ADULT ATTACHMENT, BULIMIA NERVOSA AND RELATIONSHIP SATISFACTION

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ABSTRACT

Research interest of the role that childhood anxiety plays in the predisposition of eating disorder pathology has facilitated investigation into the antecendents of this anxiety within the framework of Bowlby's (1969, 1973, 1980) attachment theory and its inherent concept of internal working models.

Parallel findings within the literature on Bulimia Nervosa and insecure attachment, in terms of difficulties with affect regulation and autonomy focused behaviour, lead to the hypothesis that anxiety within close adult relationships will be positively related to bulimia. Research to date investigating attachment processes in eating disordered samples has typically focused on attachment in relation to parent-child relationships, overlooking the impact adult love relationships has on attachment. The present study investigates the links between adult attachment styles within close relationships, bulimia, dietary restraint, and relationship satisfaction.

120 female participants aged between 18 to 45 years were recruited from the University of Canterbury campus, and administered three to four brief questionnaires pertaining to the study. Results found that women with bulimia who were currently involved in romantic relationships were significantly more anxiously attached, more likely to engage in dieting behaviour and report low levels of satisfaction within their relationships. Multiple regression analyses further supported the significant independent contributions that attachment, dieting and relationship satisfaction constructs had on bulimia. Furthermore, a mediational model was supported, whereby securely attached women were more satisfied with their relationships, which in turn was related to lower levels of bulimia. The effect that secure attachment had on bulimia was not direct, but a function of relationship satisfaction within adult love relationships.

The findings of this study extend results from previous research concerning anxious attachment and bulimia, into the realm of adult love

relationships. Further research investigation of attachment styles within adult love relationships, in terms of specific cognitive processing and types of symptom expression within the eating disordered population, represents a productive avenue for future research.

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CHAPTER ONE

INTRODUCTION

Factors involved in the onset and maintenance of Bulimia Nervosa have been the target of much theoretical and empirical research to date. Investigation of the role childhood anxiety plays in the predisposition to later bulimia pathology, represents a recent and encouraging research avenue from which to study the eating disorders.

Consistent findings concerning the co-morbidity of eating disorders such as bulimia and affective disorders, together with research discovering that the affective disorder most often occurred first, guide Bulik's (1995) identification of childhood anxiety as a potential risk factor for the development of bulimia. In light of this recent drive, it appears timely to investigate the antecedents of this anxiety in order to fully understand its implications for future research and treatment within the eating disorders.

Although, single factor theories alone are insufficient in elucidating the complex bulimia syndrome, a full exploration of the concepts inherent in such theories enables a greater understanding and a more comprehensive, multifactorial theory of bulimia to be achieved (Ward, Hudson, Marshall & Siegert, 1995). The relationship between anxiety and bulimia is one such factor.

This study will attempt to further our understanding into the links between anxiety and bulimia within the framework of Bowlby's (1969/82, 1973, 1980) attachment theory and its inherent concept of internal working models thought to guide cognitive processing and behaviour concerning the self, others and the social world.

The importance of the mother-infant bond in a child's subsequent personality organisation and development has been central to the evolution of psychological theory. Freud described this relationship in very potent terms,

calling it "unique, without parallel, established...as the first and strongest love-object and as the prototype of all later love relations..." (1940; p. 188). Psychoanalytic concepts such as this are integrated within Bowlby's account of the caregiving environment.

For example, attempts and outcomes of attachment related behaviour, in terms of the quality of the caregiver's responses to their infants signals, are fundamental to the nature of this infant's relation to its attachment figure and the internal working model that subsequently develops. Later life experiences are incorporated into this model so that continuity of self and other is experienced (Rosenstein & Horowitz, 1996).

Attachment theory is concerned with this bond between children and their caregiver's. A child often displays discomfort and anxiety when separated from an attachment figure, with a subsequent decrease in anxiety and increased feelings of security when the attachment figure once again becomes accessible (Ward, Hudson & Marshall, 1996). Secure attachments are thought to result from consistent and responsive caregiving. In contrast, insecure attachments are thought to develop through either inconsistent or unresponsive caregiving.

Attachment theory has been recently applied to research investigating adolescent and adult psychopathology. According to O'Kearney (1995) personality is shaped via the affective, cognitive and behavioural features of the attachment system. The outcome of insecure attachments includes the possibility of serious impairments within these areas of functioning, in addition to maladaptive psychological development through "sensitive periods" (Cicchetti, 1993). This may be particularly relevant during times such as adolescence, whereby changes in attachment relationships are necessary. During this stage emphasis is traditionally placed on separation from the parents, independence and the shaping of a separate identity. Thus adolescence may signal a critical phase for which the

attachment system must adapt in order to obtain healthy functioning (Holmbeck & Hill, 1986).

O'Kearney suggests further that considering the attachment system has been found to be influential in a wide range of psychological functions such as the regulation of effect, the maintenance of self esteem, and interpersonal competencies. And research in turn identifying deficits in these psychological functions in individual's with bulimia, it seems plausible that bulimic symptomatology may be one manifestation of the inability to incorporate the changes required during adolescence into healthy, updated internal working models of self and others in relation to attachment (cf Striegel-Moore, 1992).

Accordingly, research thus far has discovered evidence of disruption within the attachment processes of eating disordered individuals (e.g., Becker, Bell & Billington, 1987; Armstrong & Roth, 1989; Heesacker & Neimeyer, 1990; Kenny & Hart, 1992; and Cole-Detke & Kobak, 1996). However, we are unaware of any research to date which specifically measures attachment as it applies to adult love relationships and its relationship to bulimic symptomatology.

Therefore, this study will attempt to elucidate insecure attachment, in particular anxious attachment, as one possible causal pathway implicated in the onset and maintenance of bulimia nervosa. Whereby women who report bulimic symptomatology will be more likely to have formed insecure attachment to a primary caregiver in childhood, and later manifest this insecure attachment within adult love relationships. Furthermore, the anxiety inherent in such insecure attachments predisposes the individual towards symptom expression which attempts the fulfill attachment related goals and motives, via secondary or defensive attachment strategies, such as attempts to control weight (Rosenstein & Horowitz, 1996).

Firstly we will review the relevant literature on attachment as it applies to the development of internal working models, thought to guide behaviour in

infants through to its application to child and adult populations. The implications of quality of attachments to the development of internal working models concerning adult love relationships, and psychopathology via bulimic symptom expression will also be explored.

Attachment Theory

Attachment theory was originally developed by Bowlby (1969, 1973, 1980) and was later extended by Ainsworth (Ainsworth, Blehar, Waters & Walls, 1978). This theory constitutes a diverse body of knowledge regarding the characteristics and development of specific interactions between an individual and his/her caregiver's (see O'Kearney, 1995). The central feature is that of the attachment system which involves the organisation of behaviour which is focused (Bretherton, 1985) toward obtaining and maintaining proximity to a primary attachment figure, usually the mother (Simpson, 1990). This focusing of proximity seeking behaviours is aimed at regulating negative affect, and is hypothesised to have developed via an evolutionary strategy aimed at ensuring infant protection and survival.

The attachment system is designed to highly correlate feelings of security experienced by the person, with actual conditions of safety met in their environment. The attached individual cognitively processes information such as signs of danger, and the availability/responsiveness of the attachment figure (Bretherton, 1985).

The attachment system is thought to be continuously active. For example, when the infant perceives danger within his/her environment, the attachment system's proximity focus is intensified, producing a negative affective state, encouraging the child to move closer to the attachment figure. If this person is believed to be both physically available and emotionally responsive, the perception of safety is restored within the infant and their affective state is

regulated. Consequently, the attachment system's proximity focus weakens, allowing the infant to venture from the attachment figure, and once again explore his/her environment (see Bretherton, 1985).

If however, the infant perceives the attachment figure as not physically available or emotionally responsive, he/she typically responds through hyperactivating proximity seeking behaviours designed to restore contact with the caregiver. These behaviours include visual searching, calling, running and clinging to the attachment figure (Shaver, Collins & Clark, 1994). Attachment behaviours such as proximity seeking, are thought to intensify until the infant re-establishes contact with the attachment figure and fulfils their perception of safety. Consequently, the infant maintains a state of anxiety and is discouraged from mastery oriented and autonomous behaviours until this condition of safety is met.

If the attachment figure consistently fails to provide physical and/or psychological security, an intolerable state of anxiety within the infant is thought to develop. This results from repeated failures from the attachment figure to reduce negative affect, and subsequently forces the infant toward independence via the deactivation or suppression of the attachment system. This is referred to by Bowlby as detachment (cf Shaver et al., 1994).

Bowlby (1973), summarises attachment theory along 3 propositions;

> The first [proposition] is that when an individual is confident that an attachment figure will be available to him [sic] whenever he[sic] desires it, that person will be much less prone to either intense or chronic fear than will an individual who for any reason has no such confidence. The second proposition concerns the sensitive period during which such confidence develops. It postulates that confidence in the availability of attachment figures, or lack of it, is built up slowly during the years of immaturity - infancy, childhood, and adolescence - and that whatever expectations are developed during those years tend to persist relatively unchanged throughout the rest of life. The third proposition concerns the role of actual experience. It postulated that the varied expectations of the accessibility and responsiveness of the attachment figures' that the individual develops during the years of immaturity are tolerably accurate reflections of the experiences those individuals have actually had (Bowlby, 1973, p. 235).

Although the attachment relationship is thought to exist dyadically between the infant and caretaker, attachment as proposed by Bowlby concerns the organisation of a system within the attached person (Bretherton, 1985; see also Hinde, 1982; Sroufe & Fleeson, 1986). This system is said to be experienced by the attached person as a psychological bond to the attachment figure (Bretherton, 1985), and is guided by a desire to obtain a feeling of security (Sroufe & Waters, 1977).

Attachment theory is compatible with Piaget's (1954) theory of representation (cf Bretherton, 1985), and was designed to incorporate phenomena described by Freud as attention; including love relations, defence mechanisms, and emotional detachment (Bartholomew, 1990).

Thus the quality of early attachment relationships, is dependent upon the history of interactions between the infant and his/her attachment figure, and the degree to which the infant has come to be able to rely on the attachment figure as a source of security (Ainsworth et al. 1978).

Internal Working Models

According to Bowlby, children construct affective and cognitively based mental representations of attempts and outcomes of behaviour associated with attachment, and that these dyadic experiences lead to the development of internal working models which guide expectations of self, others and the social world (see Main, Kaplan & Cassidy, 1985).

For example, through repeated interactions with an attachment figure, a child may come to see themselves as worthy and capable of gaining attention from others, or conversely, unworthy and incapable of doing so (Alexander, 1992). They may also expect the other person in the attachment relationship to be generally trustworthy, accessible and responsive, or in contrast, to be unreliable, cold or rejecting. These expectations, beliefs and attitudes form the basis of

Bowlby's concept of internal working models (Bowlby, 1973). This concept is compatible with recent attempts within empirical psychology (e.g., Collins & Read, 1994) to understand the internalised (i.e., cognitive) structures and functions that organise attachment relationships and behaviours.

However, the concept of internal working models differs from traditional cognitive approaches in important ways. For example, rather than primary emphasis on factual knowledge and verbal approaches, attachment theory bases its main emphasis on the mental representation of motivational and behavioural tendencies and are consequently very affect laden. In addition, working models are believed to contain many unconscious elements that are not easily articulated due to being stored outside of conscious awareness (see Shaver et al., 1994).

New experiences and interactions are integrated into the original system in the aim of achieving a hierachically organised model of self and others (Bartholomew, 1990). Consequently, adult internal working models are more complex than childhood ones, due to the increasing number of different situations and relationships an adult is expected to encounter, rendering a single model of adult attachment as inadequate. Adults are believed to have distinct working models which correspond to their different roles in life, including for example, a model for wife, friend, mother, father, son etc. Thus internal working models in adulthood, are best viewed as multiple models of attachment representations, which make up a diverse multifaceted network of attachment (Collins et al., 1994).

Collins et al., suggest further that due to this complex organisation, access to different models is likely to be dependent on factors such as their strength and availability within the network, and their relevance to the given situation. It is hypothesised that models based on childhood experiences with important attachment figures, occupy a central, and relatively accessible place within the network. Therefore these models are often aroused within significant adult

relationships. For example, "the deeper the relationship and the stronger the emotions aroused the more likely are the earlier and less conscious models to become dominant" (Bowlby, 1977: 209).

Thus in sum, working models of attachment comprise cognitively processed memories of attachment related experiences, leading to beliefs, attitudes and expectations concerning the self and others in relation to attachment. These models represent rules for the direction of attention and behaviour, (Main et al., 1985) and strategies to achieve attachment goals (Collins et al., 1994). It has been this move to "the level of representation" (Bretherton, 1985) that has facilitated theoretical and empirical research into individual differences in the development and expression of attachment.

Infant Studies

Ainsworth and colleagues were instrumental in the development of attachment theory by creating a powerful set of empirical tools designed to measure attachment processes in infancy. In order to assess how the attachment system interacts with different caregiving environments to produce individual differences in attachment, they developed a laboratory procedure known as the Strange Situation (eg., Ainsworth, et al., 1978; see also subsequent reviews by Bretherton, 1985; Shaver et al., 1994).

This procedure involved observation of infant behaviour during consistent episodes of contact, separation and reunion with their primary caregiver. This in addition to Ainworth's later work with infants (Ainsworth, 1989) followed Bowlby's assertion that the infant's confidence in the availability and responsiveness of the attachment figure, or their sensitivity to the infant's signals (Ainsworth et al., 1978) provides the key factor in attachment classification. Through this research, three distinct patterns of attachment were identified, these being, secure, anxious-ambivalent (anxious), and avoidant attachment styles.

Within the strange situation reunion phase, securely attached infants were found to miss the attachment figure on first separation and often cry during second separation. Once reunited, secure infants were found to actively greet and seek comfort from the attachment figure. Following this contact, secure infants happily settled and returned to autonomy/mastery oriented activities, such as playing with toys (Ainsworth et al., 1978).

These infants successfully used the mother as a secure-base to regulate negative affect, thus obtaining the condition of felt-security. Mothers of infants classified as secure in the strange situation were characterised by consistent sensitivity to their infants signals, displaying a generally warm and responsive pattern of caregiving in the home setting (eg., Main, 1996).

