor, Bagby, Ryan & Parker, 1990). They may be more likely therefore to be vulnerable to physiological arousal and display 'stonewalling' behaviour during conflict resolution processes with their partners to avoid conflict as illustrated in the work of Gottman & Levenson (1992). This leads to the hypothesis that alexithymic men are more vulnerable to the processes that are known to be associated with relationship failure and as such high alexithymia may be associated with a history of more failed relationships than individuals with lower alexithymia scores.

Due to difficulties in expressing emotion, alexithymic men may also be likely to display emotional neutrality towards their partners which is associated with relationship problems. The study by King (1993) leads to the suggestion that men who were unable to express emotion would experience less marital satisfaction than

those who were more able to express emotion. This leads to the second major hypothesis of this study: that men with high levels of alexithymia are more likely to experience lower levels of relationship satisfaction than men with lower alexithymia scores.

HYPOTHESES

The present study seeks to explore the relationship between the ability to express emotion (alexithymia) and cohabiting relationship satisfaction in men who were referred to community mental health teams for assessment and treatment of common mental health problems (e.g. depression and anxiety).

Hypothesis one

High alexithymia will be associated with a history of more previous failed cohabiting relationships than low alexithymia (derived from longitudinal studies of conflict resolution styles in couples, e.g. Gottman & Levenson, 1992).

Hypothesis two

High alexithymia will be associated with lower levels of relationship satisfaction than low alexithymia (derived from studies of emotional expression as a factor in relationship satisfaction, e.g. King, 1993).

Two highly related, subsidiary hypotheses will also be tested in this study. They are included as they are concerned with the effects of variables that may differentially effect relationship satisfaction scores depending on the age of the participants in the study.

Hypothesis three

Older participants are expected to experience higher levels of relationship satisfaction than younger participants (derived from a study investigating a cohort effect based on changing gender roles in society, Rogers & Amato, 2000).

Hypothesis four

Participants who have been in their cohabiting relationship for longer will experience lower levels of relationship satisfaction than participants who have been cohabiting for a shorter period of time (derived from studies investigating the decline in relationship satisfaction over time, e.g. Vaillant & Vaillant, 1993).

Hypotheses three and four are related since older participants are likely to have been in a relationship for a long duration (potentially decreasing relationship satisfaction scores) but may also belong to a cohort in which gender roles were more traditional (potentially increasing relationship satisfaction scores).

METHOD

1 Participants

Participants were drawn from the waiting lists and caseloads of two geographically adjoining community mental health teams. All participants were required to be men who were currently in a cohabiting relationship with a partner or wife for a minimum of at least three months duration. The men selected for the study were also required to have a psychiatric diagnosis other than psychosis. This resulted in a sample of men with a diagnosis of either depression or anxiety. All men fitting these criteria that were on the caseloads of the two community mental health teams were sent a questionnaire during a six month period of data collection. In total it was possible to identify 104 potential participants of which 24 were returned, providing an overall response rate of 23%.

2 Measures

The Toronto Alexithymia Scale (TAS, Bagby, Taylor, Parker & Loisele, 1989) was used to measure the alexithymic personality trait. It is a 26 item questionnaire answered on a five-point likert scale, with high scores indicating alexithymic difficulties. The TAS is reported to be psychometrically sound due to its good retest reliability, internal consistency, convergent validity with related psychological concepts and its stable four factor structure (Taylor et al, 1990). The scale has been developed using samples of college students, normal adults and

psychiatric patients, providing suitable normative data with which to compare the sample in the present study.

The Relationship Assessment Scale (RAS, Hendrick, 1988) was used to examine participants' perceptions of their cohabiting relationships. This is a seven item self report questionnaire based on a five point likert scale, with high scores indicating high levels of global relationship satisfaction. It was selected for use in this study because of its good reliability and its high level of correlation with other measures of relationship satisfaction (Vaughn & Matyastik Baier, 1999). It was also selected because it was designed to measure a variety of contemporary relationships rather than marriages alone and because of its comparative brevity in relation to other measures, which was likely to increase the probability of participants completing the questionnaire and taking part in the research. Normative data, based on a clinical population attending family therapy services and data from college students are available for this questionnaire.

The above questionnaires were accompanied by a study-specific questionnaire requesting details about each participant's age, ethnic origin, number of previous cohabiting relationships and the duration of their current cohabiting relationship. Each questionnaire pack contained a brief description of the study for participants to read in conjunction with the actual questionnaires. Along with this brief description of the study, participants were sent a letter from their consultant psychiatrist informing them that details obtained during the study would remain confidential (see appendix two).

All questionnaires were sent out with an ethics committee consent form on which participants were required to write their name (see appendix two). Participants were reassured that their responses on the questionnaires would remain confidential, as it was intended that the consent forms would be kept separately from the completed questionnaires.

3 Procedure

Ethical approval for the study was firstly obtained from the local ethics committee (see appendix one).

Before commencing the study a meeting with the consultant psychiatrist responsible for the community mental health team took place in order to establish whether enough potential participants were likely to be available. It was established that the community mental health team had a caseload that included large numbers of men with common mental health problems who would be appropriate for the study. The consultant psychiatrist alone identified over 30 potential participants on his individual caseload before it was decided to begin collecting data.

