Exploring Depression: Attachment, Intimacy and Personality Traits

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Abstract

Depression is among the most common mental disorders in young Australians. Through evolving theory two depression subtypes, sociotropic (anaclitic) and autonomy (introjective), have emerged. Attachment and intimacy have also been implicated as important to mental health in young adults, and vulnerability to depression has been linked to intimacy, sociotropy, autonomy and attachment. Therefore the aim of the current study was to examine depression in relation to attachment, intimacy, autonomy and sociotropy in young adulthood, in a clinical and community sample. In this context the study also aimed to explore 'experience of intimacy' in young adults (given Erikson's psychosocial model implicating its importance), and its relation to attachment and depression. Further, based on theory of Holmes about the way autonomy and intimacy relate, the study aimed to examine this relationship. There has been limited research exploring all these variables together in the context of depression.

A total of 105 participants were recruited for the current study, with 32 members in the clinical sample and 73 in the community sample. Methods of data analysis were multiple regression, correlational analysis and discriminant function analysis. Results found autonomy, sociotropy, and security of attachment together predicted intimacy, with 30% of the variance accounted for by the model; sociotropy and depression did not predict intimacy; intimacy and autonomy did not share a positive relationship; secure attachment and sociotropy were significant predictors of depression; and attachment, intimacy, sociotropy and autonomy did discriminate between a clinically depressed and community sample, with secure attachment and sociotropy contributing the most to discriminating between the two groups.

While the study had some limitations it contributed to the limited number of studies examining all the variables implicated together, and contributed

significant findings in support of theory. Consideration of the study's limitations pointed to the need to distinguish between problematic autonomy and healthy autonomy. Theoretical and practical implications were discussed together with directions for future research.

Doctor of Psychology Declaration

"I, Theresa Marasco, declare that the Doctor of Psychology (Clinical) thesis entitled **'Exploring Depression: Attachment, Intimacy and Personality Traits'** is no more than 40,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work".

Signature: _____ Date: _____

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Chapter 1

Introduction and Overview

1.1 Background

Depression is prevalent worldwide and is among the leading causes of disability that contribute to the global burden of disease (Churchill, 2010). Depression impacts upon the lives of individuals, and can pose a significant risk of suicide, with over 10 million suicide attempts occurring per year worldwide (Churchill, 2010). In Australia alone, according to the Australian Bureau of Statistics between 2001 and 2010 a total of 22,526 suicide deaths were registered. Over the 10 year period suicide accounted for between 1.6% and 1.9% of all deaths in Australia annually. The figures show a large proportion of these suicide deaths were people aged between 15 and 34 years of age. In light of the link between suicide and depression, these high suicide rates underscore the importance of theory and research exploring depression, vulnerability and risk factors.

Theories, from both psychoanalytic and cognitive orientations and subsequent research studies, have implicated attachment, intimacy and personality traits of sociotropy and autonomy as potential factors posing vulnerability to depression. Further research will inform and contribute to the body of knowledge that already exists, in order to clarify potential factors posing vulnerability to depression and the relationship between such risk factors. By extending the research beyond its current point we can contribute to the knowledge regarding these potential risk factors, which can enhance and build upon the current treatment. Understanding more about depression vulnerability can pave the way for tailored intervention and preventative strategies in the hope of reducing its high prevalence. The current study will draw together earlier psychoanalytic theories that have evolved to the emerging, in more recent theory, of two depressive sub types (sociotropy and autonomy), along with exploring the role of attachment and intimacy. The more information that is ascertained about the depressive subtypes of “sociotropy” and “autonomy” and the importance of attachment and intimacy, the further we can understand

the complex vulnerability factors for depression. This thesis attempts to use theoretical underpinnings to illuminate and contribute to the existing body of research.

1.2 Defining depression

Depression can be detrimental to the well-being of an individual, and impairs functioning in daily living in areas including social, academic, and occupational, and increases risk of suicide. The diagnostic criteria for clinical depression in relation to a Major Depressive Episode, include features existing across a same two-week period which comprises an experience of a sad or depressed mood for most of the day nearly every day, and/or a lack of interest in once pleasurable activities (APA, 2000). Further features may involve changes in weight and sleep, agitation, loss of energy, feelings of worthlessness, inability to sustain concentration and thoughts of suicide. Such symptoms impact and impair an individual's ability to function in important areas of their life (i.e. occupational, social, and academic).

1.3 Prevalence and factors posing vulnerability

Depression is a high prevalence disorder. The National Survey of Mental Health and Well-being of Adults (2007) found approximately one in five Australians (over 16 years of age) suffered with a mental illness over a twelve month period. The statistics reported a prevalence of 6.2% for any mood disorder with 4.1% suffering a depressive episode. Other mood disorders included dysthymia with 1.3% prevalence and bipolar disorder with 1.8%. The prevalence of mental disorders was higher among individuals who were divorced or separated as opposed to those who were married. Statistics indicated that adults in younger age groups experienced higher rates of mood disorders, with depression included.

Depression is one of the most common mental disorders in young Australians (along with anxiety and substance use disorders). As stipulated in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) the lifetime risk for Major Depressive

Disorder is approximately 10 to 15 per cent for women and 5 to 12 per cent for men (APA, 2000).

Theories have explored depression in relation to different subtypes, relating to sociotropy and autonomy personality traits. In addition, attachment styles and intimacy have been implicated as factors potentially posing vulnerability to depression. In relation to 'intimacy', its importance has been highlighted through the work of Erikson (1968), as a capacity that needs to be accomplished during the young adulthood phase of development. These factors have been indicated as having an association with depression. However, more research is required to address gaps in research, to clarify the relationships between the variables and their associations to depression, particularly within an Australian sample.