Children characterised as anxious in the strange situation were found to be preoccupied with their parent throughout the procedure. During the reunion phase these infants displayed ambivalent behaviour, combined with often overt expressions of anger and anxiety. Often seeking and then resisting the parent's efforts to soothe. These infants often failed to settle and return to exploration and instead continued to focus on parent and cry (Ainsworth et al., 1978).

When observed in the home setting, these infants appeared to hyperactivate proximity seeking behaviours, displaying an overt clinginess in an effort to maximise contact with the attachment figure. Mothers of these infants were found to be inconsistent in their caregiving, either being slow or unresponsive to their infants cries, or intrusive to their infants desired activities and autonomy focused behaviour in order to satisfy their own needs. Thus mothers of children classified as anxious in the strange situation were characterised by either inconsistent, or over-involved caregiving (Main, 1996).

Infants classified as avoidant in the strange situation, typically displayed autonomy focused activities, such as playing with toys throughout the whole procedure. These infants experienced the least distress following separation with

the parent, and actively avoided contact with the parent on reunion. This avoidance toward the attachment figure was manifested as a disinterested/unemotional expression, coupled with either body or gaze aversion (Main, 1996). These infants behaved in a way which suggested they had deactivated or suppressed attachment behaviours, and had become defensively autonomous (Ainsworth et al., 1978).

Mothers of these infants observed in the home were seen to be averse to physical contact and unresponsive to their child's needs. They rejected attachment related behaviour and displayed a general cold and detached hostility toward their child (cf Main, 1996).

Main & Solomon (1986) examined a group of infants termed unclassifiable in the strange situation procedure. As a consequence they discovered an additional category of insecurely attached infants, who displayed a bizarre combination of avoidant and proximity seeking behaviours with their attachment figure. For example, these infants would freeze with a trancelike expression, or cling to parents while leaning away. Unlike the other three categories, these infants did not appear to possess a coherent strategy to respond to separation and reunion (Rosenstein et al.,1996). They appeared to be in a state of confusion, and hence were described as disorganised/disoriented (Main et al., 1990).

In the home environment, mothers of these children appeared to avoid contact, and behaved in a way which often frightened or alarmed their infant. Thus these infants who sought comfort and security from their attachment figure when alarmed or frightened, were in fact confronted by a caregiver who was alarming or frightening also. This behavioural interaction between the attachment figure and infant, is thought to lead to a collapse in the attachment behavioural strategy, displayed as disorganised attachment behaviour (see Main, 1990).

Childhood Evidence

Following a review of studies utilising the strange situation procedure within middle class subjects in the United States, approximately 70% of one year olds were classified as secure, 20% as avoidant and 10% as anxious (Lewis, Feiring, McGuffog, & Jaskir, 1984). In addition, attachment literature cites numerous studies which have confirmed Ainsworth's initial observations with infants and extended them into the realm of later childhood. This evidence is reviewed, for example in (Elicker, Englund & Sroufe, 1992).

Securely attached children appear to be generally happy (La Freniere & Sroufe, 1985), easy-going in temperament, co-operative (Arend, Gove & Sroufe, 1979), displaying empathic behaviour (Sroufe et al., 1986) and creativity (Elicker et al., 1992). They respond well to guidance in problem-solving tasks, working successfully with parents and teachers alike (Arend et al., 1979; Matas, Arend and Sroufe, 1978; Sroufe & Fleeson, 1988). Secure children are found to enjoy many close friendships, and display positive interaction within the peer environment (Elicker et al., 1992; Sroufe, Carlson, & Shulman, 1993).

In studies comparing the three attachment styles, secure infants were found to be significantly more ego resilient (Arend et al., 1979), more compliant with instructions, and frequently showed evidence of internalised controls more often than insecure infants (Londerville & Main, 1981). Infants classified as secure in attachment, when studied in a peer-play situation, scored higher on qualitative rating scales of sociability, orientation to peer and orientation to mother at 23 months, in comparison to infants classified as anxious or avoidant in attachment (Pastor, 1981).

Children classified as anxious in attachment were described by teachers in the preschool as 'anxious', 'impulsive', 'helpless' and 'fearful' (Sroufe, 1983). Arend et al., (1979) found them to be ego under-controllers (i.e., impulsive). Anxious children were found to perform relatively poorly in tasks involving independent

problem solving, being overly dependent on teachers who as a result often infantilised them (Sroufe et al., 1993). By age 10-11 years, anxious children were found to be less skilful in the peer environment when compared to secure children, and demonstrated negative biases when discussing peer relations (Elicker et al., 1992).

Avoidant infants were described by Arend et al (1979) as ego over-controllers (i.e. restrained). They were described in the preschool setting by teachers as 'hostile', 'socially isolated', and/or 'disconnected (psychotic-like)' (Sroufe, 1983). This finding was replicated in a later study, "To some extent, the rejecting relationships of the avoidant child's early years were recapitulated in the preschool classroom and not for mysterious reasons. These children often engaged in hostile or defiant behaviour that alienated teachers as well as children" (Sroufe et al., 1993, p.325). At ages 10-11 years, avoidant children were found to have the worst relationships with peers, compared to both secure and anxious children. They displayed negative biases comparable to that exhibited by anxious children, and a general inability to engage in successful social relations (Elicker et al., 1992).

Infants classified as disorganised-disoriented in attachment style, later studied as 6 year olds were found to exhibit a controlling, role-inverting (D-controlling) response pattern with attachment figures (cf Main, 1996). This D-controlling behaviour was reflected in the children being either punitive or caregiving with the attachment figure. Disorganised infants have been later found to be disruptive and aggressive in the school environment. This infant classification has also been linked to later development of dissociative behaviour in elementary and high school. In addition, a great majority of parentally maltreated or neglected children have been found to exhibit disorganised/disoriented attachment behaviour (see Main, 1996).

The predictive validity of early infant attachment classification is evident in numerous studies assessing infant samples at later stages of childhood. Research investigating the impact of early attachments on later social-emotional functioning, has been encouraging for attachment theory. For example Elicker et al., (1992) assessed an infant sample 10 years later and found that infant attachment classifications were able to reliably predict social functioning. These results follow research demonstrating infant attachment classifications as successfully predicting quality of interpersonal relationships, and incidence of behavioural problems, during infancy through to school years (see Simpson, Rholes & Nelligan, 1992).

Bowlby's (1980) sentiments are reflected by Sroufe et al. (1986) who propose that through continuous interaction with others, individuals learn to internalise both sides of a relationship. Thus a child who has experienced parenting rich in nurturance and support develops a model of parenting consistent with their experience and accesses this model when faced with parenting later in life.

Crowell & Feldman (1988) cite numerous studies involving evidence of intergenerational transmission, whereby early attachment experiences have been empirically shown to influence subsequent parenting behaviour, including their children's cognitive and social development. For example, Main and Goldwyn (1984) found parents exhibiting a secure attachment style within relationships, were most often the parents of infants who were classified as secure, in the strange situation laboratory setting. This trend was also upheld for both insecure groups of adults, and their children. Thus suggesting that a parent's internal working model of relationships, affects his/her ability to attend to signals from his/her child, and in turn competence to respond in a sensitive and consistent manner (Main et al., 1984).

Erikson, Sroufe & Egeland (1985) contrast the different attachment styles according to explanations provided by Bowlby. For example, an individual who exhibits a secure attachment style, " is likely to possess a representational model of attachment figures as being available, responsive and helpful and a complementary model of himself as at least a potentially lovable and valuable person" (Bowlby, 1980, p.242). As a result, the secure child is better equipped to "approach the world with confidence, and, when faced with potentially alarming situations, likely to tackle them effectively or to seek help in doing so". In contrast, individuals whose attachment needs have not been consistently or adequately met develop a model of the world as comfortless and unpredictable, and they respond either by withdrawing or attacking it (Bowlby 1973, p.208).

Adult Attachment

Following Ainsworth's (1982; 1989) observation that love partners may have the capacity to operate as attachment figures, and research interest in the mechanism involved in the development, maintenance and dissolution of affectional bonds within romantic relationships (see Bretherton, 1985), adult romantic love was formally introduced into the theoretical framework of attachment, through theoretical and empirical research conducted by Hazan and Shaver (1987).

This research aimed to conceptualise romantic love as an attachment process. Their theoretical work originated from the strong similarities observed between infant and adult attachment. For example, the primary features of infant-mother attachment, desire for proximity to the attachment figure; a feeling of security once contact is established; and grief and anxiety when threatened with separation or loss; was found to characterise many love relationships (Weiss, 1982; Hazan et al., 1987; Shaver, Hazan & Bradshaw, 1988; Shaver et al., 1988).

Hazan et al.(1987) suggest than an important difference between child and adult attachment, is that romantic love, unlike childhood attachment relationships, is essentially driven by sexual attraction (eg., Tennov, 1979). The validity of attachment theory's extension to romantic relationships, was supported by Bowlby's (1979) and Ainsworth et al's., (1978), postulate of distinct behavioural systems governing attachment. These include for example, the attachment system, the caregiving system and the mating, reproductive system. Adult romantic love is hypothesised to involve the integration of all three of these systems, with the structure of the integration resulting from attachment history (Shaver et al., 1994).

In developing their theory Hazan et al. (1987) discovered that secure, anxious and avoidant attachment styles are evident in the adult population in similar proportions to the spread of these styles among children. Support for this contention is provided by research finding the prevalence of the three attachment styles in adulthood to be akin to reports of prevalence in infant research, for example (Ainsworth 1985; Collins & Read, 1990; Crowell et al., 1988; Feeney & Noller, 1990; Hazan et al., 1987; Kobak & Sceery, 1988; Main et al., 1984; Main et al., 1985; Simpson et al., 1992).

Simpson and colleagues (1992) reviewed the literature on the influence of an infant's attachment to their caregiver's to attachments experienced throughout the lifespan. In conclusion, they posit that the research tends to support the view of attachment styles developed in infancy as being influential in determining the way we view ourselves and others, and that this becomes the foundation for subsequent behaviour and personality organisation in adulthood.

Much of this research was in response to Bowlby's postulate involving the progressive influence of childhood attachment relationships, to "...the later capacity to make affectional bonds; as well as a whole range of adult dysfunctions including 'marital problems and trouble with children as well as ... neurotic symptoms and personality disorders" (1977, p. 206).

Adult Internal Working Models

The empirical research of attachment styles in adult love relationships (Hazan et al., 1987) was based on two adult samples, whose attachment style was measured according to their endorsement of a single self-report attachment classification. An individual's attachment classification was found to correspond to expected differences in their attachment history, and that working models of self and relationships was also related to attachment style.

Subsequent research has shown that Hazan & Shaver's measure of adult attachment styles is substantially related to measures of love, and that both of these measures predict relationship characteristics (Hendrick & Hendrick, 1989; Levy & Davis, 1988).

Adult attachment styles are related to a wide variety of relationship variables, including attachment history and relationship beliefs (Feeney et al., 1990), global personality traits (Shaver & Brennan, 1992) differing emotional experience and quality within romantic relationships (Simpson, 1990), relationship satisfaction (Hammond & Fletcher, 1991) patterns of self-disclosure (Mikulincer & Nachson, 1991), support seeking and support giving in a situation evoking anxiety (Simpson et al., 1992), and different types of interpersonal difficulties in adulthood (Horowitz, Rosenberg, & Bartholomew, 1993).

Recent work by Bartholomew (1990), has extended the application of attachment styles in adult relationships, by focusing on the avoidance of intimacy. Bartholomew incorporates previous formulations of love, including Hazan et al. (1987) model, as well as extending Bowlby's concept of internal working models. Subsequently, the attachment construct is divided into four classifications, with a focus on two distinct styles of avoidance of intimacy. These being (a) individuals who desire intimacy with other adults but avoid them because of their fear of rejection, and (b) those who apparently neither fear nor desire close relationships.

These are termed fearful and dismissive avoidant attachment styles, respectively. Bartholomew's four category attachment classification also includes categories of secure and preoccupied attachment styles. All four categories are characterised by either a positive or negative view of self and others.

According to Bartholomew (1990) adults who describe a secure attachment style possess a positive view of the self and others, and are comfortable with intimacy. They also convey being worthy of others love, and conceptually correspond to Hazan et al. (1987), and Main et al. (1985) categories of secure attachment (Bartholomew & Horowitz, 1991).

Subsequent research investigating romantic relationships from an attachment theoretical perspective finds the following consistencies in adult behaviour. Secure adults are reported to feel comfortable in initiating and accepting closeness with others, are comfortable depending on others and having others depend on them, and are rarely worried being abandoned by others (Hazan et al., 1987). In turn, their romantic relationships are often characterised by more frequent positive affect (Simpson, 1990), elevated levels of trust, commitment, satisfaction and interdependence (Collins et al., 1990; Simpson, 1990) and by happy, positive and trusting styles of love (Hazan et al., 1987; Hendrick et al., 1989; Levy et al., 1988).

Secure adults tend to be highly invested in long-term relationships, which are characterised by high levels of relationship characteristics measuring friendship and trust (Collins et al., 1990; Hazan et al., 1987; Keelan, Dion & Dion, 1994; Kirkpatrick & Davis, 1994; Kirkpatrick & Hazan, 1994).

Research concerning interpersonal processes within attachment classifications reports that adults exhibiting a secure attachment style, cope with perceived distress by first acknowledging it, and then turning to others as sources of support (Kobak et al., 1988; Main et al., 1985; Mikulincer, Florian & Tolmacz, 1990). They are successful in regulating negative affect, feel well liked by co-

workers, display relatively high self-esteem and a high regard for others (Collins et al., 1990; Feeney et al., 1990; Hazan & Shaver, 1990).

When faced with a stressful situation, secure adults mediate their anxiety by seeking social support (Mikulincer, Florian & Weller, 1993) and they effectively solicit and provide support towards their romantic partner when experiencing distress (Simpson et al., 1992). They pursue integrative, mutually beneficial resolution to discord (Pistole, 1989) self-disclose appropriately, and approve of others who also display self-disclosing behaviour (Mikulincer & Nachson, 1991).