All files kept by the two community mental health teams were examined by the principal researcher who was on placement with the first of these teams. A questionnaire pack including the above measures was sent to every man with a diagnosis other than psychosis who was described in their case notes as cohabiting with a partner or wife.

Initially only the files from the first community mental health team were considered. However due to a very low response rate to questionnaires (only one in seven questionnaires had been returned during the first four months of data collection) ethical approval to send questionnaires to clients from the second geographically adjoining community mental health team was obtained (see appendix one). The consultant psychiatrist from the second, adjoining community mental health team was also approached for permission to send questionnaires to these clients.

Permission was sought from each client's keyworker to send a questionnaire pack. Some clients who had keyworkers already assigned were given the questionnaire packs by their keyworker. However the vast majority (approximately 75%) were sent by post to the client's address. In cases where new clients had not yet been allocated a keyworker and were still on the waiting list, permission was sought from the consultant psychiatrist to send questionnaires.

This process resulted in five potential participants not being sent questionnaires as their keyworkers felt that this was likely to cause them distress or would be inappropriate for other reasons.

Participants were requested to return questionnaires in self addressed pre-paid envelopes to the principal researcher. A copy of the questionnaires sent to participants is included in appendix two.

4 Statistical analyses

The data from all variables were assessed for normality of distribution using the Kolmogorov-Smirnov (z) test. The data were then intercorrelated using the Pearson product-moment correlation coefficient (r) with the exception of the number of previous relationships variable, for which a point biserial correlation (r_{pbi}) was used. Hypotheses one and two were one-tailed tests. Hypotheses three and four were two-tailed tests.

An unrelated samples t-test was used to determine if there were significant differences in age for the participants who returned questionnaires and the clients to whom questionnaires were sent but did not return them. This test was two-tailed.

RESULTS

The final, overall response rate to the questionnaires was 23%. 24 questionnaires were returned out of the 104 that were distributed during the six month data collection period. Potential reasons for the low response rate to the questionnaires are outlined in the discussion section.

The data were assessed for normality of distribution using the Kolmogorov-Smirnov (z) distribution test. Results indicated that the data from all variables were normally distributed, with the exception of the number of previous relationships of the participants. Since only seven of the participants had experienced one or more previous relationships, an abnormal distribution for this variable was observed, with seventeen participants having a 'zero' score.

1 Sample characteristics

Table 1: Sample characteristics: age and experience of relationships.

	Minimum	Maximum	Mean	Standard Deviation
Age	28	70	49.23	11.08
Relationship Duration (months)	18	546	239.50	156.39
Previous Relationships	0	3	0.55	0.91

1.1. Ages of responders and non responders in the sample

The mean age of the 24 participants who returned questionnaires was 49.23 years with a standard deviation of 11.08 years indicating a sample of generally older men (see table one above).

The mean age of the 80 clients who were sent questionnaires but did not return them was 45.45 years with a standard deviation of 12.81.

A comparison between the 24 responders and the 80 non responders was carried out to determine if there were any significant differences in age between these groups. This was carried out using an unrelated samples t-test (homogeneity of variance was not assumed since although the variances were similar, the sample sizes were very different). The result of this comparison ($t = 1.19$, $P < 0.30$) was that there was no significant difference in age between those who returned questionnaires and those who did not.

1.2. Ethnicity of the sample

The ethnicity of the sample was entirely white British men. The population of clients seen by the community mental health team included a small proportion of men of Asian ethnic origin however none of these were presenting with common mental health problems, and were therefore excluded from the study. This issue is explored further in the discussion section.

1.3. Previous relationship experiences

The majority of men within the sample of 24 responders were still in relationships of long duration with their first wives or partners (see table one above). Therefore the number of previous cohabiting (failed) relationships was very low (the mode number of previous relationships was zero). The mean duration of cohabiting relationships within the sample was 239.50 months (approximately 20 years).

2 Main results

Table 2: alexithymia and relationship satisfaction scores

	Minimum	Maximum	Mean	Standard Deviation
RAS score	14	35	26.73	5.87
TAS score	53	100	71.86	11.91

2.1 Toronto alexithymia scale (TAS) scores

The mean alexithymia score for the sample was 71.86 with a standard deviation of 11.90 (see table two above).

This result is slightly higher than the normative data provided for the TAS with male psychiatric outpatients (mean score of 67.3 with a standard deviation of 12.4, Bagby et al, 1989).

2.2 Relationship assessment scale (RAS) scores

The mean relationship satisfaction score of the sample was 26.72 with a standard deviation of 5.86 (see table two above).

Normative data for the RAS based on an undergraduate sample of both sexes is 29.1 with a standard deviation of 6.4 (Hendrick, 1988). For family therapy clients (males only) the normative data was a mean score of 23.8 with a standard deviation of 6.1 (Vaughn & Matyastic Baier, 1999).

2.3 Hypothesis testing (correlations)

The data was analysed by correlating scores on the main measures of the study (TAS and RAS) with the ages, number of previous cohabiting relationships and duration of current cohabiting relationships in order to test the hypotheses of the study (N = 24).