1.4 Aims and Scope

The aim of the current study is to examine depression in relation to security of attachment, intimacy, autonomy and sociotropy in young adulthood. The study aims to explore 'experience of intimacy' in young adults in relation to attachment, and whether this predicts depression. Further, based on theory of Holmes (1997), more research is needed about the way autonomy and intimacy relate, and therefore the study aims to examine this relationship further.

1.5 Structure and Overview of thesis

Chapter 2 of this thesis explores and discusses the relevant theoretical underpinnings for each of the variables in the current study. This will explore and discuss attachment, intimacy and evolving theories of depression, particularly in the context of depressive sub-types conceptualised as sociotropic (anaclitic) and autonomy (introjective) depression. Chapter 3 then critically reviews the existing research literature on attachment, intimacy, sociotropy and autonomy in the context of depression vulnerability, examining studies that have focused on the identified variables in relation to depression. In addition, this chapter will include studies relating to intimacy and Erikson's psychosocial stage of *intimacy vs. isolation*, and the chapter will conclude with the research questions and hypotheses developed for the study. Chapter 4 then describes the quantitative design used in this

project and discusses the sample, measures, and procedures taken to conduct the study. Then the results of the current study are reported in Chapter 5 with Chapter 6 focusing on discussion of the research findings, as well as including the overall conclusions of the study, identifying strengths and limitations, and highlighting both theoretical and practical implications, and recommendations for future research.

Chapter 2

Theoretical Perspectives

2.1 Introduction

This chapter outlines and discusses theoretical underpinnings of attachment, intimacy and personality dimensions of sociotropy and autonomy relative to depression. Early psychoanalytic theories on depression from an object relations perspective including those from Freud (1917) and Klein (1935) are explored. The way in which these earlier psychoanalytic theories have evolved through Blatt (1974), and Beck's (1983) cognitive model are outlined with reference to theory on depressive subtypes. In addition, this chapter discusses how such theories link with attachment and the personality dimensions of sociotropy and autonomy. This chapter also explores intimacy in the context of Erik Erikson's psychosocial stages of development and the parallels drawn to Bowlby's attachment theory are discussed. This chapter aims to explore the complex theoretical underpinnings and highlight the way in which theories are linked.

2.2 Attachment

Attachment theory as developed by Bowlby stipulates that early experiences with parents/caregivers affect an individual's functioning in future relationships (Bowlby, 1980). These early and repeated interactions with caregivers become internal working models of attachment, which serve to guide social behaviour and expectations in future relationships, across an individual's lifespan (Mikulincer, 1998). These early experiences influence an individual's capacity to develop intimate relationships with other individuals (Mayseless & Scharf, 2007).

Bowlby's theory maintained that healthy development is central to an individual's capacity to engage in the world, and extend beyond significant attachment figures (Bowlby, 1973; 1980; 1982). This process of development commences at infancy and continues through to adulthood. This healthy development also involves having a capacity for intimacy with others, and was described in Bowlby's theory of the secure base. The secure

base is built within the first few years of life and develops within the routine of interactions between the child and their attachment figure (Bowlby, 1980; 1982). The secure base forms during these interactions where the attachment figure has been responsive and aware of the child's communicative behaviour and acts as available to both psychological and physical needs. In addition, the secure base involves the caregiver accepting such interaction within the caregiver role, in particular in dealing with inconveniences that are imposed by the child. In this scenario, a secure child-caregiver interaction would evolve in a way that is both secure and harmonious. Therefore, the child with the secure base will use the attachment figure for a safe haven, as a means to regulate emotions in the situation of an emergency or disruption (Bowlby, 1980; 1982). Through Bowlby's observations and work, he estimated that during the approximate ages of 9 to 24 months exploration, proximity seeking, and the phenomenon of the secure base can be observed when caregiver and child are together (Ainsworth, Blehar, Walters, & Wall, 1978; Bowlby, 1980).

Bowlby began his observations at the point of separation and tracked personality development forward (Bowlby, 1980). Through Bowlby's observations, the attachment patterns that existed were pre-verbal until children were approximately three years of age. This is when their attachment behaviours were easily activated, and indicated less need for physical proximity to their caregiver (Bowlby, 1980; Shaw & Dallos, 2005). As children's capability of independent movement increases, they start moving away from the caregiver to explore their surroundings (Bowlby, 1980; 1988). This process involves the infant moving closer, then away, then back to the caregiver and is repeated during social encounters. As the child develops and begins to grow, there is an increase in exploration distances and the cycle of exploration can also extend. These shifts to longer cycles of exploration from the infant were interpreted by Bowlby as *secure base behaviour* evolving to an internalisation of the child-caregiver relationship. As infants / children develop through to adolescence and adulthood, their internal working model is maintained and is referred to internally, rather than needing that nurturing physical closeness / proximity to their attachment figure (Bowlby, 1980; 1988).

Bowlby's theory highlights that not only during infancy, but also throughout all developmental ages, exist critical issues with attachment that impact an individual's confidence regarding their secure base; whether what is needed from the secure base will be available to them and able to extend support if required (Bowlby, 1988). There are instances where important early experiences of a child do not allow for an opportunity to develop a secure base. This then would mean that the relationship between child and caregiver will give rise to different working models for the relationship, which may involve things such as unpredictability with rejection or unpredictable contact or support. This then would have an impact on the internal model of self (i.e. I am not worthy of being loved or supported), and may have an impact on the internal model for the extended world (i.e. the world is dangerous or threatening) (Bowlby, 1980; 1988). In addition, Ainsworth (1978) contributed significantly to attachment theory, through her work with children and her study findings that children will form a secure attachment to their parents / caregivers, or will develop strategies consequently to cope with the absence of security, strategies that involve avoidant or anxious attachment (Ainsworth et al., 1978).