Preoccupied (anxious) adults demonstrate a negative view of self coupled with a positive view of others, and tend to be over-dependent (Bartholomew 1990). Displaying a general sense of unworthiness, an individual with a preoccupied style of attachment is often perceived as striving for self-acceptance through the approval and acceptance of important others. This classification corresponds conceptually to Hazan and Shaver's anxious/ambivalent group and Main et al's., enmeshed or preoccupied with attachment classification (Bartholomew et al., 1991).

Adults displaying this anxious style of attachment, report that others are reluctant to become as close as they would like, are frequently concerned that their partners do not really love them or will abandon them, and often desire extreme closeness to their partners (Hazan et al., 1987). Their relationships are characterised by more frequent negative affect (Simpson, 1990), lower scores on measures of trust, commitment, satisfaction and interdependence, when compared to secures (Collins et al., 1990; Simpson, 1990) and obsessive, jealous types of love (Hazan et al., 1987; Hendrick et al., 1989; Levy et al., 1988; Carnelley & Pietromonaco, 1991).

Research concerning the interpersonal processes of anxious adults finds their relationships to be relatively enduring, yet unstable (Kirkpatrick et al.,

1994). Individuals displaying an anxious attachment style, deal with disturbing memories and negative affect by directing attention towards the distress in an overwhelming way, and by forming overly dependent relationships that eventually add to their anxiety (Kobak et al., 1988; Main et al., 1985; Mikulincer et al., 1990). They display difficulties with affect regulation, and relatively low, unstable self-esteem (Collins et al., 1990; Feeney et al., 1990).

Anxious adults enjoy working with others, but continually feel not appreciated and misunderstood (Hazan & Shaver, 1990). They become very emotional when experiencing distress, and are subsequently best to use coping techniques which are emotion focused (Mikulincer et al., 1993).

Anxiously attached adults, are often preoccupied with issues surrounding relationships. These adults are found to be overly concerned with rejection, and during interactions with others are found to be fervent self-disclosers, liking others who are also self-disclose indiscriminately (Mikulincer et al., 1991). Although these individuals are thought to possess a positive view of others, they display a general theme of mistrust and pessimism towards others (Collins et al., 1990).

In comparison to securely attached adults, anxious adults are significantly more anxious (Kobak et al., 1988) and hold a more negative view of themselves (Collins et al., 1990). They have been described by others as argumentative, intrusive and overcontrolling (Kunce & Shaver, 1994). Anxious adults are more likely than secure or avoidant adults to binge on high calorie foods such as chocolate, and report serious problems with their weight (see Shaver et al., 1994).

According to Shaver et al., (1994) what begins in infancy with attempts to keep track of an unreliable caregiver, results in a characteristic hypervigilent style of interacting with romantic partners. Leading to excessive dependency on others, and a self-perpetuating cycle of rejection.

Bartholomew's first type of avoidant attachment classification describes an individual who exhibits both a negative view of self and a negative view of others. Individuals with this style of attachment, are socially avoidant (Bartholomew, 1990), and perceive themselves to be unworthy of love and affection from significant others who are seen to be rejecting. This category conceptually corresponds to Ainsworth's childhood avoidant style, the avoidant style of attachment described by Hazan et al. (1987) and is referred to as fearful avoidance (Bartholomew et al., 1991).

Individuals with a fearful avoidant attachment style are characterised by their desire for intimacy coupled with a corresponding fear of closeness. They are described as introverted and submissive, often conveying feelings of exploitation within interpersonal relationships (Bartholomew et al., 1991). They display low levels of self-confidence and high levels of self-consciousness. Fearful adults report avoidance of intimacy while simultaneously longing for it, resulting in an interpersonal style described as anxious, depressed and hostile (Bartholomew et al., 1991; Carnelley, Pietromonaco & Jaffe, 1994; Dutton, Saunders, Starzomski & Bartholomew, 1994; Shaver et al., 1992).

In general, fearful adults convey more negative than positive feelings about themselves (Clark, Shaw & Calverley, 1994). Fearful avoidance in adults has also been shown to be positively related to childhood memories of abuse (Clark et al., 1994). Interpersonal processes of adults displaying this avoidant attachment style include descriptions of comparatively high hostility (Kobak et al., 1988) more pessimistic, and mistrusting outlooks on the social world and others in general (Collins et al., 1990).

In studies which distinguish only one avoidant attachment classification, these individuals report being uncomfortable in developing closeness with others, find it difficult to completely trust and depend on others, and become anxious whenever anyone gets too close (Hazan et al., 1987). Their romantic relationships

are characterised by more frequent negative affect (Simpson, 1990), lower scores on measures of trust, commitment, satisfaction and interdependence, compared with secures (Collins et al., 1990; Simpson, 1990). They are reported to have higher break-up rates than secures (Hazan et al., 1987; Kirkpatrick et al., 1994; Shaver et al., 1992) and mourn less following a break-up of a relationship (Simpson, 1990), although they often report feelings of loneliness (Hazan et al., 1987).

Avoidant adults have been seen to dismiss the importance of close or long-term relationships, and maintain cynicism and emotional distance within these relationships (Carnelly & Janoff- Bulman, 1992; Kobak et al., 1988; Main et al., 1985; Mikulincer et al., 1990). In situations eliciting anxiety, avoidant adults withdraw their support towards romantic partners and correspondingly avoid support offered to them (Simpson et al., 1992). In addition, they are found to cope with negative affect by ignoring or denying its existence (Dozier & Kobak, 1992).

Avoidant adults portray boredom and lack of involvement in interactions with others (Tidwell, Shaver, Lin & Reis, 1991), do not self-disclose to others freely, and consequently disapprove of others who are high self-disclosers (Mikulincer et al., 1991).

The second category of avoidance described by Bartholomew, is referred to as dismissive avoidance (Bartholomew et al., 1991) and is defined by a positive view of the self, yet a negative view of others. Adults who report this type of avoidance are also inclined to deny emotional or attachment needs, thus maintaining a positive model of self through the reduction of importance of others who are seen as rejecting. This category corresponds to the detached or dismissing of attachment individual described by Main et al., (1991).

Dismissive adults often deny the importance of closeness in relationships and intimacy. They appear to display a hostile and aloof interpersonal style which values independence over intimacy. In studies that distinguish between the two

types of avoidance; dismissingly avoidant individuals appear defensively autonomous, and are reported to have high self-esteem. In addition, they convey a cool, competitive and distant interpersonal style when interacting with others. They are notably not anxious, depressed or dependent. Both dismissing and fearful styles are identified by high avoidance of intimacy, in comparison to secure and anxious styles which are characterised by low levels of avoidance (Bartholomew et al., 1991). In developing this four-category model of attachment, Bartholomew (1990) has proposed that avoidance of intimacy in adulthood has evolved from early attachment styles involving parental rejection.

Research investigating reports of family environment within the different styles of attachment classifications, found secure adults to generally describe their parent and sibling relationships favourably, portraying an overall balanced and realistic picture of their family functioning (Simpson et al., 1992; Hazan et al., 1987; Rothbard & Shaver, 1994). Adults exhibiting a secure attachment style, displayed ease in recall of childhood experiences, with generally positive memories of caregiving and a valuing of attachment relationships (Bartholomew, 1990).

Adults reporting an anxious attachment style described their family relationships as being intrusive and unfair, interpreted as resulting from inconsistent parenting (Hazan et al., 1987; Rothbard et al., 1994). Anxiously attached adults are described as recalling childhood experiences, as involving a combination of closeness with parents with failed attempts to gain parental support (Bartholomew, 1990).

Finally, avoidant adults described their parents in rejecting and cold terms (Hazan et al., 1987; Rothbard et l., 1994) and were more likely than secure or anxious groups, to report having had an alcohol abusing parent (Brennan, Shaver & Tobey, 1991). When recalling childhood experiences of attachment, avoidantly attached adults, tended to dismiss the importance of attachment relationships and

the possible influence of their experiences on present functioning. These adults lacked coherence in their verbal reports of childhood memories, offering statements suggestive of ideal parenting, while simultaneously referring to parents as rejecting and not supportive in times of stress (Bartholomew, 1990).

Subsequent authors suggest that an adult's conceptualisation of their attachment experience is as significant as actual experience, in predicting attachment styles of their children. This followed evidence showing that some adults who recalled abuse or neglect in their childhood experiences, went on to produce children who acted securely in the strange situation setting. They concluded that these examples reflected adults who had worked through, and had appeared to have updated their negative memories of experience to include understanding and forgiveness, thus developing an updated healthy model to apply to subsequent relationships (eg., Main et al., 1985).

Stability of the Attachment Construct

Stability of attachment ratings has been demonstrated by many studies, using attachment categories derived from Ainsworth's strange situation procedure during infancy, and reassessing these samples in later childhood (Bartholomew, 1990). For example, highest stability in attachment ratings was found in upper-middle class families, with as many as 96% of infants classified in the same attachment category over a period of 6 months (eg., Waters, 1978) with moderate stability being reflected in lower-income families (eg., Thompson, Lamb & Estes, 1982; Egeland & Sroufe, 1981; Vaughn, Egeland, Sroufe & Waters, 1979).

Due to the recency of adult attachment classifications, longitudinal research investigating the stability of attachment ratings is somewhat limited. Kirkpatrick et al. (1994) report results which suggest that stability in adult attachment ratings correspond to the infant attachment literature. For example, test-retest correlations using continuous attachment measures derived from the

original categorical Hazan & Shaver measure range from .37 to .71 over periods of 2 weeks to nine months (Collins et al., 1990; Feeney et al., 1994; Hammond et al., 1991; Levy et al., 1988; Shaver et al., 1992).

Additionally Baldwin & Fehr (1995) conducted a series of six studies and found proportions to be similar to their proportions found within the infant literature; with 56% secure, 32% avoidant and 16% anxious. On the basis of these findings, one might be tempted to conclude that the attachment style ratings were in fact stable, supporting a trait based view of attachment. Further research inspecting previous studies finds this stability may be overestimated. Whereby the proportions, and not the subjects individual classifications on which they were based, remained stable.

Employing data from six studies they conducted over a two year period, in addition to combining three independent data sets, Baldwin & Fehr found an overall rate of change in attachment style of 28%. Rates of change in attachment classification was not found to differ significantly in studies which utilised the three category measure (Hazan et al., 1987) in comparison to the four category construct (Bartholomew, 1990). Furthermore this instability was not found to be related to the amount of time elapsed between tests. Highest rates of change in attachment classification was found in individuals reporting anxious attachment, with retest data over a four year time lag changing in 50% of cases (Kirkpatrick et al., 1994).

Baldwin et al. (1995) offer explanations for the instability discovered in attachment ratings over time. Firstly, a person's attachment orientation may be unique to the situation and individual with whom it is currently experienced. Secondly the expression of working models may be a function of the quantitative and qualitative nature of the individuals current relationship (see Hammond et al., 1991). And finally, due to the way in which attachment experiences are cognitively organised, an individual's most dominant schema may be what is

conscious and accessible via automatic processing in self report situations (see Fletcher & Fitness, 1990).

The aforementioned research has been valuable in delineating the instability of attachment rating over time. Baldwin & Fehr assert that both the three and four category continuous measures derived from Hazan & Shaver's three category construct are not problematic, provided researchers classify subjects based on self reports concurrently, and results are reported in terms of the individual's current attachment status, rather than all encompassing attachment style, per se. For example, Shaver et al. (1994) suggest that it is incorrect to speak of one model of self or others, in additional to an individual's single attachment style.

In sum, research on the stability of infant attachment ratings extended to later childhood, suggest the former to be a direct reflection of the stability within the primary attachment relationship, rather than a lifelong trait entrenched within the child (cf Bartholomew, 1990).

The Application of Attachment Theory to Later Psychopathology

Through the organisation of affective experiences involved in seeking and receiving security from primary attachment figures, the attached individual develops event representations which are structuralised as an internal working model of the self, other and the social world. Later interactions are selected in order to affirm this internal working model and allow continuity between ones experience and internalised expectations of this experience (Rosenstein et al., 1996).

Crittenden (1990) distinguishes among three important 'meta-structures' of internal working models. The first and most clarified structure involves one model that is applied to all relationships. This meta-structure impairs interpersonal experience because it requires that all relationships be distorted to

fit a single model, and is thought to be characteristic of abusing and neglecting mothers and their children (Crittenden, 1988) and descriptive of a dismissively avoidant attachment style.

The second structure is thought to involve multiple, unrelated models that allows the representation of particular aspects of relationships but prevents the development of a cohesive sense of self. This structure may be characteristic of anxious (preoccupied) and fearfully avoidant attachment styles.

The third and most adaptive meta-structure involves a complete generalised model along with differentiated sub-models specific to relationships. This type of structure is thought to be representative of secure attachment styles (Shaver et al., 1994).

Successful psychological development is thought to be dependent on the compatible organisation and integration of new experiences within the internal working model framework. Main (1990) suggests that when caregiver's are insensitive, offspring may develop conditional or secondary attachment strategies to permit continued maintenance of proximity and self-organisation. For example, children of rejecting caregiver's (avoidant) tend to develop a strategy of minimising the output of attachment behaviours. Children of inconsistent or insensitive caregiver's (anxious-ambivalent) are thought to maximise attachment behaviours designed to ensure parent availability. And children exhibiting disorganised/disoriented attachment patterns fail to develop a coherent strategy to respond to separation or reunion with caregiver's.

Insecure models which are based on inconsistencies among the child's experience, behaviour, and the responses of the caregiver, are thought to be highly vulnerable to fragmentation or incoherence, producing multiple or conflicting models. This cognitive organisation places an individual at risk for psychopathology in that their actual experiences become defensively dissociated

from conscious awareness and an incompatible representation of that same experience becomes dominant and conscious (Rosenstein et al., 1996).

For example, the defensive exclusion of representations that elicit painful emotions, may provide initial emotional relief, however it also forces a person to work with an inadequate model of reality. Problems arise in that the representation of experience is unconscious, thus is unable to be articulated and reconstructed, as an effective model should be (see Bowlby, 1973; 1980).

Main et al., (1985) discovered that rules regarding the interpretation and examination of attachment experiences, were inherent in working models themselves. Further support is provided by Bretherton (1990) who argued that, "secure relationships...go hand in hand with the partners ability to engage in emotionally open fluent and coherent communication both within attachment relationships and about attachment relationships. Insecure relationships, by contrast, seen to be characterised by selective ignoring of signals, as well as certain forms of incoherence and dysfluency when discussing attachment relations" (p. 58).