Since the distribution of the data was found to be normal, the Pearson product-moment correlation coefficient was used. However for the number of previous relationships reported by participants, a point biserial (rpbi) correlation was used. This form of correlation was used because the range of scores on this variable (between only zero and three) was too small to use the Pearson product-moment correlation coefficient.

2.3.1 Number of previous cohabiting relationships and alexithymia

(Hypothesis one)

In order to carry out the point biserial correlation, it was necessary to split the participants into two dichotomous groups (the categories selected were zero

previous relationships and one or more previous relationships). The correlation between the number of previous cohabiting relationships and alexithymia was not significant ($r_{pbi} = -0.01$, $P < 0.48$).

2.3.2 Relationship satisfaction and alexithymia (Hypothesis two)

Results of the main hypotheses of this study were also not significant. As predicted a negative relationship between alexithymia and relationship satisfaction was observed. However this was not at a level that achieved statistical significance ($r = -0.23$, $P < 0.16$). A power analysis of the obtained correlation coefficient indicated that this level of correlation would only have been statistically significant at the 5% level (one tailed) if it had been possible to obtain 60 or more participants for the study.

2.3.3 Cohort effects on relationship satisfaction levels (Hypothesis three)

A positive tendency between relationship satisfaction and age was observed, but this was not at a statistically significant level ($r = 0.25$, $P < 0.14$). A power analysis of the obtained correlation coefficient indicated that this level of correlation would also only have been statistically significant at the 5% level (two tailed) if it had been possible to obtain 60 or more participants for the study.

2.3.4 Duration of relationship and relationship satisfaction (Hypothesis four)

A positive tendency between duration of relationships and relationship satisfaction was found, contradicting the prediction made by this hypothesis. However the relationship was minimal ($r = 0.06$) and was not statistically significant ($P < 0.39$).

DISCUSSION

1 Characteristics of the sample

1.1 Response rates

The study was hindered by a very low response rate to the questionnaires that were distributed (only 23% of questionnaires were returned). Had this very low response rate been anticipated, arrangements could have potentially been made to have taken participants from several community mental health teams (rather than a single team) at the early stage of seeking ethical approval for the study. However, the time consuming nature of searching the case files of several community mental health teams in order to find participants would have in any case prevented this solution. Although the study was later expanded to include a second community mental health team, this still did not provide enough potential participants to counter the abnormally low response rate. In addition, the community mental health teams had less men on their books who were appropriate for the study than was anticipated when the study was originally designed. The majority of clients seen by the teams were female. Of the male clients, the majority had a diagnosis of psychosis and did not in any case have partners, leaving few men with common mental health problems (e.g. anxiety and depression) to whom questionnaires could be sent. Of the men who were available with an appropriate diagnosis, of particular importance was the fact that far fewer were in cohabiting relationships with partners than had been anticipated. Once those men with a diagnosis of psychosis and those men who were not living with a partner had been excluded from the study, approximately 15% of the total number of male clients seen by the

community mental health teams remained. As a result, despite a six month period of data collection, only 104 questionnaires could be sent to suitable participants, from which only 24 questionnaires were returned. The small sample size of this study meant that its characteristics, such as scores on the main measures of the study may have been unrepresentative and distorted.

In retrospect, it is fully acknowledged that a sample taken from a primary care service, (dealing only with clients with common mental health problems) would have been far more appropriate for the present study. The community mental health teams see a majority of clients with psychosis that were not appropriate for this study. This meant that insufficient numbers of participants were available to counterbalance the low response rate to questionnaires that was encountered.

1.2. Demographic characteristics of the sample

The mean age of the sample obtained for the current study was not typical of those clients seen by the community mental health teams. This was true for both those who returned questionnaires, and those who did not. The community mental health teams included in the study have a caseload of men and women aged in the vast majority between 18 and 65 years (typical criteria for an adult service). However the sample of 104 clients who were sent questionnaires during the present study had a high mean age relative to the age criteria for community mental health team referrals. This may have been because of the referral policy of the community mental health teams, as referrals of younger clients with psychotic problems are more likely to be accepted. Only clients with severe depression and anxiety problems are now being accepted by these teams and this may have selected younger people out

of the sample. Alternatively the requirement for participants to be in cohabiting relationships may have been the factor that selected younger men out of the sample of the present study.

The age of the sample may have influenced findings on the relationship measures of the present study, since cohort effects upon relationships are reported in the literature (Rogers & Amato, 2000). The older men within the sample were nearly all still with partners they had met many years previously (average relationship duration was nearly 20 years). This may also have been a factor that reduced the number of individuals with a history of several past cohabiting partners, or individuals in new relationships (e.g. less than two years duration) within the sample.

1.3. Other demographic characteristics of the sample

The population served by the two teams is predominantly of low income or socio-economic status and covers both rural and urban areas. The main ethnic minority group in the area is of Pakistani and Indian origin. The ethnic minority male clients did not appear to have been accepted by (or referred to) the teams for professional help unless they had a diagnosis of psychosis, effectively excluding them from this study.

1.3. Diagnosis and relationship satisfaction

The study was designed to focus on a small number of potential diagnoses amongst participants. This was done so that any variability in relationship satisfaction scores could not be confounded by a variety of diagnoses within the sample.