Bowlby's secure base theory and the concept of internal working models, both of the self and the wider world, have been adapted theoretically to other domains of relationship attachment, including insecure attachment styles of ambivalence / anxiety and avoidance in adult relationships (Ainsworth, et al., 1978; Bowlby, 1980; 1988; Hazan & Shaver, 1987). In particular, Bowlby and Ainsworth's theories regarding attachment have been applied to measures of adult attachment styles, through questionnaires constructed based on work of Hazan and Shaver (1987). Expanding on these earlier theories of attachment, Hazan and Shaver (1987) outlined three main attachment classifications in adult attachment patterns that are similar to classifications identified in infancy, which are secure type, avoidant type and anxious / ambivalent type (Hazan & Shaver, 1987; Mayseless & Scharf, 2007). The secure attachment type involves high levels of comfort with dependency and closeness to another, with low levels of anxiety in relation to abandonment. The avoidant attachment type includes low comfort with dependency and closeness to others and lower levels of anxiety over abandonment. Those individuals with

an anxious / ambivalent attachment type report intermediate levels of comfort with dependency and closeness to others and high levels of anxiety over abandonment (Hazan & Shaver, 1987; Mayseless & Scharf, 2007).

Understanding attachment and the associated complexities, beginning with Bowlby's theory on the secure base and internal representations helps aid the understanding of an individual's behaviour throughout the lifespan (Bowlby, 1980; 1988). When considering an understanding of behaviours throughout the lifespan, another influential theorist was Erik Erikson. Erikson (1968) had also developed a lifespan framework that explored psychosocial stages of development that paralleled work of Bowlby's model of attachment.

Erik Erikson followed on from Freud's ideas about psychosexual stages of development and conceptualised psychosocial stages of development (Erikson, 1968). Erikson's extension from Freud's psychosexual stages requires each psychosocial crisis being resolved in order to successfully move through each stage (Erikson, 1968). Erikson's earlier psychosocial stages of development relate to caregiver-child interactions, and parallel those developed by Bowlby's attachment model. As such, with the development of children, the caregivers play a central role as their child's social world begins to extend (Pittman, Keiley, Kerpelman, & Vaughn, 2011).

The parallels between Bowlby's attachment model and Erik Erikson's psychosocial stages of development are pertinent to the transition to adulthood and the secure base representations are noted as an individual develops through the psychosocial stage of intimacy vs. isolation (Pittman et al., 2011). During this phase the existence or lack of, a secure base is evident. The links between Bowlby and Erikson's model have been discussed recently by Pittman et al (2011), with discussion focusing on the phenomenon of the secure base that evolves during adult relationships. Earlier experiences with childhood attachment can influence and impact, later formed, intimate adult relationships.

There is expectancy for individuals with a secure base to possess an interaction with their intimate partner that is committed, collaborative, and open in seeking support when

needed. In contrast to this, for those individuals who have an insecure attachment style, their model of self may rely heavily on their partner to ease distress, or they could be distrustful or dismissing within their relationship and may not openly seek support in the relationship (Pittman et al., 2011).

This suggests that whatever the secure base representations brought by each individual to the partnership, it will have a significant impact on the way in which each spouse will respond and engage. These internal working models are important in facilitating understanding of how intimacy might be expressed in intimate relationships, and additionally may have an impact on resolution of Erikson's psychosocial stage of intimacy vs. isolation (Pittman et al., 2011).

2.3 Intimacy and Erikson's stages of psychosocial development

2.3.1 Erikson's theory

According to Erikson's theory, 'intimacy' involves the ability to share with others and to be giving toward others through our own centeredness (Erikson, 1968). Erikson defined intimacy as "the capacity to commit oneself to concrete affiliations and partnerships and to develop the ethical strength to abide by such commitments, even though they may call for significant sacrifices and compromises" (Erikson, 1963, p. 263). Intimate relationships encompass trust, expression of concern for one another and self-disclosure (Collins & Sroufe, 1999). Intimacy has been outlined as an important factor in development during young adulthood (Erikson, 1968). During young adulthood, psychological maturity can be highlighted by an individual's ability to form intimate relationships (Erikson, 1968).

The place of intimacy in Erikson's theory can be understood through his sixth psychosocial stage of development. Freud's developmental theory, addressing psychosexual crises over the lifespan, focused heavily on childhood and adolescence. Erikson extended this to consider development across the whole lifespan (Erikson, 1963; 1968; 1982). Erik Erikson built upon developmental stages through his theory on psychosocial development, theorising that individuals will face eight psychosocial major

conflicts throughout the lifespan. Given biological maturity and social demands, whether or not conflict during each psychosocial stage has resolved, an individual will consequently be pushed through to the next stage. If conflict during a stage or stages is unsuccessfully resolved, it may impact the way the following stages evolve (Erikson, 1968; Erikson, 1982).