Main & Colleagues describe adults with secure representations of attachment as displaying a coherence and ease in discussing childhood memories associated with attachment. Thus healthy functioning, is contingent on conscious awareness of attachment experiences and subsequent updating of mental models.

Researchers have recently begun to examine the relation between attachment strategies and symptom expression. Studies of psychiatric adolescent and adult populations support the notion that secondary or defensive attachment strategies are predominant in groups with histories of severe psychiatric problems (see Rosenstein et al., 1996 for a review of studies).

For example, Rosenstein et al. (1996) found dismissing attachment strategies to be most often associated with an attachment organisation which tends to minimise distress associated with an unresponsive caregiver. As

predicted these individuals were found to possess a psychiatric disorder which downplayed their distress, yet simultaneously expressed that distress, for example, conduct disorder and substance abuse.

In contrast, adolescents who reported an anxious a (preoccupied) attachment organisation whose attachment strategies tend to maximise signals of distress in order to ensure attachment figures availability, most often exhibited affective disorders which similarly maximised negative affect.

Attachment theory has recently been applied to the study of specific psychiatric populations. For example Ward et al. (1995) conducted research into the attachment organisation of sexual offending adult men. They based their pioneering research on assumptions that early attachment relationships may influence sexual offending through the development of internal working models involving insecure attachment representations and subsequent intimacy problems within adult love relationships. For example, Ward and colleagues cite Bowlby's (1969) assertion "If attachment bonds are insecure in childhood, individuals do not acquire the necessary skills to establish close relationships, and may grow to fear, rather than desire, intimacy with another adult" (p.73).

Ward and colleagues were first to test the assumption that attachment experiences could be related to sexual offending. Their results supported this contention by discovering that the majority of sexual offenders who participated in the study, displayed insecure attachment styles. Furthermore, the type of insecure attachment style endorsed, was found to closely approximate a conceptually corresponding type of sexual offence. To substantiate these findings, they developed a model of sexual offending which utilises the three styles of insecure attachment proposed by Bartholomew (1990), and posits specific intimacy deficits to correspond to each of these insecure attachment styles. This model builds on existing research in the area of sexual offending, and offers a highly plausible explanation of how intimacy deficits, in conjunction with

additional factors, may lead to the type, onset and maintenance of sexual offending.

Research thus far demonstrates the credence of attachment theory to provide a mechanism by which personality and behavioural regularities formed in childhood along with other factors, may significantly contribute to interpersonal processes, quality of adult love relationships, and specific types of psychopathology in adulthood. This study will now endeavour to implicate attachment theory and related findings more specifically to the literature investigating the onset and maintenance of bulimia nervosa.

Bulimia Nervosa

The term Bulimia Nervosa represents the pathological eating disordered syndrome most evident in women 17 years of age and over (Thelen, Farmer, McLaughlin, Mann & Pruitt, 1990; Bulik, 1994; Fairburn, 1981 Fairburn et al., 1991; Johnson & Larson, 1982; Mitchell et al., 1985). This disorder is characterised by its behavioural paradox, whereby sufferers attempt to maintain strict dietary control, and nonetheless experience recurrent lapses in that control represented as binge eating (APA, 1994).

Consensus within the field considers a binge as constituting an 'out of control' consumption of an unusually large amount of food, or unusual types of food, within a short interval of time (see Bulik, 1994). Women with this disorder often attempt to counteract this lapse in dietary restraint and control, purging these subjectively forbidden foods. The most common method of purgation is the use of self-induced vomiting, with between 70-90% of women with bulimia reporting the regular use of this behaviour (Johnson, Stuckey, Lewis & Schwartz, 1982; Mitchell, Hatsukami, Eckert & Pyle, 1985). However, the use of numerous other methods of purgation in conjunction with self-induced vomiting, or alone,

such as the use of laxatives, diuretics, emetics, exercise and fasting, is also reported in the literature (Bulik, 1994).

Using strict diagnostic criteria of the DSM III-R (APA) a Christchurch Psychiatric Epidemiology study estimates a lifetime prevalence rate in women of 2.1% (Wells et al., 1989). This rate being comparable to other studies employing similarly strict inclusion criteria (Fairburn et al. 1990; Kendler et al., 1991).

Risk Factors for the Development of Bulimia Nervosa

Kendler et al. (1991) investigated the genetic epidemiology of bulimia, and found the development of bulimia is best attributed to a combination of genetic and environment factors. For example, they found the following characteristics to be associated with the disorder; birth after 1960, low perceptions of paternal care, history of considerable weight fluctuations, excessive dietary restraint and exercise, a slim ideal body shape, low self-esteem, high neuroticism and an external locus of control. Other research identifying risk factors can be organised within three categories, these being individual, familial and societal factors (see Bulik, 1994).

Individual factors such as childhood or adolescent anxiety and affective disorders have been shown to be a potential risk factor for the later onset of an eating disorder. Research has consistently shown anxiety disorders to be frequent co-morbid conditions of eating disorders, and that the anxiety disorder generally occurred first (Bulik, 1994).

Ward, Bulik & Johnston (1996) posit that women with bulimia have difficulty in achieving mental control, through unsuccessful attempts to suppress negative thoughts relating to food. They are currently attempting to empirically test this assumption with research investigating food related suppression in both eating disordered and control women.

In terms of familial factors, research suggests that first and second degree relatives of women with bulimia report significantly higher rates of alcoholism and depression, when compared to rates in the general population (Bulik, 1994). Additionally, reports of sexual abuse history has been found to be higher in women with bulimia than in the general population, but comparable to rates reported by women in other psychiatric samples (Bulik, Sullivan & Rorty, (1989) .

Societal pressure which dictates thinness as the cultural ideal (Anderson & Di Domancio, 1990) is thought to impact on the development of bulimia, via the widespread incidence of body shape and weight dissatisfaction reported in the general populations of college age women (e.g., Klemchuk, Hutchinson & Frank, 1990) and the acceptance of this diet and weight preoccupation as normal adolescent female development (see Bunnell, Cooper, Hertz & Shenker, 1990).

A larger body of literature focus on the intrapsychic difficulties of individuals with bulimia, from an object-relations or self-psychology perspective (e.g., Swift & Letvin, 1984) or on the interactional pattern of the family as a whole, from a 'family systems' point of view (e.g., Roberto, 1986; Minuchin, Rosman & Baker, 1978). Due to valuable clinical experience, Humphrey & Stern (1988) suggest that both these schools of thought are complementary and when combined, provide a more robust model in which to understand the development of bulimia. They base this integration on the ideas inherent in Winnicott's (1965) conception of the mother-infant 'holding environment', (a metaphor for the complete love and protection a mother provides for her child during its infancy), and early ego deficits at the level of part-object relations formulated by Klein (1975).

According to this view, failures in the holding environment involve deficits in (a) nurturance and soothing (b) tension and affect regulation; and (c) empathy and affirmation of separate identities. These failures are hypothesised to result in transgenerational adaptation involving (a) incomplete self and other

formation and (b) the need for primitive defenses, requiring others to complete the self, i.e., including splitting; idealisation and projective identification (Humphrey, 1986b; Humphrey et al., 1988).

Most often this literature has relied on psychodynamic formulations and clinical observations. O'Kearney (1995) reviews what is currently known empirically within this area. These studies have used the Parent Bonding Instrument (PBI; Parker, Tupling & Brown, 1979) and are designed to assess perceptions of maternal and paternal care and protection during the first 16 years of childhood. O'Kearney concludes that the arguments connecting data using the PBI to predictions about eating disorder pathology based on attachment theory are often unclear or specious.

Attachment Theory and Bulimia - Research and Methodological Problems

The application of attachment theory to the eating disorders has received relatively little attention. With specific reference to research implicating insecure attachment to bulimia nervosa, to our knowledge only five empirical studies exist.

The first study by Becker et al., (1987) provides tentative support for the association of insecure attachment in women with bulimia. These researchers used a self-report bulimia inventory to classify 547 volunteer college women into 4 groups; these being 16 purging bulimics, 40 restricting bulimics, 183 problem eaters and 308 non-problem eaters. Using an object relations measure groups were found to differ on the insecure attachment subscale in relationships when compared with other women. In addition, 48% of the purging bulimics reported pathological levels of insecurity in relationships compared to 32% of restricting bulimics, 28% of the problem eaters and 17% of the non-problem eaters.

Armstrong et al. (1989) tested the association between anxious attachment, particularly separation distress, to the incidence of eating disorder pathology. They compared the responses of 27 hospitalised women, 12 of which

had a primary diagnosis of anorexia, 12 of bulimia nervosa, and 4 of atypical eating disorder, to separation situations depicted in the Hansburg (1980) Separation Anxiety Test. The control group consisted of noneating-disordered samples provided by earlier research on intimacy. Results found that 96% of eating disorder women displayed anxious attachment and 85% extreme separation depression. These scores were significantly higher than that of control groups.

Heesacker et al. (1990) employed a sample of 183 college women and examined the relationships between eating disorder symptoms, measured by the drive for thinness subscale of the Eating Disorder Inventory (EDI; Garner, 1983), the Eating Attitudes Test (EAT; Garner & Garfinkel, 1979), relational schema measured by a repertory grid technique, and object relations function using the Bell Object Relations Inventory (Bell, Billington & Becker, 1986). Using multiple regression analyses, they found object relations indicating insecure attachment in early parental relationships was associated with greater eating disorder scores, and that reports of high social incompetence was associated with a greater desire for thinness. In addition a tightly organised, inflexible interpersonal schema was the cognitive structure most strongly associated with eating disorders.

Research conducted by Kenny et al. (1992) investigated the specific relationship between parental attachment and eating disorder symptoms among 68 young women in treatment for eating disorders. 50 subjects had a primary diagnoses of Bulimia and 18 of Anorexia Nervosa, the control group consisted of 162 sample of college women.

Using the EDI as a measure of eating disorder symptomatology, and the Parental Attachment Questionnaire (PAQ; Kenny, 1990), results found eating disordered females when compared to controls described themselves as less securely attached to their parents. More specifically, they characterised their relationships as more affectively negative, described their parents as less supportive of their independent striving and described themselves as less likely to

seek out and receive comfort from their parents in times of stress. In addition, reports of an affectively positive and supportive relationship with parents, in conjunction with the perception of parents as supporting autonomy, was associated with adaptive functioning, in particular, description of personal effectiveness, low levels of bulimic symptoms and dieting preoccupation.

Finally, Cole-Detke & Kobak (1996) examined the relationship between attachment strategies and symptom reporting among college women using the adult attachment interview (AAI). This measure relied on descriptions of attachment relationships between the individual and her parents experienced in childhood. Results indicated that women with hyperactivating AAI strategies, whose attachment experiences were typified by unpredictable caregiving, were prone to reporting elevated levels of depressive symptoms, whereas women with deactivating strategies though to have arisen from unresponsive caregiving, were prone to reporting elevated levels of eating disorder symptoms, when scores for depression were statistically controlled.

A limitation of this study is that it fails to take into account the findings of multiple threshold modelling, which has shown bulimia to represent a continuous phenomenon, able to be studied at any point along the subclinical to clinical continuum (Kendler, 1993; Kendler et al.,1991). Considering the frequent co-morbidity of depression and eating disorders it seems likely that the above findings concerning attachment strategies are applicable only to the specific point on the continuum to which the individual's current experience is positioned.

Additionally, the aforementioned studies display many methodological shortcomings, due to the use of insensitive attachment measures and sampling limitations. For example, two of the above studies used eating disordered subjects who were concurrently involved in hospitalised treatment programmes, hence limiting the extension of findings to the general eating disordered population (e.g., Armstrong et al. 1989; Kenny et al. 1990).

Furthermore, the attachment measure utilised by Armstrong & Roth (SAT; Separation Anxiety Test) required subjects to respond to silhouette pictures conveying episodes of mildly and highly stressful separation situations, and was originally designed with specific reference to child samples. This measure appears to measure separation distress, rather than insecure attachment per se. In addition, these researchers found no differences on the SAT measure when comparing responses of women with Anorexia Nervosa and women with Bulimia Nervosa, thus suggesting their measure to be insensitive to the qualitative difference reported by these eating disordered subtypes within parent-child relationships (see Humphrey, 1986b).

Finally all studies fail to address the quality of attachment within current adult love relationships, thus neglecting the importance of attachments formed in adulthood and the impact these have on both memories of parent-child attachments and current functioning.

Nonetheless, combined this research provides support that factors associated with insecure attachment, such as fear of abandonment and difficulties with autonomy differentiate eating disordered from non-eating disordered women. Additionally, the eating disordered women's perceived affective quality of their attachment to their parents and parental support for autonomy were analogous to specific features of their disorder viz. bulimic symptomatology and drive for thinness. These associations are consistent with the proposed theoretical links between parental discouragement of autonomy via insecure attachment, and these key aspects of bulimic pathology (O'Kearney, 1995).

Bulimia Via Internal Working Models

Bretherton (1985) has drawn our attention to recent research suggesting that schemata corresponding to events experienced, scripts, or generalised event

representations, perform the function of key components within mental representations. Thus generalised event representations of actual events experienced by an individual become the basis for which behaviour, thoughts and emotions are guided. According to this view, a child's memory of experiences with others is guided schematically by attempts and outcomes associated with these attempts. This notion of early mental representation as fundamental in guiding behaviour is consistent with psychoanalytic theorising, as suggested by Fraiberg (1969), and inherent in the explanation of internal working models within an attachment theoretical framework (cf Main et al., 1985).

Collins et al. (1994) suggest that internal working models are make up of four interrelated components: These comprising (1) autobiographical memories associated with attachment experience, including characteristic attempts and outcomes of attachment related behaviour, resulting in explanations concerning the self and others; (2) an organisation of beliefs, attitudes and expectations with respect to self and other explanations; (3) attachment related aims and motives; and (4) a collection of behavioural plans and methods, organised with the attainment of specific goals in mind.