All participants within the present study had a diagnosis of either anxiety or depression. It was expected that the sample would report considerably lower than normal levels of relationship satisfaction due to the negative influence of depression and anxiety on the perception of relationship quality reported by Beach & O'Leary (1993) and Caughlin, Huston & Houts (2000). The sample reported lower levels of relationship satisfaction than that found in undergraduate samples but higher levels than was found in family therapy samples (Hendrick, 1988, Vaughn & Matyastik Baier, 1999). Since the relationship satisfaction scores reported by the sample were higher than anticipated, it was possible that the mental health problems of participants did not negatively effect the perceptions the participants had about their relationships as would be expected from the research literature. Alternatively an element of response bias may have occurred in that those men who were very unhappy with their relationships may not have wished to return the questionnaires. The combination of a low response rate to questionnaires and a sample of men emerging who were happier than expected with their relationships, despite their mental health problems indicated that some element of response bias may have occurred. Individuals that were unhappy with their relationships may have felt threatened by a study that enquired about relationship satisfaction: two men to whom questionnaires were sent telephoned to complain about questions being asked about their relationships. Another returned a questionnaire that had been defaced. This provided further evidence that response bias had occurred amongst those few men who did respond to the questionnaires.

1.5. Alexithymia

The sample was also more alexithymic than anticipated. The mean alexithymia score for the sample (TAS score 71.8) was considerably higher than for normal males (TAS score 62) and somewhat higher than that found in psychiatric outpatient samples (TAS score 67) by Bagby et al (1989). This result may have been due to the small sample size and because psychotic clients were excluded from the study, making the sample more highly selected than those upon which the normative data is based (e.g. the psychiatric outpatient sample of Bagby et al, 1989).

2 Discussion of hypotheses

2.1 Hypothesis one: Number of previous cohabiting relationships and alexithymia

Only seven of the 24 participants had experienced a previous cohabiting relationship. The association between number of previous cohabiting relationships and alexithymia (calculated by a point biserial correlation) showed a negative trend rather than the positive relationship expected, but did not achieve significance. This would initially suggest that high alexithymia is not in fact associated with a history of more failed cohabiting relationships. A positive correlation between these variables was expected due to the hypothesis of this study that alexithymic men may be more vulnerable to the destructive pattern of conflict resolution within a relationship that is associated with separation by Gottman & Levenson (1992). However conversely, a negative trend was found between the duration of cohabiting relationships and alexithymia. This may have initially suggested that

highly alexithymic individuals within the sample were more likely to be in a new relationship, perhaps as a result of previous, failed relationships. However, only seven of the men in the sample had experienced a previous cohabiting relationship. An analysis of the data shows, however that one highly alexithymic individual was currently in a new relationship of less than two years duration. Within such a small sample, this individual result may have overly influenced the finding that there was a negative tendency between alexithymia and relationship duration. Similarly, as the negative tendency was not significant, the relationship between these variables may be described as having occurred by chance as a result of small sample size. It is known that many unhappy couples stay together despite low scores on measures of relationship satisfaction (Gottman, 1991): the association between relationship satisfaction and couple separation is poor, and divides the longitudinal and self report based approaches to relationship satisfaction research. This may mean that although alexithymia may reduce relationship satisfaction, this has little impact on whether the couple remain together or separate. Therefore alexithymic men may not demonstrate a history of more failed relationships because of cultural or social pressures to remain together despite being unhappy. It is possible that in a sample of generally older men, social and cultural pressures to remain together despite unhappiness may be a strong, cohort based factor that would have affected a younger sample less (Rogers & Amato, 2000). This conclusion is similar to the argument presented by Gottman & Levenson (1992) who found that younger couples were more likely to separate than those from older cohorts.

2.2 Hypothesis two: Relationship satisfaction and alexithymia

As predicted, a negative trend between alexithymia and relationship satisfaction was observed, although this result was not at a statistically significant level. The finding that a negative relationship between the variables was observed in such a small sample suggests that this hypothesis may indeed be supported, and requires further testing with a larger, less homogeneous sample (in terms of age and ethnicity). The observed tendency, (had the relationship between these variables continued at the same level) would have achieved statistical significance with a sample size of 60. The obtained ($r = -0.23$) relationship suggests that alexithymia accounts for 5.2% of the variance in relationship satisfaction. Whilst this is a small proportion of the variance in relationship satisfaction, because of the number of variables that are suggested in the literature to contribute to relationship satisfaction, no single variable alone can be expected to account for a large proportion of the variance. Had a sample of sufficient size been available, alexithymia may have been seen to account for a similar proportion of the variance in relationship satisfaction as similarity in attitudes (six percent, Vaitkus, 1996). However due to time limitations, low response rates to questionnaires and a shortage of suitable participants within the community mental health team caseloads, it was not possible to collect a sample of this size. Self selection in those choosing to return the questionnaires may also have helped to bias the results, in that men who were unhappy with their relationship may not have wished to return a questionnaire about relationship satisfaction.