The first stage of trust versus mistrust involves infants learning to trust their caregiver to meet their needs (Erikson, 1968). If the caregiver rejects the infant or is inconsistent in responding to the infant, the latter is at risk of developing mistrust towards others. A healthy balance related to the conflict during this stage is required in order for development to progress. The second stage is autonomy versus shame and doubt, where children begin to do things to become autonomous. If parents are punitive in these instances (e.g. toileting accidents), it may result in the child doubting their own competencies as they develop. The third stage, initiative versus guilt, is when children begin making plans, for instance in fantasy play (e.g. making castles out of sand), which starts to bring a sense of purpose and pride in completing tasks. During this stage, children are required to consider others during the process. The next stage of conflict is industry versus inferiority where children are required to master vital skills, both socially and academically, to avoid feelings of inferiority. The psychosocial stage during adolescence is identity versus role confusion and this is where individuals seek to define their identity and their place within society (Erikson, 1968).

Freud's psychosexual stages ceased with the adolescent phase, Erikson's stages continue throughout adulthood (Erikson, 1968). In young adulthood exists Erikson's sixth psychosocial stage, where the conflict is *intimacy versus isolation*. During this stage, if a young adult had not resolved conflict within the previous stage, they may feel threatened by entering a long-term relationship, or may become over-dependent on their partner as a way to resolve identity issues. If intimacy is not achieved, due to fears of intimacy, an individual may experience loneliness or isolation. Although not indicated in Erikson's theory, it is interesting to speculate for the purposes of the current study, whether those experiencing

this conflict feel isolated and possibly become more vulnerable to depression during this life stage.

In middle age, the conflict is generativity versus stagnation, where adults seek to produce something that will live on after them, perhaps as parents or through employment. Not achieving this poses the risk of self-centeredness or stagnation. Elderly adults are confronted with integrity versus despair. As the elderly come towards the end of the lifespan they must come to perceive their life as having been meaningful, in order to be able to face death with few regrets and worries (Erikson, 1968).

Erikson's theory stipulates that one of the major tasks of young adulthood is to establish and maintain intimate relationships, and sustain commitment to love as identified by 'intimacy vs. isolation' (Erikson, 1968). If this is not achieved, young adults may experience isolation and associated implications of this, highlighting the importance of experiencing intimacy in young adulthood.

2.3.2 Intimacy and Autonomy and Security of Attachment

Holmes (1997) argued that autonomy and intimacy are related reciprocally, and a secure attachment provides the basis for both intimacy and autonomy (Holmes, 1997; 2001). A secure base assists an individual to be autonomous; to make choices independently, to be able to tolerate 'aloneness' and understand that a loved one is not lost and intimacy is available when needed. Therefore intimacy is obtainable if the loved one is able to separate. Meaning that an individual has the understanding that 'separation' does not mean the loved one is forever lost and can still remain close to another and be autonomous (Holmes, 1997; 2001). This indicates that a 'closeness' and commitment can be established as members in the relationship pose no threat to autonomy. Therefore being separate in a sense both inside and outside the relationship does not comprise feelings of fear of loss over abandonment (Holmes, 1997; 2001). When considering Erikson's psychosocial developmental stages, it seems that these two theories are somewhat connected, with Erikson theorising that a sense of identity requires to be resolved (identity vs. role confusion) before developing a capacity for intimacy (intimacy vs. isolation), and

Holmes theorising similarly, that being autonomous is having a secure sense of self and applicable to a capacity for intimacy in a healthy relationship.

Despite this theory by Holmes highlighting a reciprocal relationship, there is minimal research exploring this notion of a balance between autonomy and intimacy in relation to security of attachment (Holmes, 1997; 2001). The existing research about these factors will be discussed in the next chapter, following the discussion and exploration of theoretical underpinnings on depression.

2.4 Depression Theories

2.4.1 Early psychoanalytic theory

As early as the 1900s, object relations perspectives formed within psychoanalysis, identifying the importance of earlier life experiences during childhood for the formation of personality. Through this evolving theory the metapsychological dimensions of depression emerged, with depression an inherent feature within psychoanalytic theory, and Freud and Klein contributing significantly to this theory (Freud, 1917; Klein, 1935). These psychoanalytic theories indicate that depression occurs throughout the developmental stages, from infantile and adolescent development as the maturation process evolves with the mind driving through the demands of continuous tension and reality (Freud, 1917). The basic assumption within psychoanalytic theory of depression is that, within development throughout the maturational process there will be psychological states of conflict, in which depression is a normal and healthy response. It is when this response differs from the normal response that implies that certain conflicts and defenses have emerged, which compromise successful developmental undertakings. This pattern of functioning may begin to emerge as maladaptive and can develop as pathological. Through this, distinctions can be made between normal and pathological depression, or otherwise, currently termed and known as clinical depression. This process is quite complex and can be understood conceptually throughout this discussion within an object relations position (Holmes, 2002).

Freud's paper discussing Mourning and Melancholia stipulated that for infant's development to evolve satisfactorily, the infant must identify that 'the object' is not 'the self' and that 'the self' exists independently of the object (Freud, 1917). It is also important for the infant to identify that all goodness does not only reside within the self, but can exist independently and externally. This then brings to it a realisation that not everything "within" is good. Such things may involve phantasies (Klein, 1935) (to use Melanie Klein's term), impulses, desires, thoughts and feelings that may cause trouble "without" (Freud, 1917). This process involves a replacement of external reality for internal reality and involves a secondary splitting of the ego, in which all goodness remains within, being the 'self', and all the badness is projected "without", being the "object". This then evokes a natural sadness within the ego that Freud termed as "mourning" and mourning is an important step in the evolving of narcissism into object love. Through this process, the infant is faced with the internal conflict involving the realisation that the object is independent, which may also come with terrifying realisations or risks (such as death of the object, etc). The second internal conflict is ambivalence; this involves the interchange of hate and love towards the same object (Freud, 1917), and this ambivalence can interfere with the normal process of mourning, where the lost object becomes idealised and is then included as part the "self", or "ego", to use Freud's word (Holmes, 2002).