This study will first delineate the first and fourth of the aforementioned components with respect to their relevance to bulimia. Thus directing a hypothesis concerning the specific adult attachment organisation most likely to be exhibited by individuals reporting bulimic pathology. Following this, the second component of internal working models concerning beliefs, attitudes and expectations will be discussed, providing basis for the strict dieting behaviour engaged by women with bulimia. And finally attachment related aims and motives will be addressed, with the prediction that women reporting bulimia symptoms will convey a specific type of interaction within romantic relationships typical of their adult attachment organisation.

Autobiographical memories of attachment experience

Collins et al. (1994) propose that autobiographical memories of attachment experience are vital components of internal working models. This concept suggests that attempts and outcomes of attachment related behaviour, results in parallel definitions of the self and others in relation to attachment.

For example, a child who has received consistent and effective caregiving is likely to possess a view of others as reliable and helpful, and a corresponding view of self as worthy of care. Furthermore, a child who is confident in the availability of an attachment figure is likely to exhibit developmentally healthy levels of autonomic functioning. In contrast, an individual who has not had their attachment needs consistently met may come to see others as unreliable or rejecting and form a parallel view of self as defensively autonomous, helpless and/or unworthy of care. The psychological and behavioural consequences of these differences in attachment experience will be discussed with reference to individuals suffering from bulimia.

For example, disturbances within the family environment is often reported in families of women with bulimia (e.g., Brookings & Wilson, 1994; Kinzl, Traweger, Guenther & Biebl, 1994), with common themes appearing in the research involving perceived lack of protection, affection, caring, nurturance, affirmation, understanding and empathy, within families of individuals with bulimia, in comparison to control families (Grissett & Norvell, 1992; Humphrey, 1986b; Humphrey et al., 1988).

Symptoms associated with bulimia have also been associated with lack of perceived support via parental reliability (Smolak, Levine & Sullins, 1990). Both women with bulimia and their parents report that their family environment lacks cohesion, involvement and supportiveness, (Moos and Moos, 1980) when compared to non-eating disordered control groups (Humphrey, 1986b; Johnson & Flach, 1985; Ordman & Kirschenbaum, 1986).

Humphrey (1987; Humphrey, Apple, & Kirschenbaum, 1986) describe parents of individual's with bulimia as being more belittling and neglectful towards their daughters, and family members as being generally less helpful, trusting, and nurturing toward each other, compared with healthy control groups.

Where deficits were found in bulimic families perception of nurturance etc, parallel deficits were reported by women with bulimia's rating of their intrapsychic experience of self-nurturance and self-exploration, when compared to healthy controls (Humphrey, 1986b). Similarly, clinical observation of women in treatment for bulimia, found these individual's to often present with difficulties in the ability to self-soothe or regulate their affective states (Armstrong et al., 1989).

Empirical support for deficits in affect regulation within the eating disorder literature, and with specific reference to bulimia is extensive. For example, the capacity to govern negative affect and/or anxious states is less evident in women with bulimia, when compared to normal controls (Humphrey, 1986a; Ordman et al., 1986) women with anorexia nervosa (Strober, Salkin, Burroughs, & Morrell, 1981) and women with obesity (Williamson, Kelly, Davis, Rugiero & Blouin, 1985).

Individuals reporting bulimic symptomatology are often found to score high on measures of anxiety and depression (e.g., Johnson & Larson, 1982; Katzman & Wolchick, 1984; Striegal-Moore et al., 1993; Williamson et al., 1985). In investigating the relationship between anxiety and bulimia, Bulik (1995) distinguishes between two aspects of anxiety, these being fear of negative evaluation and obsessionality. In an earlier study, women with bulimia were found to exhibit clinically significant fears of negative evaluation, in the context of generalised social fears, equal in intensity to women with social phobia (Bulik, Beidek, Duchmann & Weltzin, 1991). Additionally, these fears of negative

evaluation were evident in a non-social setting, and were found to be higher than both women presenting with social phobia and that of women in control groups.

The link between anxiety and bulimia is further strengthened by Bulik et al., (submitted) with evidence to support previous research (e.g., Schwalberg, Barlow, Alger & Howard, 1992) concerning the co-morbidity of eating and anxiety disorders. This study found 64% of women with bulimia also reported some form of anxiety disorder. High co-morbidity of anorexia nervosa in women with anxiety disorders was also found in a supportive study Sullivan, Bulik and Fear (in progress), in comparison to controls. In cases indicating presence of anxiety disorder, 92% reported anxiety to precede the onset of bulimia. In addition, a study by Joiner, Metalsky & Wonderlich (1995) found that in subjects who indicated a negative attribution style, bulimic symptoms were found to precede the onset of depressive symptoms.

Combined, this research suggests that the strict dieting behaviour central to bulimia, may be enlisted in an attempt to modulate underlying states of anxiety (see Ward, Hudson & Bulik, 1993, for supportive evidence) and that failure in control-based dieting may result in the onset of depression.

Scores on measures reflecting bulimic behaviour, have been significantly related to both current, and lifetime affective disorder diagnosis (Sunday, Levey & Halmi, 1993) and measures indicating difficulties with anger, depression, interpersonal relationships, impulse control and identity issues (Root & Friedrich, 1989). Women with bulimia also report higher use of affect altering substances such as alcohol and cigarettes, compared to both women with anorexia and healthy controls (Bulik, Sullivan, Epstein & McKee, 1992).

Humphrey et al. (1988) provide an explanation for the inability of individuals to regulate their affective states, they state in response to similar suggestions made by others (e.g., Gedo, 1979; Swift et al., 1984; and Goodsitt, 1983) that "If the mother, serving as an auxiliary ego, is unable to provide the

needed pacification, or does so only on an inconsistent basis, then the infant cannot learn to perform this essential function for itself or to internalise it. The pathological result is a chronic deficiency of the ego or self in the capacity to regulate tension, mood and self-esteem" (p.341).

The ability of caregiver's to encourage autonomy while concurrently providing adequate empathy and nurturance, is thought to contribute to defence development, which in itself is purported to indicate a child's level of psychological maturity. For example, deficits in parental encouragement of autonomy are believed to result in personality formation based on primitive defenses such as acting out, and are suggested to be analogous to personality disorders. In contrast, parenting which supports autonomy is thought to result in personality organisation based on mature defenses such as suppression which indicates healthy personality organisation (Steiger, van der Freen, Goldstein & Leichner, 1989).

Empirical support for the relevance of this concept to bulimia is provided, whereby eating disordered individuals were found to exhibit significantly more primitive defenses and less mature ones, when compared to controls (Steiger et al., 1989). Thus suggesting, deficits in autonomic functioning within the eating disordered individual is indicative of personality disturbance, reflected in a characteristic type of defence development.

Humphrey & Stern (1988) cite numerous authors who have identified failures within the early caregiving environment in providing affirmation and empathy of separate identities within eating disordered individuals (e.g., Johnson & Conners, 1987; Masterson, 1977; Minuchin et al., 1978; Palazzoli, 1978; Stern, Whittaker, Hagemann, Anderson & Bargman, 1981).

Humphrey et al. (1988) suggest that in contrast to anorexia nervosa, where the individual's autonomy is discouraged and dependent behaviours rewarded (e.g., Masterson, 1977), bulimia sufferers face problems with the development of

autonomy due to the conflicting messages they receive from caregiver's. Inconsistent responses are thought to be evoked by any behaviour which does not directly apply to the caregiver's needs, including that towards development of separate identity. Consequently the developing sense of self is discouraged from true autonomic functioning, through either ambivalent and/or hostile responses from the caregiver.

The above literature suggests that difficulties with affect regulation, autonomy, impulse control and depression are common to women with bulimia, and that it is highly plausible that these difficulties are manifestations of a general insecure attachment organisation.

Behavioural plans

Intrinsic to the explanation of internal working models described by Collins et al. (1994) is the component involving a collection of behavioural plans organised with specific reference to the attainment of attachment related goals.

As a result of attachment experiences an individual is thought to develop automatically evoked "if-then" production rules (cf Shaver et al., 1994). This procedural knowledge, is thought to influence how future experiences are processed, in an automatic manner (see Fletcher & Thomas, 1996).

Women with bulimia are found to exhibit distorted cognitive styles that may be causally linked to both maintenance of their symptoms and to the relapse process (Ward et al., 1993). For example, research findings suggest that individuals with bulimia portray unrealistic goals concerning dieting and distorted cognition's such as overgeneralisation and selective abstractation, (e.g., Mizes, 1988). As a result they set goals and engage in behaviour which is aimed at unsustainable restraint and control.

The behavioural manifestation of bulimia which is typified by fluctuation between periods of strict dietary control and loss of control via binge eating, has

been found to be similarly manifested within the cognitive processing of women with bulimia. Ward et al. (1996) posit that women with bulimia fail to achieve mental control via unsuccessful attempts to suppress thoughts relating to forbidden foods. For example, the suppression strategies used by these individuals are thought to conflict with complex cognitive processing rules. As a consequence, these attempts to banish food related thoughts lead to ironic effects which result in the escalation of these unwanted thoughts under stressful situations. Thus leading to a loss of mental control displayed behaviourally in a lapse of abstinence.

Once this abstinence rule is inevitably broken, the bulimic individual is considered to engage negative attribution's concerning the reason for their behaviour, and these attribution's are thought to lead to the onset of the binge-purge cycle. This concept has come to known as the abstinence violation effect, and posits that the types of cognition's and affect experienced following a lapse in abstinence (Marlatt & Gordon, 1985) are critical in determining full relapse in bulimic symptoms (see Ward et al., 1993).

With reference to attachment concepts, individuals whose attachment needs have not been consistently met, often exhibit secondary or defensive strategies to ensure fulfilment of attachment related goals. Furthermore research has shown a relationship between symptom expression in psychiatric populations and the type of secondary strategies enlisted. For example, dismissive attachment has been associated with strategies designed to minimise distress and is evident in symptom expression which downplays yet simultaneously expresses that distress, such as conduct disorder and substance abuse. In contrast, individuals with anxious attachment organisation have been found to exhibit strategies which maximise distress, evident in corresponding symptom expression such as affective disorders (Rosenstein et al., 1996).

Considering the frequent co-morbidity between bulimia and affective disorders, it is possible that the type of strategy used by individuals with bulimia is aimed at maximising negative affect in an attempt to keep track of an unreliable caregiver. For example, Armstrong et al. (1989) suggest that due to the cultural and familial importance connotated with thinness, the anxiously attached individual may be more likely to engage in dieting behaviours as a means of gaining and controlling the availability of attachment figures. Accordingly, difficulties with affect regulation, depression, low and unstable self-esteem and feelings of hopelessness, may be the result of failed attempts in dieting and subsequent control of the availability of important relationships (see also Collins et al., 1990; Feeney et al., 1990; Kobak et al., 1988).

Thus analysis of dynamics within bulimic symptomatology may provide evidence of a secondary or defensive attachment strategy in practice. The specific type of which is aimed at hyperactivating attachment behaviour in an effort to control the availability of significant others, and is result of an anxious attachment organisation.

Beliefs, attitudes and expectations

A subsequent component thought to make up internal working models as proposed by Collins and Read involves the beliefs, attitudes and expectations concerning self and other, developed by the child in response to their caregiving environment. These generalisations are thought to develop as a result of actual experiences which are organised into abstract schemas. These are in turn thought to guide global feelings and expectations concerning the self and others.

Humphrey et al. (1988) propose that through failures in the caregiving environment in providing nurturance, soothing and tension regulation. In addition to discouragement of independent behaviour leading towards autonomy. The developing of self is halted at the part-self, part-objects level. This implies, that

the individual remains dependent on others for completion of self, and psychological existence. This places them especially vulnerable to criticism and neglect, which they readily incorporate into their fragile ego.

Similarly, Goodsitt (1984) argues, individuals with bulimia are hypothesised to develop with deficits in their organisation of self, and this may explain central features of bulimic behaviour, for example, "(1) the pervasive limit-setting and self-control problems that support pathological eating practices and (2) the identity and self-acceptance problems that render some individuals prone to chronic struggles against their natural biological endowments, and 'exquisitely permeable' to cultural pressures towards slimness." (cf Steiger, Van der Freen, Goldstein & Leichener, 1989, p.138).

According to Klein (1975) healthy development can be characterised by idealisation of specific behaviour and people giving way to more complete and realistic interpretations of others and the world. This may provide an example for the clinical observation regarding families of women with bulimia as being idealistic, portraying a charade of perfectionism (Humphrey et al., 1988). Additionally, Western society places further pressure on the individual through the dictation of thinness as the cultural ideal (Garner et al., 1980; Anderson et al., 1990) which is reflected in the high incidence of body dissatisfaction reported in nonclinical populations involving college-age women (e.g., Klemchuk et al., 1990).

With reference to attachment concepts, research conducted by Feeney (1995) reports that anxiety over relationships, corresponding to anxious attachment was found to be positively associated with measures reflecting desired changes in the areas of diet and weight control. This being indicative of the desire to please others and sense of self-worth based on the approval of others associated with anxious attachment (Bartholomew et al., 1991).

Goals and motives related to attachment

The collection of goals and motives related to attachment form another core feature of Collins & Read's explanation of internal working models developed as a result of attachment experiences. For example, as a result of a sensitive caregiving environment, a securely attached person is likely to form a positive representation of self and others, resulting in a desire for closeness, and interactions with others. In contrast insecurely attached individuals may be motivated to form relationships characterised by excessive closeness, as in anxious attachment, or relationships reflecting low levels of intimacy, as in the case of avoidant attachment.

Sours (1980) posits that healthy personality development can be characterised by the ability to form stable object relations or reliable, mutually satisfactory relationships with others. Studies using object relations measures have found high scores on measures of bulimia to be positively associated with the severity of object relations disturbance, when compared to healthy controls (e.g., Becker et al., 1986; Humphrey, 1986b).

Object relations disturbance has also been successfully studied with reference to bulimia and attachment theory. For example, object relations deficits were found in response to subscales of insecure attachment and social incompetence in women reporting eating disorders symptoms (Heesacker et al., 1990).

Thus bulimic symptoms may be indicative of deficits in personality development, at the level of stable object relations. This concept is supported by literature concerning the quality of interpersonal and adult love relationships in individuals with bulimia. For example, recent research has explored the bulimic individual's functioning and satisfaction within interpersonal relationships and finds bulimic symptoms to be associated with deficiencies in the areas of; social adjustment, heterosexual relationships, interpersonal interactions, perceived

support from friends, and social competence, (Thelen et al., 1990; Reiss & Johnson-Sabine 1995; Grissett et al., 1992).