It is important to note that with sufficient time and resources (e.g. payment of participants) it may have been possible to collect a sample of sufficient size to

demonstrate that the ability to express emotion in a cohabiting relationship is a statistically significant factor for relationship satisfaction. Because of the number of other variables that contribute to the complex and multifaceted construct of relationship satisfaction, it is unusual to find a single factor that is capable of accounting for a large proportion of the variation found in relationship satisfaction. The findings of this study suggest that research into the effects of single (unidimensional) rather than multiple variables upon relationship satisfaction is still a valid methodology as far as emotional expression and alexithymia are concerned. Should a larger scale study of alexithymia and relationship satisfaction be conducted, the findings would help determine whether emotional expression is as important for relationship satisfaction as it is for conflict resolution processes within relationships (as shown by the longitudinal studies of Gottman & Levenson, 1992). Such a study would therefore help to bridge the gap between relationship satisfaction research and longitudinal research into the factors that predict relationship failure, a disparity which has long been evident in the research literature.

2.3 Hypotheses three and four: Age and relationship satisfaction; duration of relationship and relationship satisfaction

There was an unfortunate confounding effect between hypotheses three and four. Older participants may be happier than younger ones because of cohort effects based on how changing sex roles in society have a negative effect on relationship satisfaction for younger people (As stated in hypothesis three, based on Rogers & Amato, 2000). However older participants were also likely to be in longer duration relationships which are less satisfactory due to the negative effect of time on

relationship satisfaction (as reflected by hypothesis four, based on Vaillant & Vaillant, 1993). The results indicated that whilst neither hypothesis was fully supported as results did not achieve significance, there was some support for the hypothesis that older participants are happier in relationships, possibly due to a cohort effect involving changing sex roles in society for younger couples.

The idea that relationship satisfaction declines with time is only supported by those studies in the literature that used a prospective, longitudinal design (e.g. Vaillant & Vaillant, 1993). Previous studies had used flawed methodology including retrospective designs or insufficient longitudinal follow up periods and found that relationship satisfaction declines in the first few years, but then improves again in the later years of the relationship (e.g. Spanier & Lewis, 1980). Therefore in a sample of older participants who had been in their relationships for long durations, these studies may have predicted that a positive relationship between relationship duration and satisfaction levels may have been found. In the present study results indicated that there was a (non-significant) positive rather than negative relationship between age and relationship satisfaction. It is more likely that this result occurred because of methodological problems and sample biases and should not be taken as support for the unlikely theory that relationship satisfaction improves in the later years of long relationships. The result may have been because the sample did not include enough older men who were in relationships of short duration and consisted predominantly of older men in relationships of long duration only, thus further confounding hypotheses three and four. In addition the higher than expected overall levels of relationship satisfaction within the sample suggested that there may have been a response bias effect in which men who were dissatisfied

with their relationships did not return questionnaires. This would have made it less likely that a negative correlation between age and relationship satisfaction (in what was a generally older sample of men) would emerge.

3 Methodological weaknesses of the study

Due to ethical considerations it was not possible to answer the major hypotheses of this study with an ideal methodology. Marital satisfaction research on emotional expressiveness is based upon the question of whether the male partner's level of emotional expressiveness causes both partners to experience less relationship satisfaction (e.g. King, 1993). Ideally for this study a correlation between the male partner's alexithymia score and both partners' relationship satisfaction would have better answered the major questions of this research. However at the stage of designing the study, prior to applying for ethical approval the principal researcher was strongly advised not to send questionnaires to the partners of participants about relationship satisfaction due to the potential that this methodology may have had for disrupting such relationships. Therefore it was necessary to work only with the assumption that the male participants' ratings of relationship satisfaction were meaningful in terms of how both partners were likely to view the relationship. There is considerable evidence within the research literature to support this assumption (Beach & O'Leary, 1993, Hendrick, 1988, King, 1993). Research concerned with the effects of common mental health problems on relationship satisfaction suggests that the participants, who all had diagnoses of either depression or anxiety may have under rated how successful their relationship was in relation to their partner's views of the relationship (Beach & O'Leary, 1993,

Caughlin, Huston & Houts, 2000). The effects of depression and anxiety would therefore be expected to bring down ratings of relationship satisfaction in relation to the normative data for the RAS. However it was suspected that a response bias may have also occurred within the group to whom questionnaires were sent, resulting in only those who were more content with their relationship responding.

In addition the assumption that highly alexithymic individuals are capable of accurately assessing their own feelings about their cohabiting partner relationships was a potential weakness of the study: these results may have been unreliable for very alexithymic male participants, as it can be hypothesised that an inability to interpret their own emotions may have made these men poor judges of how successful their relationship was.

Gottman & Levenson (1984) suggested that symmetry of emotional responsiveness is important for relationship satisfaction. It is therefore possible that highly alexithymic men may find partners who are similarly alexithymic and be able to achieve this symmetry of emotional responsiveness without their lack of emotional expressiveness becoming a problematic factor in the relationship (an 'assortative mating' hypothesis). This study did not assess the emotional expressiveness of the partners of the men who participated which may be seen as a drawback in the methodology selected to assess the impact of alexithymia on relationship satisfaction.