The depression, or to use Freud's terms, the mourning and melancholia comes with the problem of the object loss, either real in the case of *mourning*, or ideational in the case of *melancholia* (Freud, 1917). This can be understood as an attachment process and conceptualised as a natural "over attachment" to the object. This process can be excruciating and involve the experience of normal depression as the infant moves towards inner objects and the outside world. Similarly, Melanie Klein's theory on depression involved external to internal dynamics within an object relations framework (Holmes, 2002). The internal dynamics involve the internalised experience of the good object and bad object. This experience is regulated by un-pleasurable experiences being attributed to the bad object and pleasurable experiences being attributed to the good object. As a defense against object relations, the narcissistic process involves the "good object" being

internalised, (i.e. “everything that I love is me”) and the “bad object” externalised (i.e. “everything that I hate is not me”) (Holmes, 2002).

The internal dynamics involve “splitting”, which means when a negative occurrence evolves within the internal good object, it then splits and is projected onto the “bad object” (external / other) (Holmes, 2002). This process also involves the projection of bad objects onto the good object. Through this, mental growth evolves, with a move towards maturity, although the struggle will determine the outcome of an individual’s internal object relations. During the struggle, if the individual has a healthy development or been through successful therapy, they will feel the object as secure in their inner world, even if lost in the outer world (Holmes, 2002).

The narcissistic aspect to depression has been implicated by both Klein and Freud, in different contexts (Holmes, 2002). Klein suggested a positive narcissism can take on a destructive quality, which is understood through object relations theory. Klein discussed this as occurring through the individual search for the ideal object whereby envy then occurs as a result of the idealized qualities attributed to the object. This means that distortions occur with projective identification and the external object (i.e. attachment figure / caregiver) is unable to be borrowed for reassurance (Holmes, 2002; Klein, 1935). This can impact on the internal world (within the individual) and would involve a decreased interest in the external world, as the inner attachment model becomes distorted (Klein, 1935).

Freud theorised narcissism as a mechanism of depression which involves narcissistic identification with the lost object. Within Freud’s melancholia theory, the ego is treated as if it were the object that abandoned it and melancholia is subsequently experienced. Freud’s structural depression theory discusses depression being related to loss, regression back to an aggressive incorporation of the object and internal conflict around aggressive self-criticism and ambivalence towards the self. Therefore depression is experienced due to a painful loss in the relationship, pertinent to an earlier ideal state. Theory stipulates that when the depression is experienced earlier, the more likely it will be

considered a narcissistic depression, as the person will seek an infantile state of ideal satisfaction (Freud, 1917).

2.4.2 Anaclitic and Introjective depression

With the evolution of psychoanalytic theory regarding early defenses and differing maturity, two different types of depression have come to be understood as "anaclitic" depression (neurotic) and "introjective" depression (narcissistic). During the early 1970s, Sidney Blatt, a psychoanalytic researcher described these two types of depression (Blatt, 1974; Blatt, Shahar & Zuroff, 2001; Hjertaas, 2010). It was Blatt who termed these as 'anaclitic' and 'introjective'. Blatt and his colleagues proposed both a theoretical and empirical model of personality psychopathology and personality development (Blatt, et al., 2001). Personality develops along firstly a relatedness (anaclitic) line that involves developing the capacity for establishing mature interpersonal relationships that are mutual and satisfying, and secondly, develops along a self-definitional (introjective) line, which involves developing a realistic, integrated and positive self-identity. Both of these developmental lines continuously develop in a reciprocal transaction. A mature and integrated sense of self is reliant upon establishing satisfying relationships, and at the same time, being able to develop satisfying interpersonal relationships is dependent upon having developed a mature sense of self. These developmental personality processes usually develop interactively, mutually and are reciprocally balanced within normal development. Psychopathology within the development of personality can be understood as an overemphasis and amplification of one of the developmental aspects and a defensive avoidance of the other aspect (Blatt, et al., 2001).

Blatt and his colleagues therefore conceptualised this theory of the two depression sub-types anaclitic (dependent) depression and introjective (self critical) depression and developed clinical evidence for such theory (Blatt et al., 2001; Hjertaas, 2010). Blatt observed experiences of individuals suffering with anaclitic depression as feeling neglected and unloved (Holloway, 2006). Anaclitic depression was observed to stem from difficulties in dealing with fear of being abandoned, isolated and a feeling of loss, with an emphasis

placed on interpersonal relatedness (Blatt, et al., 2001). Anaclitic psychopathologies relate to a preoccupation with interpersonal relations, with more of a dependent style and a focus on issues of intimacy, trust and care and during times of stress and conflict the main defense is avoidance (such as denial and withdrawal) (Blatt, et al., 2001). This psychopathology runs along a spectrum from less disturbed to more disturbed, and may include psychological disorders such as borderline personality and anaclitic depression (Blatt, et al., 2001).

Therefore anaclitic depression is concerned with dependency, as individuals who experience anaclitic depression usually have endured some sort of loss or difficulty in their earlier attachment relationship experiences (Blatt, 1974; Blatt, et al., 2001). This individual would be described as self-sacrificing for others or in particular for a 'significant other', and tend to be a more submissive counterpart in his or her relationships, although relationships, perhaps at the surface, would appear stable and secure. The dependency involves the individual's emotional needs being met through a sense of belonging and being finely in tune with the feelings of others. This sensitivity and dependency poses a risk of psychopathology if the underlying need for dependency is not met. These individuals want to be looked after, supported and comforted by others. This is related to earlier relationship experiences that led to feelings of being abandoned and deprived (Holloway, 2006), for instance, perceived risk to the beloved relationship would incur extreme anxiety and actual loss of the relationship would be endured as catastrophic (Blatt, 1974; Blatt, et al., 2001).