Additionally, research has found women with bulimia to not differ from healthy controls as to the quantitative aspects of romantic relationships (Reiss et al., 1995; Pruitt, Kappius & Gorman, 1992) however they were found to differ in the qualitative nature of their relationships; whereby women with bulimia reported an inability to maintain a stable marital relationship (Russell, 1979) and global dissatisfaction with marital relationships, equal in intensity to subjects in treatment for marital distress, and significantly more than control couples (Van Buren & Williamson, 1988). Furthermore, significantly more individuals with bulimia report having experienced repeated physical battery within their past relationships, compared with individuals in control groups (Kaner, Bulik & Sullivan, 1993).

Both psychodynamic (Bruch, 1973) ad feminist (Boskind-Lodahl, 1976) perspective's based on clinical observations, suggest that women with bulimia have a desire to please others, and tend to base their sense of self-worth on the approval of others. This often causes them to become hypervigilent and overly dependent within close relationships, and results in a self-perpetuating pattern of rejection. Comparable patterns are consistently reported within the attachment literature, with specific reference to anxious attachment (e.g., Bartholomew, 1990).

The above review of bulimia via the concept of internal working models finds that this syndrome is often characterised by thoughts and behaviour indicative of an insecure attachment organisation, in particular that of anxious attachment thought to result from inconsistent caregiving. Subsequently, the following hypotheses are formulated.

Hypothesis One: Attachment Styles and Bulimia

Bulimic symptoms will be found to be significantly related to insecure attachment, in particular anxious attachment. For example, scores on the bulimia subscale of the eating disorder inventory (EDI; Garner, Olmstead & Polivy, 1983) will form a significant positive correlation with scores reflecting anxious attachment within the context of Simpson's (1990) close relationship scale.

Hypothesis Two: Anxious Attachment Within Close Relationships and Dieting Behaviour

Anxious attachment within close relationships will be significantly related to dieting behaviour. For example, scores reflecting anxiety within close relationships (Simpson, 1990) will be positively correlated with scores indicating dieting behaviour (Stunkard & Messick, 1985).

Hypothesis Three: Relationship Satisfaction, Attachment Styles and Bulimia

Secure attachment within close relationships will be significantly related to positive relationship characteristics such as global relationship satisfaction, trust and commitment, and negatively associated with bulimia. An inverse pattern will be found in individuals reporting insecure attachment within close relationships. For example, high scores on measures reflecting anxious and avoidant attachment will be negatively associated with measures reflecting high levels of global relationship satisfaction, trust and satisfaction within close relationships.

CHAPTER TWO

METHOD

Participants

120 participants were recruited for this study from the University of Canterbury campus. These individuals were chosen according to a criteria specification that they be female and aged between 18-40 years of age. This criteria was chosen due to literature suggesting bulimia is most often found within college-aged women (see Thelen et al., 1990). Thus enabling the small sample size to capture bulimic behaviour within a representative population.

Questionnaire construction

The self-report questionnaires administered to subjects (see Appendix) aimed to address the hypotheses formulated in chapter one, by measuring participants attachment style within close adult relationships, eating behaviour related to bulimia, degree of dietary restraint, and relationship satisfaction.

Subjects completed three questionnaires, and the fourth measuring relationship satisfaction was required to be completed only by those who were currently involved in a romantic relationship.

Questionnaire 1: Eating Disorder Inventory -bulimia subscale

The Eating Disorder Inventory (EDI; Garner et al., 1983) is a self-report questionnaire consisting of eight subscales designed to assess behavioural and psychological traits associated with eating disorders (Schoemaker, van Strien & van der Staak, 1993).

This scale is considered to be a good screening instrument within clinical populations, (cf, Schoemaker et al., 1993), and with increased sensitivity of items by coding as suggested by Garner (1990), the EDI is considered to be a good predictor of eating disorder symptoms within nonclinical populations also

(Schoemaker et al., 1993). One subscale of the EDI is designed to measure behavioural traits common to bulimia specifically and was used in this study accordingly.

The bulimia subscale consists of 7 items in which participants are asked to respond on a 6-point likert scale (never to always). The bulimia subscale of the EDI is shown to be reliably associated with eating disorder symptomatology and demonstrates good prognostic utility (e.g., Norring, 1990; Welch & Hall, 1990). Scores were added to yield one total score, with highest scores representing greatest bulimic symptoms. One item concerning thoughts of vomiting was rephrased in order to assess actual vomiting behaviour, and a direct question of laxative abuse was also included. Therefore the revised EDI subscale measuring bulimic behaviour consisted of the following 8 items.

(1) I eat when I am upset, (2) I stuff myself with food, (3) I have gone on eating binges where I felt that I could not stop, (4) I think about bingeing (overeating), (5) I eat moderately in front of others and stuff myself when they're gone, (6) I eat or drink in secrecy, (7) I deliberately vomit after eating to avoid weight gain, (8) I use laxatives to help control my weight.

Possible scores on the scale ranged from 8 to 48, with a mean response score of 14.75, and a standard deviation of 4.65 (see Figure 1). The EDI bulimia subscale demonstrated good internal consistency, i.e., alpha = .82, and item-total statistics ranging from r = .43 to r = .72.

Questionnaire 2: Close Relationship Scale

The original measure of adult attachment styles designed by Hazan et al. (1987) consisted of three paragraph long prototypes, from which subjects were required to select one which was most descriptive of their own experiences and emotions felt within close relationships. Since this scale was introduced, a number of modifications have been made, including a likert response scale for the paragraphs (Levy et al., 1988), the development of multi-item scales (Collins et

al., 1990; Feeney et al., 1994; Simpson, 1990) and the inclusion of a fourth prototype (Bartholomew, 1990). All of these scales originate from the original forced-choice measure (see Kirkpatrick et al., 1994).

Continuous measures of attachment style are favoured to the original categorical Hazan and Shaver measure, for a variety of methodological and theoretical reasons. Accordingly, the attachment style measure used in this study, was that composed by Simpson (1990) which decomposes the original Hazan & Shaver measure into 13 continuous responses, each replying to a likert-type scale with responses ranging from *strongly disagree* (1) to *strongly agree* (7). Four new items were added to accommodate relevant research findings concerning internal working models of relationships, within the adult attachment literature (e.g., Collins et al., 1990; Hazan et al., 1987; Simpson, 1990; Simpson et al., 1992). Respondents were asked to answer the following questions in reference to their romantic close relationships *in general*.

(1) I find it relatively easy to get close to others, (2) I'm not very comfortable having to depend on other people (reverse scored), (3) I'm comfortable having others depend on me, (4) I rarely worry about being abandoned by others, (5) I don't like people getting too close to me (reverse scored), (6) I'm somewhat uncomfortable being too close to others, (7) I find it difficult to trust others completely, (8) I'm nervous whenever anyone gets too close to me, (9) Others often want me to be more intimate than I feel comfortable being, (10) Others often are reluctant to get as close as I would like, (11) I often worry that my partner(s) don't really love me, (12) I rarely worry about my partner(s) leaving me (reverse scored), (13) I often want to merge completely with others, and this desire sometimes scares them away, (14) I'm confident others would never hurt me by suddenly ending our relationship (reverse scored), (15) I usually want more closeness and intimacy than others do, (16) The thought of being left by others rarely enters my mind, (17) I'm confident that my partner(s) love me just as much as I love them.

Prior to these scores being computed, the 4 items worded in a negative direction were rescored. Internal reliability coefficients for the secure, avoidant

and anxious dimensions were; .50, .55, and .69, respectively. Item-total correlations ranged from $\underline{r} = .12$ to $\underline{r} = .69$. Subjects who were more anxiously attached were significantly less secure ($\underline{r} = .24, p < .05$). Additionally subjects who were more securely attached were significantly less avoidant ($\underline{r} = -.50, p < .001$). No significant relationship was found between subjects reports of anxiety and avoidance within relationships ($\underline{r} = .04$). These interscale relationships replicate findings from Simpson's (1990) research.

Questionnaire 3: Three Factor Eating Questionnaire- subscale

The revised Three Factor Eating Questionnaire (TFEQ Stunkard et al., 1985) is a 51 item questionnaire that contains a 21 item subscale measuring cognitive restraint. The factor structure of the cognitive restraint subscale is reported as being robust (Stunkard et al., 1985) with confirmatory factor analysis replicating this finding (Ganley, 1988; Hyland, Irvine, Thacker, Dann & Dennis, 1989). Allison, Kalinsky & Gorman, (1992) compared three subscales measuring restraint and found the TFEQ to have the best discriminant validity with respect to social desirability, and least susceptible to dissimulation, in comparison to the other two scales. In addition, they found the TFEQ to demonstrate high test-retest reliability $\underline{r} = .91$ and internal consistency i.e., alpha = .90. This being similar to results obtained by Stunkard and Messick.

Participants were asked to respond to a likert-type scale, with responses ranging from (rarely, never, not at all, etc) corresponding to a score of 1, to items including (always, very much, never etc) corresponding to a score of 4. For item 21, scores ranged from a possible 0 to 5, as suggested by the original format design (Stunkard et al, 1985). Participants scores on these items were summed to yield one total score, whereby higher scores indicated greater cognitive restraint. Items 1 to 8 were changed from the original dichotomous true-false format, to a likert scale which corresponded to the rest of the scale items. Items 3, 6, and 9

were reverse scored to control for acquiescence response biases. The TFEQ subscale measuring cognitive restraint reads as follows;

(1) When I have eaten my quota of calories, I am usually good about not eating any more, (2) I deliberately take small helpings of food as a means of controlling my weight, (3) Life is too short to worry about dieting, (4) I have a pretty good idea of the number of calories in common food, (5) While on a diet, if I eat food that is not allowed, I consciously eat less for a period of time to make up for it, (6) I enjoy eating too much to spoil it by counting calories or watching my weight, (7) I often stop eating when I am not really full, as a conscious means of limiting the amount that I eat, (8) I consciously hold back at meals in order not to gain weight, (9) I eat anything I want, any time I want, (10) I count calories as a conscious means of controlling my weight, (11) I do not eat certain foods because they make me fat, (12) I pay a great deal of attention to changes in my figure, (13) How often are you dieting in a conscious effort to control your weight?, (14) Would a weight fluctuation of 5 lbs (approximately 2 kg's) affect the way you lived your life? (15) Do your feelings of guilt about overeating help you to control your food intake? (16) How conscious are you of what you are eating ? (17) How frequently do you avoid 'stocking up' on tempting foods? (18) How likely are you to shop for low calorie foods? (19) How likely are you to consciously eat slowly in order to cut down on how much you eat? (20) How likely are you to consciously eat less than you want? (21) On a scale of 0 to 5, where 0 means no restraint in eating (eating whatever you want, whenever you want it) and 5 means total restraint (constantly limiting food intake and never 'giving in'), what number would you give yourself?

Possible scores on the scale ranged from 20 to 85, with a mean response score of 41.68. The internal reliability coefficent for the total scale =.94, with item-total correlations ranging from $\underline{r}$ = .21 to $\underline{r}$ = .78.

Questionnaire 4: Relationship Satisfaction Scale

The relationship satisfaction scale (Fletcher, 1995) was designed to assess global satisfaction within romantic relationships. It includes 24 items with 7-point Likert scales, with items rated from *not at all* (1) to *extremely* (7). The

relationship satisfaction scale is composed of eight subscales measuring; happiness, commitment, intimacy, trust, passion, romance, love and understanding within relationships. This measure is a new one and has not received detailed psychometric or validity testing. However, it does possess high face validity and is very similar to many other measures in the relationship area (see Fletcher & Fitness, 1996).

(1) How satisfied are you with your relationship? (2) How content are you with your relationship? (3) How happy are you with your relationship? (4) How committed are you to your relationship? (5) How dedicated are you to your relationship? (6) How devoted are you to your relationship? (7) How close is your relationship? (8) How intimate is your relationship? (9) How connected are you to your partner? (10) How much do you trust your partner? (11) How honest is your partner with you? (12) How sincere is your partner with you? (13) How passionate is your relationship? (14) How lustful is your relationship? (15) How sexually intense is your relationship? (16) How romantic is your relationship? (17) To what extent do you and your partner go out of your way to make each other feel special? (18) To what extent do you and your partner surprise one another with small gifts, notes, cards, flowers, special treats, etc? (19) How much do you love your partner? (20) How much do you adore your partner? (21) How much do you cherish your partner? (22) How well do you know your partner? (23) How well do you understand your partner? (24) How well can you read your partner?

Internal consistency for the whole scale is high with an alpha of .96. Alpha's for the subscales are also high and as follows; happiness (items 1 to 3) = .95; commitment (items 4 to 6) = .96; intimacy (items 7 to 9) =.89; trust (items 10 to12) = .77; passion (items 13 to15) = .81; romance (items 16 to18) = .87; love (items 19 to 21) = .92; understanding (items 22 to 24) = .82. Item-total statistics for the scale range from $\underline{r}$ = .29 to $\underline{r}$ = .90. These consistency estimates suggest the scale can be used either as one scale measuring perceived relationship satisfaction, or in terms of subscales.

Research procedures

Recruitment of agencies and administration of questionnaires.

Following approval by the University of Canterbury Human Ethics Committee, posters requesting participants and containing information relevant to the study, were positioned around the university campus. Individuals who responded to these requests for research participants via telephone, arranged to meet with the researcher at their convenience to receive information sheets and questionnaires. Subjects were informed of the study through the information sheet, which stated the voluntary, anonymous and confidential nature of their participation (see Appendix).

The researcher also approached women around the campus asking them if they would like to participate in the study. Those who agreed to participate after reading the information sheet, were given the questionnaires and asked to complete them in a private setting. The researcher then agreed to meet them with the completed questionnaires at a mutually convenient time. Following participants completion of the questionnaires, the researcher immediately checked for missing data (informing the participants she was doing this). In the meantime, subjects who desired, were offered the chance to enter a cash incentive draw. Finally, subjects were given their incentive ($1 Instant Kiwi ticket) and thanked for their participation.