Similarity between partners in terms of personality variables may have an important role in determining relationship satisfaction levels (Richard et al, 1990, Rogers,

1999). Therefore the degree of similarity between partners in terms of the alexithymia personality trait may also influence relationship satisfaction levels. The fact that this study was not able to take account of the alexithymia levels of the partner of each participant must be considered as a methodological shortcoming of the experimental design.

4 Recommendations for future research

4.1 Clinical reasons for further research

There are sound clinical reasons to support further research into how alexithymic difficulties in expressing emotion may have negative consequences for cohabiting partner relationships. As outlined in the introduction section, an inability to express emotion may make alexithymic individuals more likely to enter the destructive pattern of conflict resolution with a partner that is known to be associated with subsequent relationship breakdown (e.g. Gottman & Levenson, 1992). Relationship failure has negative consequences for separating partners (such as increased suicide risk in men, Lester, 1994). In addition the low relationship satisfaction associated with an inability or unwillingness to express emotion (King, 1993) may increase conflict levels between partners. This is thought to have a negative effect on the children of dissatisfied couples (Pryor & Rodgers, 2001).

4.2 Replication of the current study

Replication of this study with a larger sample size is highly recommended in order to test the hypotheses of the study with a larger, less homogeneous sample (in terms of age and ethnicity). Many factors besides emotional expressiveness are known to

be associated with relationship satisfaction, such as attachment types (Small, 2000), similarity of personality characteristics (Richard et al, 1990) and attitude similarity (Mckinley, 1997). Amongst these many variables, alexithymia may have an effect, but is only likely to emerge as significant if a greater sample size is employed. This was demonstrated by a power analysis of the correlation coefficient, which indicated that statistical significance for hypotheses two and three would have been achieved with a sample size of 60 participants.

4.2.1. Accessing a larger population of appropriate participants

The present study has demonstrated the difficulties encountered in obtaining male participants who are willing to take part in research that is concerned with cohabiting partner relationships such as marriages. The higher than expected scores on the measure of relationship satisfaction in those that returned questionnaires, along with a 77% drop out rate from the study suggests that those who were unhappy in their relationships may have been the least likely to participate in the research. It is fully acknowledged that a far more conservative estimate of the numbers of appropriate participants who could be found from the community mental health team caseloads would have been of great benefit in the early stages of this research. In particular, it was not expected that of the many men with common mental health problems available, so few would be in cohabiting relationships. Had the low response rate been anticipated, more measures could have been taken to ensure that larger numbers of potential participants were available at the start of the study to counterbalance the effect of the low response rate. This may in practice have necessitated the use of a population other than that available from a community mental health team (of which too many were found to be men who were

psychotic or not in cohabiting relationships). In retrospect, a sample of men taken from a primary care service, which by definition has a population consisting only of clients with common mental health problems rather than psychosis would have been more appropriate for increasing the number of participants in the current study.

4.2.2. Improving response rates

Since it is possible that the investigation of relationship satisfaction issues may be viewed as threatening by potential participants who are currently experiencing relationship strain and problems, a methodology that relies on the voluntary return of postal questionnaires is likely to meet with a disappointing response rate. To overcome the problem of low response rates some studies have paid couples for their participation (Beach & O'Leary, 1993, obtained a 61% response rate with this method). However if subjects are randomly recruited with an incentive of being paid to participate, such a method is likely to attract a sample that is biased in terms of socio-economic status. However it is also acknowledged that the payment of participants in order to overcome the low response rate encountered by the current study may have incurred prohibitive costs. The study of relationship satisfaction in samples who are not also suffering with mental health difficulties may produce better response rates from potential participants. Vinokur, Price & Caplan (1996) obtained a 40% response rate with unemployed members of the general population. Studies that have used college students as participants may provide high response rates, but may not be representative of the wider population in terms of their responses on relationship satisfaction measures.

4.2.3. Further suggestions

A sample that was more representative of all age groups is also recommended. In retrospect the community mental health team caseloads that were selected for the present study may not have been the best population to have obtained this age range, since younger men may be more likely to only be seen by such teams if they have a diagnosis of psychosis. A sample drawn from a primary care service may have been more appropriate for obtaining participants with common mental health problems that were less homogeneous in terms of age. A sample with a greater age range would have enabled better control of variables such as how time effects relationship satisfaction and the effects of the departure from traditional sex roles in modern society effects relationship satisfaction.

4.3 Recommendations for future research in the field of relationship satisfaction

Since relationship satisfaction is likely to be affected by a variety of factors, in retrospect it is acknowledged that a design that attempts to isolate the effect of a single variable is on the whole less likely to meet with success. The present study was however inspired by research that has been able to successfully use this methodology (e.g. King, 1993, McKinley, 1997 and Viatkus, 1996). Only one study, to the present author's knowledge, has attempted to examine multiple variables simultaneously, with vast numbers of participants (Lavee & Olson, 1993), although such a design is probably better suited to examine relationship satisfaction, which is a highly complex and multifaceted phenomena.