The primitive object representation involves significant others existing to gratify needs and requiring them to be constantly present physically, as opposed to autonomous individuals who are able to draw on mental presence when the object is physically absent (Holloway, 2006). Therefore, the early attachment style would most likely involve an insecure anxious / ambivalent type. This type of dependency may leave the individual experiencing ongoing feelings of emptiness, and confusion around who they are and where they fit in the world (Blatt, 1974; Blatt, et al., 2001; Hjertaas, 2010). Given this, the individual may also experience dysphoria around feelings of abandonment, loneliness and

losses. The core issue manifested leading to this type of depression involves a lack of feeling connected with others and a lack of a true sense of feeling as though they belong (Blatt, 1974; Blatt, et al., 2001).

In contrast, the introjective psychopathologies relate to issues around maintaining a sound sense of self, concerns about autonomy, control and with further psychopathology more complex internal issues regarding self worth (Blatt, 1974; Blatt, et al 2001). In this case, defenses to cope with stress and conflict would be counteractive, such as projection, reaction formation, intellectualisation and over-compensation. These individuals are more focused on establishing and maintaining a viable self-identity rather than achieving interpersonal warmth, feelings of trust and affection. Therefore, it is likely that their earlier attachment style is insecure, avoidant type (Blatt, et al., 2001; Holloway, 2006).

Central to their difficulties include feelings of anger and aggression, which are directed toward others or the self (Blatt, 1974; Blatt et al., 2001). Introjective psychopathologies run along a spectrum from less disturbed to more disturbed, including psychological disorders such as obsessive-compulsive personality disorder, over-ideational borderline personality disorder and introjective depression. Therefore introjective depression relates to underlying anxieties about self-worth, guilt and failure, as due to a punitive superego the difficulties experienced relate to establishing and maintaining a viable sense of self (Blatt, 1974; Blatt et al., 2001; Hjertaas, 2010).

Individuals experiencing this type of depression are often perfectionist, possess rigid or driven qualities in their treatment of themselves and others and are often achievement oriented and focused (Blatt, 1974; Blatt, et al., 2001; Hjertaas, 2010). Although these individuals often hold high expectations of others and are often critical, they may appear personable and friendly due to adopted and adapted beliefs, which may be inconsistent with the way they truly feel. There is a drive for success and avoidance of failure, which may have to do with internal working models regarding demanding, critical or punitive early attachment figures. These individuals are motivated to achieve by intense feelings of inferiority, and when such achievements seem less than perfect or goals too

difficult to obtain, introjective depression is experienced. This is due to the internalisation, feelings of worthlessness, inferiority and feelings of inadequacy. This strict self code of conduct and unforgiving position towards any mistakes or shortcomings may leave one experiencing self-loathing, shame and feelings of guilt. This is often due to a perception that one's autonomy and sense of control is gone and depression is then consequently experienced (Blatt, 1974; Blatt et al., 2001).

The marked difference between individuals with introjective and anaclitic difficulties has been helpful in defining these depression subtypes (Blatt, 1974; Blatt et al., 2001). It has been highlighted that these two sub-types have evolved from earlier theories of Freud's depression mechanisms and Klein's theory of the two subtypes being the depressive position and paranoid-schizoid depression. Psychoanalytic theorists, in particular Melanie Klein, contributed to the understanding of personality aspects, both adaptive and maladaptive with the schizoid and paranoid personality theory. More recently, Sidney Blatt and his colleagues have developed a large body of research exploring clinical depression (Blatt, 1974; Blatt, et al., 2001).

Through Blatt's work, he has drawn important attention to particular interpersonal personality traits that impact therapeutic treatment (Blatt, et al., 2001). Through this, his work led to identifying the two distinctive personality dimensions that impact prognosis and treatment of depression. Anaclitic and introjective depression are seen in the Psychodynamic Diagnostic Manual under depressive personality disorders, with the emphasis on underlying traits of dependency or autonomy included (Hjertaas, 2010). These dimensions describe those with intense dependency traits and those who are perfectionist and self-critical. Understanding these personality clusters enabled research in utilising them as research tools to aid studies exploring dependency and self-critical / perfectionist traits and depression. These studies are imperative as understanding personality aspects and the impact on the manifestations of depression can aid clinicians' approach to therapy (Blatt, et al., 2001).

2.4.3 Parallels with Beck's theory of depression

Following on from Blatt, the cognitive behavioural model of Aaron Beck also conceptualised two types of depression, similarly to Blatt's model of anaclitic and introjective types (Hjertaas, 2010). Depression vulnerability in Beck's cognitive model is related to two types of traits being sociotropy and autonomy. The sociotropic (dependency) depression vulnerability occurs when an individual has an intense need for personal attachments and connection and depression occurs from interpersonal loss or rejection, which has been explored from a cognitive therapy framework by Beck (1983). Further, Beck (1983) described "sociotropic" personality as needing positive interpersonal interactions with others and presenting with behaviour aimed at seeking approval and nurturance from others. Beck's theory on sociotropic personality is similar to that of Blatt's psychoanalytic model regarding anaclitic psychopathologies that are also based on interpersonal relations, with more of a dependent style. Similarly to Blatt, Beck (1983) hypothesised this type of depression as being due to interpersonal loss or rejection, further explaining that it may include the individual feeling lonely, crying or feeling unlikeable (Beck, 1983).