CHAPTER THREE

RESULTS

Descriptive Analyses

Table 1 shows the minimum, maximum, mean and standard deviation scores on measures of attachment, bulimia, dieting and relationship satisfaction for subjects both within romantic relationships and not involved in romantic relationships.

Table 1

Descriptive Statistics for Total Sample

	In Romantic Relationships				Not in Romantic Relationships			
Measure	Min. Score	Max. Score	*M*	*SD*	Min. Score	Max. Score	*M*	*SD*
Attachment Styles								
Avoidant	6	27	16.5	4.38	7	34	18.9	5.33
Anxious	7	35	19.3	6.22	6	37	20.2	6.01
Secure	18	39	28.1	4.24	10	38	25.3	5.26
Eating Disorder Inventory								
Dieting subscale	9	34	14.6	4.73	9	29	14.9	4.61
Three Factor Eating Questionnaire								
Dieting subscale	21	74	39.2	11.9	25	79	44.3	12.1
Relationship Satisfaction Scale								
Total Satisfaction	60	166	134	23.6	—	—	—	—
-subscales								
Happiness	6	21	16.7	3.75	—	—	—	—
Commitment	3	21	17	4.52	—	—	—	—
Intimacy	3	21	17.3	3.83	—	—	—	—
Trust	7	21	18	3.12	—	—	—	—
Passion	5	21	16.1	3.59	—	—	—	—
Romance	4	21	14.7	4.37	—	—	—	—
Love	5	21	16.7	3.99	—	—	—	—
Understanding	11	21	17.3	2.49	—	—	—	—

Note: $N = 61$ for subjects in relationships and $N = 59$ for those not in relationships.

Correlations Between Key Variables

It was predicted that higher scores on the bulimia subscale, reflecting greater bulimic symptomatology, would be positively related to anxious attachment within close relationships. This hypothesis was confirmed, whereby women with bulimia who were involved in romantic relationships were significantly more likely to report anxiety within close relationships (see Table 2). Additionally, their romantic relationships were characterised by significantly low levels of overall satisfaction.

In contrast, women who were secure within close relationships were significantly more likely to enjoy overall satisfaction, happiness, commitment, intimacy, trust and love within their romantic relationships. These individuals were not more or less likely to report bulimia or dieting behaviour.

Women with an avoidant attachment style within close relationships were not more or less likely to report bulimic or dieting behaviour. However these women were significantly less trusting of their romantic partners and reported feelings of being misunderstood within their romantic relationships.

Subjects who were secure within close relationships in general, but were not at the time of study involved in a romantic relationship, were significantly less likely to report bulimic symptomatology or engage in dietary restraint. Conversely, women with an avoidant attachment style were significantly more likely to engage in dieting behaviour when not involved in a romantic relationship.

Anxiously attached women not involved in romantic relationships were not more or less likely to report bulimia or dieting behaviour. Thus suggesting bulimia to be more of a function of anxiety within adult love relationships rather than close relationships in general.

It was hypothesised that due to the co-morbidity between bulimia and dieting (or restrained eating) reflected in earlier research, that insecure attachment

styles, in particular anxious attachment, should be significantly related to dieting behaviour. Both the former and latter predictions were confirmed with women with bulimia being significantly more likely to engage in dietary restraint, regardless of whether or not they were involved in romantic relationships.

A new variable reflecting relationship status was created, whereby subjects who were currently involved in romantic relationships received a score of 2, and those not currently in a romantic relationship, received a score of 1. This enabled investigation into the links between attachment styles, bulimia and relationship status.

Women with an avoidant style within close relationships, were found to be significantly unlikely to be currently involved in a romantic relationship, $\underline{r} = -.25$ ($p < .007$). Securely attached respondents in comparison, were significantly more likely to be involved in a romantic relationship, $\underline{r} = .28$ ($p < .002$). Anxiety within close relationships not found to be significantly related to relationship status, $\underline{r} = .07$ (ns).

Interestingly, higher scores on the bulimia measure were not significantly related to relationship status, $\underline{r} = .03$, (ns), indicating that individuals with bulimia were not more or less likely to be involved in romantic relationships. Thus confirming that it is the qualitative rather than quantitative nature of relationships which is more influential in the expression of bulimia.

Table 2

Pearson Product-Moment Correlations Between Measures of Attachment Styles, Bulimia, Dieting and Relationship Satisfaction

	Attachment Style			
MEASURE	Secure	Anxious	Avoidant	*df*
Subjects Involved in a Romantic Relationship				
Eating Disorder Inventory				
Bulimia subscale	-.16	.37**	.04	61
Three Factor Eating Questionnaire				
Dieting subscale	-.09	.30*	-.08	61
Relationship Satisfaction Scale				
Overall Satisfaction	.27*	-.27*	-.06	61
-subscales				
Happiness	.26*	-.22	.02	61
Commitment	.32**	-.07	-.15	61
Intimacy	.26*	-.09	-.18	61
Trust	.35**	-.04	-.33**	61
Passion	-.10	-.06	-.02	61
Romance	.19	.00	-.22	61
Love	.26*	-.08	-.23	61
Understanding	.10	-.02	-.45***	61
Subjects Not Involved in a Romantic Relationship				
Eating Disorder Inventory				
Bulimia subscale	-.47***	.16	.23	59
Three Factor Eating Questionnaire				
Dieting subscale	-.38**	.26*	.34**	59

All p values are for two-tailed tests; * $p < .05$, ** $p < .01$, *** $p < .001$, ****$p < .0001$.

Frequency of Attachment Styles

Subjects were assigned to one attachment category in order to assess the frequency of attachment classifications. Subjects were classified as belonging to one of the three attachment styles as proposed by Hazan et al. (1987), by dividing their total scores on each of the three attachment dimensions (Simpson, 1990), by the number of items comprising the index. The highest of the three resulting figures determined the attachment classification (see Keelan et al., 1994). As a result, the frequency distributions were, 64% of subjects classified as securely attached within their close relationships, 24% as avoidant and 12% as anxious. These frequencies approximate those reported in earlier research (e.g., Hazan et al., 1987; Keelan et al., 1994).

Hierarchical Multiple Regression Analyses

Interpretation of the previous correlational results is complicated by the fact that several of the key measure share variance, i.e., bulimia and dieting. To take this into account and examine the independent contribution of attachment on bulimia, a series of hierarchical multiple regressions were performed (see Table 3 and Appendix). Simpson's three attachment dimensions were computed to form one variable representing the theoretical construct of attachment. Scores on the attachment index were computed by summing the anxious and avoidant indexes and subtracting these from the secure index, for example (Secure - [Anxious + Avoidant]).

Table 3

Standardized Regression Coefficients From Hierarchical Regressions with Bulimia as the Dependent Variable

	Dependent Variable
Independent Variable	Bulimia
Subjects Involved in a Romantic Relationship	
Attachment	-.33**
Avoidant	.04
Anxious	.37**
Secure	-.16
Dieting	.59****
Relationship Satisfaction	-.31*
Subjects Not Involved in a Romantic Relationship	
Attachment	-.26
Avoidant	.23
Anxious	.16
Secure	-.47***
Dieting	.53****
Total Sample	
Attachment	-.29**
Avoidant	.14
Anxious	.27
Secure	-.32***
Dieting	.55****
Relationship Satisfaction	-.31*
Relationship Status	-.03

* $p < .05$, ** $p < .01$, *** $p < .001$, ****$p < .0001$

As can be seen by Table 3, an insecure attachment organisation, anxiety within close relationships, dieting behaviour and low relationship satisfaction were significant independent predictors of bulimia within women involved in romantic relationships.

For those not involved in romantic relationships dieting behaviour was found to significantly influence bulimia. In contrast, a secure attachment style was found to significantly guard against bulimic expression, with a high inverse relationship discovered among these variables.

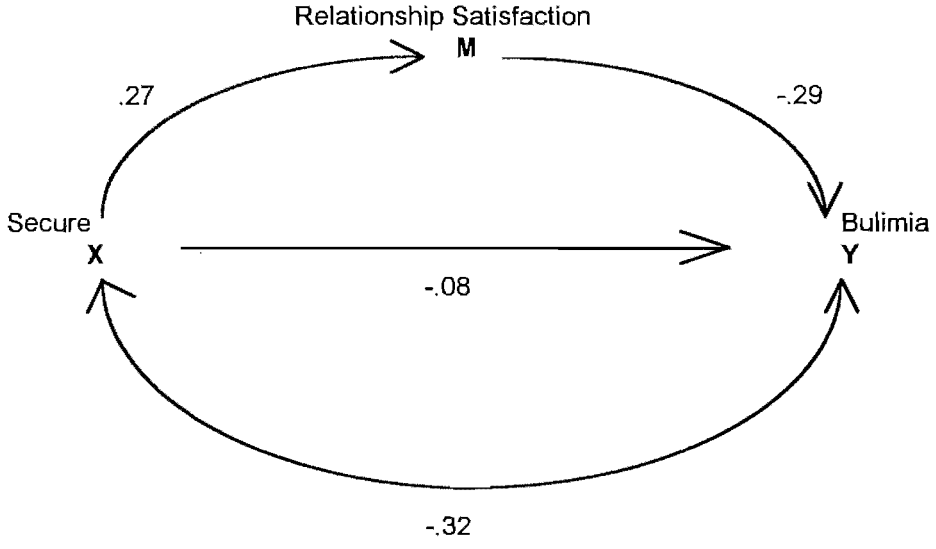
In order to test whether the qualitative nature of relationships, measured by relationship satisfaction could be mediating the link between secure attachment and bulimia, a mediational analyses was performed using data from the total sample.

For the mediational model to be supported, various conditions need to be met (Boven & Herry, 1986). First secure attachment style needs to significantly predict both bulimia and relationship satisfaction (the mediating variable). Second, the mediator (satisfaction) should predict bulimia when controlling for the secure attachment style. Third, the link between secure attachment style and bulimia should decrease close to zero when controlling for the mediator (relationship satisfaction).

As can be seen in Figure 1, all these conditions are met, so the mediational model is completely supported. More securely attached women are more satisfied with their relationships which in turn is related to lower levels of bulimia. The effect that secure attachment has on Bulimia is not direct, but is a function of relationship satisfaction within adult love relationships.

Figure 1

Mediational Model



CHAPTER FOUR

DISCUSSION

Frequency of attachment styles

The frequency of the three attachment styles within the population under investigation, was found to be similar in proportion to frequencies found within the adult attachment literature, for example (Collins et al., 1990; Crowell et al., 1988; Feeney et al., 1990; Hazan et al., 1987; Kobak et al., 1988; Main et al., 1984; Main et al., 1985). Thus, the measure of attachment styles (Simpson, 1990) can be viewed as a reliable predictor of attachment distribution within the general adult population.

Attachment styles, bulimia and dieting

Anxious attachment is thought to involve anxiety concerning the availability and trustworthiness of significant others, and is thought to preclude the development of a cohesive sense of self. Due to the parallel findings within the literature on bulimia in terms of insecure attachment to parents, difficulties with affect regulation and autonomy focused behaviour (Armstrong et al., 1989; Becker et al., 1987; Bulik et al., (submitted); Cole-Detke et al., 1996; Heesacker et al., 1990; Kenny et al., 1992) it was predicted that insecure attachment, in particular anxiety within adult love relationships would be associated with bulimia symptoms. This concept was supported whereby women with bulimia who were involved in romantic relationships, were significantly more anxious. Thus extending results from previous research concerning anxious attachment and bulimia, into the realm of adult love relationships.

Additionally, anxiously attached women, regardless of being involved in a romantic relationship or not, were significantly more likely to engage in dieting behaviour. This finding supports research indicating anxiety over relationships to be positively correlated with desired changes to one's lifestyle in the areas of

weight and diet (Feeney, 1995) and is consistent with the link between anxiety within relationships and dependence on the approval of others (Bartholomew et al., 1991).

Similarly, women who were not involved in a romantic relationship but displayed an avoidant attachment style within their close relationships in general, were significantly more likely to diet. The measure of avoidance used in this study (Simpson, 1990) is thought to reflect an active fear and simultaneous desire for intimacy (Keelan et al., 1994) corresponding to Bartholomew's (1990) fearful avoidance category of attachment. It is therefore possible that high degree of self-doubt and self-consciousness associated with fearful attachment is reflected in a sensitivity to cultural pressures towards thinness (Kenny et al., 1992) and dieting behaviour as a means to this end. The strong relationship found between bulimia and dieting replicates consistent findings within the literature (see Bulik, 1995).

Attachment styles, relationship satisfaction and bulimia

Both individuals with bulimia and individuals displaying an anxious attachment style have been shown to have difficulty in expressing intimacy and maintaining satisfying romantic relationships (Pruitt, et al., 1992; Root et al., 1989; Armstrong et al., 1989). It was therefore predicted that both these groups would display low levels of relationship satisfaction, within their current romantic relationships.

As expected, women who were anxiously attached reported being involved in relationships characterised by low overall satisfaction, although dissatisfaction within other areas of their relationship did not approach significance. Avoidant attachment was manifested within romantic relationships characterised by significantly low levels of trust and understanding (Collins et al., 1990; Simpson, 1990). Securely attached subjects in contrast, were involved in romantic relationships that were significantly more satisfying, happy, committed,

intimate, trusting and loving. These results are generally consistent with previous research concerning relationship characteristics within attachment organisations (e.g., Simpson et al., 1992).

Avoidant attachment within close adult relationships was significantly associated with subjects who were not involved in a romantic relationship. Secure subjects in contrast were significantly more likely to be involved in a romantic relationship. And both bulimia and anxious attachment were not found to be related to the individual's relationship status. Combined these results are consistent with previous research concerning low levels of intimacy preferred by individuals avoidant in attachment (Bartholomew, 1990) deficits in the qualitative, but not quantitative nature of romantic relationships of individual's with bulimia (Reiss et al., 1995; Pruitt, et al., 1992) and the relatively enduring, yet unstable relationships of those anxious in attachment (Kirkpatrick et al., 1994).

An interesting finding concerning a high inverse relationship between secure attachment and bulimia was found for those subjects not involved in a romantic relationship. This suggesting that a secure attachment organisation may act as a buffer to bulimia. A mediational analyses was conducted in order to investigate further the effect secure attachment has on bulimia, and to test whether the qualitative nature of relationships, measured by satisfaction could be mediating the link between secure attachment and bulimia.