The majority of studies that employ relationship satisfaction questionnaires with a single variable such as emotional expressiveness (e.g. King, 1993), including the

current study suffer from a methodological weakness based on the attribution of causality to correlational findings. An example from the current study is that with a hypothetical sample size of 60 the amount of variance in common between alexithymia and relationship satisfaction is 5.2%. Alexithymia may therefore potentially be said to account for this amount of the variance in relationship satisfaction. However due to the correlational nature of the present study, it could equally be said that the relationship satisfaction levels influenced the alexithymia scores (although the theoretical bases of both constructs make this highly unlikely). For reasons of attributing clear causality it is therefore recommended that future research in this area self report questionnaires be used in combination with a longitudinal, prospective design where the measures are repeated at various intervals. Changes in the obtained relationship satisfaction data at various intervals can then be studied in relation to changes in environmental factors (e.g. financial circumstances) as well as aspects of the couples' interactional style (e.g. conflict resolution). The effects of personal characteristics (e.g. alexithymic personality traits, which are unlikely to vary in severity over time) upon relationship satisfaction can then be attributed with more convincing levels of causality than the present study design affords. However, the costs, in terms of time and finances associated with longitudinal studies is acknowledged as a drawback of such a design.

Appendix 1

Letters of ethical approval

Melanie Sursham
Direct Dial 0116 2588610

Gwendolen Road
Leicester
LE5 4QF

13 September 2001

Tel: 0116 2731173

Fax: 0116 2588577

DX 709470 Leicester 12

Please quote ethics ref no on all correspondence

Mr James Ayers
Trainee Clinical Psychologist
Department of Applied Psychology
University of Leicester
Centre for Applied Psychology
The Ken Edwards Building
University Road
Leicester
LE1 7RH

Dear Mr Ayers

Research Project on 'Alexithymia and Relationship Satisfaction'

I have received your letter dated 2 September 2001 responding to the points raised by the Ethics Committee concerning the above study.

On behalf of the Leicestershire Research Ethics Committee, and by Chairman's action, final approval is given for you to undertake the above-mentioned study.

Yours sincerely



G Rabey
Chairman
Leicestershire Research Ethics Committee
(Signed under delegated authority)

(NB All Communications relating to Leicestershire Research Ethics Committee must be sent to the Committee Secretariat at Leicestershire Health Authority. If however, your original application was submitted through a Trust Research & Development Office, then any response or further correspondence must be submitted in the same way)

Melanie Sursham
Direct Dial 0116 2588610

Gwendolen Road
Leicester
LE5 4QF

28 January 2002

Please quote ethics ref no 6282

Tel: 0116 2731173
Fax: 0116 2588577
DX 709470 Leicester 12

Mr James Ayers
41 Mayfield Road
Moseley
Birmingham
B13 9HT

Dear Mr Ayers

Research Project on 'Alexithymia and Relationship Satisfaction' – our ref no 6282

I have received your letter dated 7 January 2002 proposing some minor amendments to the above project.

On behalf of the Leicestershire Research Ethics Committee I have reviewed and approve the questionnaires being sent to the patients under Dr Kenrick (South Charnwood area) in addition to those already sent to the patients under Dr Firth (North Charnwood area).

With regard to your proposed amendment to the patient information sheet, we would prefer the added phrase to say "this is why you have been invited to take part". Please could we have a copy of the revised patient information sheet for our files.

Yours sincerely

M Sursham

P G Rabey pp.
Chairman
Leicestershire Research Ethics Committee
(Signed under delegated authority)

(NB All Communications relating to Leicestershire Research Ethics Committee must be sent to the Committee Secretariat at Leicestershire Health Authority. If however, your original application was submitted through a Trust Research & Development Office, then any response or further correspondence must be submitted in the same way)

Appendix 2

Questionnaires and information sent to participants

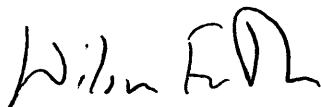
WRF/ep

19 October 2001

Dear Patient

James Ayres, who is a trainee clinical psychologist attached to our team at the moment, is carrying out a research project entitled "Emotional Expression and Relationship Satisfaction". This involves filling in the enclosed questionnaires: an information sheet about the project is also provided. He has discussed this project with me and I have agreed that patients can be invited to take part in his study. I am assured that the information provided is completely confidential and, indeed, you are not asked to give your name on the completed questionnaire, which can be returned in the prepaid envelope. If you have any concerns or questions about this then please feel free to contact a member of the team, or James Ayres himself on the above number.

Yours sincerely

A handwritten signature in black ink, appearing to read 'W R Firth', with a stylized, cursive flourish at the end.

Dr W R Firth
CONSULTANT PSYCHIATRIST

Enc.

I would like to invite you to take part in a research study. Before you decide it is important for you to understand why the research is being done and what it will involve. This research study requires the participation of men who are married or living with a partner and this is why you have been invited to take part. Please take your time to read the following information. You may contact the main researcher if you require further information on the number provided.

**‘Emotional Expression (Alexithymia) And Relationship
Satisfaction’**

Main Researcher: James Ayers
Trainee Clinical Psychologist
Department of Applied Psychology
Leicester University

Supervisor: Dr Ginny Lawes

Contact Number: 0116 252 2162
Leicester University
Centre for Applied Psychology – Clinical Section

Contact Number: 01509 553900
Loughborough Community Mental Health Team

1 What is the purpose of the study?

This study is investigating how our ability to express emotions affects our relationships with partners.