Beck's theory described the autonomous type as when an individual possesses an intense need to succeed and achieve (Beck, 1983; Hjertaas, 2010). Beck's autonomous type is similar to the introjective type described from a psychoanalytic framework as the "self critical" personality forms when the individual has struggled to form an adequate self representation in relationships and maintains 'self worth' through achievement, abilities and individuality (Blatt, 1974). In this case, as previously discussed, depression is termed "Introjective depression" and has been hypothesised to present when the self-critical person does not meet their internal standards or the standards of others. The individual may then experience feelings of guilt, worthlessness or inferiority (Blatt, 1974). Beck theorised this concept similarly in relation to his cognitive theory of the "autonomous personality" (Beck, 1983). Further, 'autonomous depression' was hypothesised by Beck as occurring from achievement losses and constituted feelings of defeat, self-blame and feeling like a failure (Beck, 1983).

Psychoanalytic (Blatt, 1974) and cognitive theories (Beck, 1983) have both illustrated the distinction between 'sociotropic / anaclitic' and 'autonomy / introjective' personality traits, and the different presentation and depressive experiences associated with these traits (Beck, 1983; Blatt, 1974; Blatt, et al., 2001). Psychoanalytic theorists conceptualise the experience of anaclitic depression as involving disruptions of satisfying interpersonal relationships (such as object loss) and introjective depression as involving disruptions of a positive crucial sense of self. In attachment terms both would be viewed as insecurely attached with anaclitic individuals being anxiously attached and introjective being compulsively self-reliant. Congruent with psychoanalytic perspectives, cognitive behavioural theorist, Aaron Beck (1983), outlined the two subtypes as a socially dependent and an autonomous depressive type as previously discussed.

Such consistency among these different theoretical orientations supports and strengthens theory regarding the manifestation of depression (Beck, 1983; Blatt, 1974; Blatt et al., 2001; Hjertaas, 2010). To build upon such theory, Beck and colleagues developed measures to assess both sociotropy (dependency) and autonomy (self-criticism) which have been used in research exploring the therapeutic process (Beck, 1983; Clark, Steer, Haslam, Beck, & Brown, 1997). Research review of such studies found that clients' personality traits influenced the therapeutic process and therapy outcomes. Similarly from a psychoanalytic perspective anaclitic and introjective clients experience the world differently. Clients present to therapy with different problems, different needs and respond differently depending on the type of therapeutic intervention. The identification of the organisation of the client's personality will improve the therapist's understanding of the clients responses throughout the therapeutic process (Blatt, et al., 2001).

Both cognitive behavioural and psychoanalytic approaches offer recommendations for the treatment of both sociotropic / anaclitic and autonomous / introjective depressive sub-types (Clark et al., 1997; Hjertaas, 2010; Holloway, 2006). Firstly, in line with a cognitive framework, such treatment recommendations for individuals that have sociotropic / anaclitic depression have been outlined as needing to examine core beliefs of self and others, and exploring thoughts about not belonging, with the aim to help develop a greater

sense of autonomy (Clark et al., 1997). Through therapy, the individual is encouraged to develop and engage in achievable successes, and build upon personal strengths in order to establish a sense of competency. The therapeutic approach would be nurturing with caution of dependency issues arising in the therapy. Therapy would aim to focus on the individual's relationships, in particular around feelings of abandonment and rejection (Clark et al., 1997; Holloway, 2006). These individuals are likely to respond well to supportive therapy.

For individuals that have autonomous / introjective depression a more direct focused approach to therapy is preferred to work on cognitive restructuring (Holloway, 2006). This would involve addressing core beliefs about 'not being good enough' and feelings of inferiority that drive the individual to self defeating over-striving (Hjertaas, 2010). The aim of therapy would be to help reduce perfectionist driving and extreme self-ideals. In addition, therapy would aim to aid the individual to explore interpersonal difficulties and other approaches to cooperating with people. Those experiencing autonomous / introjective depression are vulnerable to over-emphasising judgment and critical attitudes that significant others might have towards them. It is likely that their attachment style is insecure, avoidant type. Being highly autonomous might prevent these individuals from seeking help.

Psychoanalytic longer term therapy has been suggested as more suitable when working with individuals with introjective / autonomous depression, as individuals may become self-critical when little improvement is made, which may be the case in briefer therapy (Holloway, 2006). Individuals who experience introjective depression are driven to achieve in order to compensate for underlying feelings of being inadequate. From a psychoanalytic perspective, these individuals often have introjected a superego that is harsh and critical due to parenting (Holloway, 2006). Therefore treatment from a psychoanalytic framework would focus on modifying superego introjects with more adaptive identifications with healthier, nurturing parts of parental figures. Whereas when working with individuals with anaclitic / sociotropic depression within a psychoanalytic framework, therapy would address underlying issues regarding dependency and abandonment, and aiding the client to feel loved and accepted at a metapsychological level (Shepherd, 2001).

The therapeutic goal would be to aid development of the maturation of personality and improve the capacity to regulate emotions.

Now that the theoretical underpinnings of attachment, intimacy, and depression in the context of depressive subtypes regarding ‘sociotropy’ and ‘autonomy’, as well as discussing the practical implications, the thesis will move to examine previous research. Relevant previous research that has been conducted on exploring attachment, intimacy, and personality traits sociotropy and autonomy, inspired by theory, these past studies exploring links to depression will now be reviewed.