The mediational model was supported whereby the effect that secure attachment had on bulimia was not found to be direct, but rather a function of relationship satisfaction within adult love relationships.

Limitations

The exclusive use of female participants in this study poses limitations whereby results cannot be extended to the general population at large. For

example, this sample inevitably precludes the investigation of males who also may suffer from bulimia. Further limitations imposed by this study include the use of a relatively small sample size (N=120), and due to the prevalence of bulimia within the population under study, approximating 2.1% (Wells et al., 1989) the magnitude of findings may be somewhat limited.

Findings within this study must also be viewed within the constraints imposed by self-report research, these include participant biases, and selection affects (Dane, 1990). For example, research may be affected by participant biases, in that subjects may alter information they disclose in order to fulfil expectations concerning social desirability. In addition, participants responding to questionnaires may choose to limit the information they reveal due to its personal nature. This is especially relevant to the current study which investigates sensitive behaviour associated with bulimia.

Selection effects may also be inherent in this study. For example, the researcher approached many potential participants in a face-to-face manner. Those who refused participation in this study, may have been characteristically different from individuals who agreed to participate. This effect was minimised however, by the exclusion of reference to bulimia in the information sheet, instead stating that eating behaviour was to be investigated (see appendix).

Although a semi-structured interview may have been better able to identify individuals with bulimia and their subsequent attachment style. The self-report measures used in this study were adequate in predicting meaningful group differences within the nonclinical population under study. In addition, they "...have the advantages of economy, standard administration, minimal interpersonal contact, potential for mass administration, actuarial scoring, and brief administration" (Garner, Shaver & Rosen, 1992, p. 294). Thus being useful in testing the hypotheses formulated in this study, within a population that would have been unable to be accessed using interview techniques.

Treatment Implications

Earlier we proposed that symptoms associated with bulimia, can be organised within the explanation of internal working models of attachment experience, proposed by Collins et al., (1994). This explanation focused on the motives, goals and behaviour common to bulimia, from an attachment perspective.

Bowlby attributed a considerable amount of psychopathology as resulting from the operation of outdated, inadequate, or conflicting models of attachment. Additionally, he emphasised that conscious examination and subsequent verbal articulation of internal working models is essential for these models to become optimal (Bowlby, 1973; 1980).

Previous researchers have noted the clinical applicability associated with the conscious examination of internal working models of attachment experience. They suggest that attachment theory demonstrates the potential to form the basis of an interpersonal school of psychotherapy, involving therapeutic processes which aim to promote secure and adaptive models of attachment experience. (Bretherton, 1993). Due to findings concerning the link between anxious attachment and bulimic symptomatology, it appears necessary that an individual's model concerning self, others and relationships be addressed within the treatment process.

Ward and colleagues (1996) suggest therapy targeted at specific psychiatric populations can benefit moves towards healthy functioning through the updating of models relating to self and others. However, clinicians must be mindful of monitoring which attachment representation is conscious and therefore able to be articulated during treatment sessions (Fletcher et al., 1995). For example, support and gentle challenging of working models involved in anxious attachment concerning negative self and positive others may be valuable in

altering or updating maladaptive representations concerning important others. Additionally, emphasis is placed on the need for patients to understand the relationship between their emotions and behaviour, in order to facilitate progress toward more adaptive goals and motives in relation to attachment. Furthermore, the strong connection between anxiety and eating disorders, suggests treatment which focuses on the development of adaptive affect regulation skills will be similarly successful.

CHAPTER FIVE

CONCLUSIONS AND SUGGESTIONS FOR FUTURE RESEARCH

The literature cited throughout, in addition to the findings of this study support the view of insecure attachment organsiation within individuals with bulimia. Furthermore, the specific relation between anxiety within adult relationships supports the view of bulimia as being a behavioural manifestation of anxiety concerning the ability to control the availability of important others.

For example, the early caregiving environment is seen to be critical in determining the extent to which a child learns skills associated with successful affect regulation. Through inconsistent or unreliable responses from caregiver's, an individual develops secondary or defensive strategies in order to fulfil attachment goals. Considering also that many research findings and observations within the study of bulimia, are consistent with maladaptive operation of internal working models concerning self and others, it is plausible that failure to control the responses and availability of others may parallel the strict control-based dieting behaviour and loss of control via bingeing characteristic of the bulimia syndrome.

O'Kearney (1995) proposes a model for future research which translates the representational aspects of attachment theory, that is internal working models in relation to attachment, to specific cognitive affective processes. Research interest in the application of attachment theory to the study and treatment of specific psychopathology is reflected in the recent special series devoted to this topic. For example, Main (1996) and del Carmen & Huffman (1996) emphasise the need for future research in the study of developmental manifestations of differences in attachment experience. O'Kearney suggests further that future research needs to map the development of individuals and families who differ on sensitive measures of attachment processes, parent-child, peer, adult-love and

marital relationships, in terms of resilience or manifestation of eating disorder pathology.

In sum, consistent findings throughout the literature which identify a relation between childhood anxiety and insecure attachment to parents, to eating disorder pathology (Bulik, 1995), support the findings of this study concerning anxiety within close adult relationships of women with bulimia. Furthermore, considering the assumption that enduring love relationships are perhaps the most important attachment relationships in adult life (e.g., Bartholomew, 1990) it may be especially fruitful for future research to investigate attachment styles within adult love relationships in terms of specific symptom expression and cognitive affective processing within eating disordered individuals, including those with Anorexia Nervosa. Thus delineating which features of insecure attachment within adult love relationships are specific to eating disorder subtypes, and further strengthening the importance of attachment theoretical constructs to the study of the onset, maintenance and treatment of the eating disorders.

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APPENDICES

WANTED! **Women** 17–45 **years**

I AM CURRENTLY SEEKING FEMALES TO COMPLETE 3 OR 4 BRIEF QUESTIONNAIRES.

YOUR PARTICIPATION WILL CONTRIBUTE TO

RESEARCH INVESTIGATING EATING BEHAVIOUR,

ADULT ATTACHMENT STYLES AND RELATIONSHIP

SATISFACTION.

EACH PERSON WILL RECEIVE : 1 FREE INSTANT KIWI...
(You could win up to $10,000)

PLUS : A chance to win **$250.00 CASH**

FOR MORE DETAILS, PLEASE CONTACT - KELLY HICKMAN
University of Canterbury - Department of Psychology
Phone 385 48 28

UNIVERSITY OF CANTERBURY

DEPARTMENT OF PSYCHOLOGY

INFORMATION

You are invited to participate as a subject in the research project 'Attachment Styles, Eating Behaviour and Close Relationships'.

The aim of this project is to determine the relationship between eating behaviour, tendency to diet, individual attachment styles, and relationship satisfaction.

Your involvement in this project will involve completing four questionnaires, taking approximately 10 minutes to complete. You will be required to complete all four questionnaires only if you are currently involved in a romantic relationship. If you are not currently involved in a romantic relationship, you will be required to complete only the first three questionnaires.

Questionnaires 1 and 2 investigate behaviour related to food. Questionnaire 3 assesses an individual's attachment style within close relationships. Questionnaire 4 investigates satisfaction within the individual's romantic relationship.

The results of the project may be published, but you are assured of complete confidentiality of the data gathered in this investigation. Each questionnaire will be given an individual subject number. No names or contact numbers of the subjects will be required.

The project is being carried out by Kelly Hickman, who can be contacted at 385 48 28. She will be pleased to discuss any concerns you may have about participation in the project.

The project has been reviewed and approved by the University of Canterbury Human Ethics Committee.

You are invited to participate in the research project, Attachment styles, eating behaviour and close relationships. The aim of the project is to determine the relationship between eating behaviour, tendency to diet, individual attachment styles, and relationship satisfaction. The questionnaires are anonymous, and you will not be identified as an informant without your consent. There are no right or wrong answers, please indicate which response best describes your situation. You may at any time withdraw your participation, including withdrawal of any information you have provided. By completing the questionnaire, however, it will be understood that you have consented to participate in the project, and that you consent to publication of the results of the project, with the understanding that anonymity will be preserved.

QUESTIONNAIRE 1

Please answer **all** questions.

(1) I eat when I am upset.

1	2	3	4	5	6	**(please circle one)**
never	rarely	sometimes	often	usually	always	

(2) I stuff myself with food.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

(3) I have gone on eating binges where I felt that I could not stop.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

(4) I think about bingeing (overeating).

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

(5) I eat moderately in front of others and stuff myself when they're gone.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

(6) I eat or drink in secrecy.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

(7) I deliberately vomit after eating to avoid weight gain.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

(8) I use laxatives to help control my weight.

1	2	3	4	5	6
never	rarely	sometimes	often	usually	always

(please check you have answered all questions)

QUESTIONNAIRE 2

Please answer **all** questions, with reference to your romantic close relationships *in general*, by circling **one** number in each scale.

(1) I find it relatively easy to get close to others.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*
(please circle one)

(2) I'm not very comfortable having to depend on other people.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(3) I'm comfortable having others depend on me.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(4) I rarely worry about being abandoned by others.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(5) I don't like people getting too close to me.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(6) I'm somewhat uncomfortable being too close to others.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(7) I find it difficult to trust others completely.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(8) I'm nervous whenever anyone gets too close to me.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(9) Others often want me to be more intimate than I feel comfortable being.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(10) Others often are reluctant to get as close as I would like.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(11) I often worry that my partner(s) don't really love me.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(12) I rarely worry about my partner(s) leaving me.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(13) I often want to merge completely with others, and this desire sometimes scares them away.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(14) I'm confident others would never hurt me by suddenly ending our relationship.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(15) I usually want more closeness and intimacy than others do.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(16) The thought of being left by others rarely enters my mind.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(17) I'm confident that my partner(s) love me just as much as I love them.

strongly disagree 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *strongly agree*

(please check you have answered all questions)

QUESTIONNAIRE 3

Please answer **all** questions.

(1) When I have eaten my quota of calories, I am usually good about not eating any more.

1	2	3	4	**(please circle one)**
rarely	sometimes	usually	always	

(2) I deliberately take small helpings of food as a means of controlling my weight.

1	2	3	4
almost never	seldom	usually	almost always

(3) Life is too short to worry about dieting.

1	2	3	4
never	seldom	usually	always

(4) I have a pretty good idea of the number of calories in common food.

1	2	3	4
not at all	slightly	moderately	very much

(5) While on a diet, if I eat food that is not allowed, I consciously eat less for a period of time to make up for it.

1	2	3	4
never	rarely	often	always

(6) I enjoy eating too much to spoil it by counting calories or watching my weight.

1	2	3	4
never	rarely	often	always

(7) I often stop eating when I am not really full, as a conscious means of limiting the amount that I eat.

1	2	3	4
almost never	seldom	usually	always

(8) I consciously hold back at meals in order not to gain weight.

1	2	3	4
rarely	sometimes	usually	always

(9) I eat anything I want, any time I want.

1	2	3	4
never	rarely	often	always

(10) I count calories as a conscious means of controlling my weight.

1	2	3	4
never	rarely	often	always

(11) I do not eat certain foods because they make me fat.

1	2	3	4
rarely	sometimes	usually	always

(12) I pay a great deal of attention to changes in my figure.

1	2	3	4
not at all	slightly	moderately	very much

(13) How often are you dieting in a conscious effort to control your weight?

1	2	3	4
never	sometimes	usually	always

(14) Would a weight fluctuation of 5 lbs (approximately 2 kg's) affect the way you live your life?

1	2	3	4
not at all	slightly	moderately	very much

(15) Do your feelings of guilt about overeating help you to control your food intake?

1	2	3	4
never	rarely	often	always

(16) How conscious are you of what you are eating?

1	2	3	4
not at all	slightly	moderately	extremely

(17) How frequently do you avoid 'stocking up' on tempting foods?

1	2	3	4
almost never	seldom	usually	almost always

(18) How likely are you to shop for low calorie foods?

1	2	3	4
unlikely	slightly unlikely	moderately likely	very likely

(19) How likely are you to consciously eat slowly in order to cut down on how much you eat?

1	2	3	4
unlikely	slightly likely	moderately likely	very likely

(20) How likely are you to consciously eat less than you want?

1	2	3	4
unlikely	slightly likely	moderately likely	very likely

(21) On a scale of 0 to 5, where 0 means no restraint in eating (eating whatever you want, whenever you want it) and 5 means total restraint (constantly limiting food intake and never 'giving in'), what number would you give yourself?

0
eat whatever you want, whenever you want it

1
usually eat whatever you want, whenever you want it

2
often eat whatever you want, whenever you want it

3
often limit food intake, but often 'give in'

4
usually limit food intake, rarely 'give in'

5
constantly limiting food intake, never 'giving in'

(please check you have answered all questions)

QUESTIONNAIRE 4

(only to be completed if you are currently involved in an intimate relationship)

Please answer **all** questions.

1) How satisfied are you with your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely* **(please circle one)**

2) How content are you with your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

3) How happy are you with your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

4) How committed are you to your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

5) How dedicated are you to your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

6) How devoted are you to your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

7) How close is your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

8) How intimate is your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

9) How connected are you to your partner?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

10) How much do you trust your partner?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

11) How honest is your partner with you?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

12) How sincere is your partner with you?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

13) How passionate is your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

14) How lustful is your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

15) How sexually intense is your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

16) How romantic is your relationship?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

17) To what extent do you and your partner go out of your way to make each other feel special?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

18) To what extent do you and your partner surprise one another with small gifts, notes, cards, flowers, special treats, etc?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

19) How much do you love your partner?

not at all 1 .... 2 .... 3 .... 4 .... 5 .... 6 .... 7 *extremely*

20) How much do you adore your partner?

not at all 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *extremely*

21) How much do you cherish your partner?

not at all 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *extremely*

22) How well do you know your partner?

not at all 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *extremely*

23) How well do you understand your partner?

not at all 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *extremely*

24) How well can you read your partner?

not at all 1 . . . . 2 . . . . 3 . . . . 4 . . . . 5 . . . . 6 . . . . 7 *extremely*

(please check you have answered all questions)

Thank you for your time and participation.