2 What will I have to do to take part in the study?

You will be required to fill out two very brief questionnaires. In addition you will be asked to provide information about your age, the number of previous relationships you have had in which you have lived together with a partner and the duration of your current relationship. After filling out the questionnaires and providing information about your age and previous partners, you will not be required to do anything else. The questionnaires take about twenty minutes to complete.

3 Will information I provide for the study be confidential?

The information provided will be completely confidential and will be used only for the purpose of this study. You are not required to put your name on the forms.

4 What if I am harmed by the study?

Medical research is covered for mishaps in the same way as for patients undergoing treatment in the NHS. This means that compensation is only available if negligence occurs.

5 What Happens if I do not wish to participate in the study?

If you do not wish to participate in this study you may do so without justifying your decision and your future treatment will not be effected.

PATIENT CONSENT FORM

'EMOTIONAL EXPRESSION AND RELATIONSHIP SATISFACTION'

MAIN RESEARCHER: James Ayers, Trainee Clinical Psychologist

This form should be read in conjunction with the Patient Information Leaflet

I agree to take part in the above study as described in the Patient Information Sheet.

I understand that I may withdraw from the study at any time without justifying my decision and without affecting my normal care and medical management.

I understand that members of the research team may wish to view relevant sections of my medical records, but that all the information will be treated as confidential.

I understand medical research is covered for mishaps in the same way as for patients undergoing treatment in the NHS i.e. compensation is only available if negligence occurs.

I have read the patient information leaflet on the above study and have had the opportunity to discuss the details withand ask any questions. The nature and the purpose of the tests to be undertaken have been explained to me and I understand what will be required if I take part in the study.

Signature of patient
Date.....

(Name in BLOCK LETTERS)

.....

I confirm I have explained the nature of the Trial, as detailed in the Patient Information Sheet, in terms which in my judgement are suited to the understanding of the patient.

Signature of Investigator
Date.....

(Name in BLOCK LETTERS)

.....

On this page you will be required to provide some details about yourself, your current relationship with your partner and past relationships in which you have lived together with a partner.

1 How old are you?years

2 How long have you been living together with your current partner?

.....months

3 How many previous relationships have you had in which you have lived together with a partner for at least three months or longer?

.....relationships

4 Please select the category that best describes your ethnic origin by placing a tick next to one or more items on the list below

White British

White European

Asian

Afro Caribbean

Other

Please complete the following questionnaire. It is about your relationship with your current partner.

Using The scale below as a guide, indicate how much you agree or disagree with each of the following statements by circling a number between one and five. Give only one answer for each statement.

1 How well does your partner meet your needs?

Not at all

Totally

1

2

3

4

5

2 In general, how satisfied are you with your relationship?

Not at all

Totally

1

2

3

4

5

3 How good is your relationship compared to most?

Far worse

Far better

1

2

3

4

5

4 How often do you wish you hadn't gotten into this relationship?

All the
Time

Never

1

2

3

4

5

5 To what extent has your relationship met your original expectations?

Not at all

Totally

1

2

3

4

5

6 How much do you love your partner?

Not at all

Totally

1

2

3

4

5

7 How many problems are there in your relationship?

Very many

None at all

1

2

3

4

5

Please also complete this questionnaire. Using the scale below as a guide, indicate how much you agree or disagree with each of the following statements by circling a number between one and five. Give only one answer for each statement.

	Strongly Disagree			Strongly Agree	
1 When I cry I always know why	1	2	3	4	5
2 Daydreaming is a waste of time	1	2	3	4	5
3 I wish I were not so shy	1	2	3	4	5
4 I am often confused about what emotion I am feeling	1	2	3	4	5
5 I often daydream about the future	1	2	3	4	5
6 I seem to make friends as easily as others do	1	2	3	4	5
7 Knowing the answers to problems is more important than knowing the reasons for the answers	1	2	3	4	5
8 It is difficult for me to find the right words for my feelings	1	2	3	4	5
9 I like to let people know where I stand on things	1	2	3	4	5
10 I have physical sensations that even the doctors don't understand	1	2	3	4	5
11 It's not enough for me that something gets the job done; I need to know why and how it works	1	2	3	4	5
12 I'm able to describe my feelings easily	1	2	3	4	5
13 I prefer to analyse problems rather than just describe them	1	2	3	4	5
14 When I am upset, I don't know if I am sad, frightened, or angry	1	2	3	4	5

	Strongly Disagree			Strongly Agree	
15 I use my imagination a great deal	1	2	3	4	5
16 I spend much time daydreaming whenever I have nothing else to do	1	2	3	4	5
17 I am often puzzled by sensations in my body	1	2	3	4	5
18 I daydream rarely	1	2	3	4	5
19 I prefer to just let things happen rather than to understand why they turned out that way	1	2	3	4	5
20 I have feelings that I can't quite identify	1	2	3	4	5
21 Being in touch with emotions is essential	1	2	3	4	5
22 I find it hard to describe how I feel about people	1	2	3	4	5
23 People tell me to describe my feelings more	1	2	3	4	5
24 One should look for deeper explanations	1	2	3	4	5
25 I don't know what's going on inside me	1	2	3	4	5
26 I often don't know why I'm angry	1	2	3	4	5

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