Chapter 3

Previous Research Findings

3.1 Introduction

Vulnerability to depression has been indicated to be associated to intimacy (Pielage, (Luteijn & Arrindell, 2005; Williams, Connolly & Segal, 2001), sociotropy (Beck, 1983; Blatt, 1974; Murphy & Bates, 1997), autonomy (Beck, 1983; Blatt, 1974; Murphy & Bates, 1997) and attachment (Murphy & Bates, 1997; Pielage, et al., 2005). These highlighted links to depression will be discussed and examined, and the way in which attachment, intimacy, sociotropy and autonomy are connected in this context of depression will be clarified.

3.2 Attachment and depression

Attachment has been explored for many years, as previously discussed through early theories of Bowlby and Ainsworth. Over the years, research studies have found evidence that supports the link of attachment to depression. Previous research findings support the importance of earlier theories and such findings indicate that secure attachment is associated to better mental health and insecure attachment styles pose vulnerability to depression (Bifulco, Moran, Ball, & Bernazzani, 2002; Conradi & Jonge, 2009; Herbert, McCormack & Callahan, 2010; Pielage, et al., 2005; Scharfe, 2007; Scott & Cordova, 2002; Surcinelli, Rossi, Montebarocci, & Baldaro, 2010; Takeuchi, Miyaoka, Tomoda, Suzuki, Liu & Kitamura, 2010), with insecure / avoidant attachment styles contributing to the prediction of the severity of depression (McBride, Atkinson, Quilty & Bagby, 2006). A review of research highlighting the importance of adult attachment patterns to adult mental health is the starting point for this chapter, as this area continues to be a point of interest for researchers, particularly in light of the theoretical underpinnings.

Mikulincer (1995) researched attachment and found support for Bowlby's work. He found that the self-view is an internalisation of the perceived view of others, in particular the caregiver, relevant to early attachment theory by Bowlby. The perceived negative view

of self is linked with an anticipated rejection from others. In turn, individuals are likely to act in a way that will lead them to becoming rejected by others, which then maintains their negative self-view (Mikulincer, 1995). This study highlights the possible detrimental implications for mental health as an outcome of ongoing poor adult attachment patterns.

Attachment theory and earlier depression theories continue to be a point of interest, and a recent study conducted by Herbert, McCormack and Callahan (2010) explored such theories and investigated a perspective shared by object relations theories of depression. They explored depression as being associated with an ongoing poor attachment pattern developed throughout childhood and continuing throughout adulthood. The study explored the relationship between attachment, both peer and parental, and symptoms of depression among young adults from Northern Ireland. The results of this study highlighted and supported that attachment throughout the lifespan does in fact impact depressive symptoms throughout adult life. Furthermore, the study found that perceived poor quality of early attachment experiences, in addition to peer attachment styles, predict the experience of depressive symptoms (Herbert et al., 2010).

These recent findings demonstrate consistencies with earlier research conducted by Mikulincer (1995) who found that individuals with an anxious-ambivalent (preoccupied) attachment style reported fewer positive traits and more negative traits as self-described, than did individuals with a secure or avoidant attachment style. In light of this, one recent study suggested that 'avoidant attachment' acts as an avoidant buffer against 'symptomatology' (Conde, Figueiredo & Bifulco, 2011). However, this finding has not been consistently found in other studies, as the majority of research studies report that those with an avoidant attachment style tend to experience more depressive symptoms (Rogina & Cordova, 2002).

Bowlby's theory has inspired much research, and studies have found that earlier attachment styles impact experiences of future relationships in an individual's life (Bowlby, 1980; Hazan & Shaver, 1987; Pielage, et al., 2005). This had led to attachment being explored within adult populations, with the focus on the three different attachment styles

(insecure avoidant, insecure anxious / ambivalent and secure type) as outlined by Hazan and Shaver (1987), who suggested the impact on relationships has been evidenced depending on the attachment style. However, this is not straightforward and involves multiple complexities of interconnecting factors.

Following the work of Hazan and Shaver (1987), subsequent research has continued to explore adult attachment and found a vulnerability to depression relating to adult attachment styles. Research conducted by Scharfe (2007) found a strong association between depression and adult attachment. These results are similar to those found in a study conducted by Bifulco, Moran, Ball & Bernazzani (2002) whose findings implicated that insecure attachment related significantly with clinical depression. However, a distinction could not be made between the insecure attachment types in terms of their relationship with clinical depression (Bifulco, et al., 2002). Finally, and in further support, previous studies have found a direct relationship between insecure / anxious attachment styles and the experience of depressive symptoms (Wei, Shaffer, Young & Zakalik, 2005).

In summary, there is a substantial amount of research supporting earlier theories of attachment and its impact on adult mental health, with insecure attachment styles having a clear link to depression (Bifulco, et al., 2002; Mikulincer, 1995; Rogina & Cordova, 2002; Wei, et al., 2005). Research findings have supported that earlier attachment experiences impact depression vulnerability, and impact adult relationships (Pielage, et al., 2005; Hazan & Shaver, 1987). Given this clear identified link with early attachment patterns and their impact on adult relationships, studies have somewhat neglected to examine and explore the concept of intimacy within this important context.

3.3 The role of intimacy

3.3.1 Intimacy and previous research

The clear link between attachment and depression has been found and highlighted in past studies. However, few studies have examined and incorporated the role of intimacy within an adult sample, despite it being identified that attachments formed during infancy

and representations throughout an individual's life impact the capacity to form intimate relationships with others (Mayseless & Scharf, 2007). The research that has been undertaken has tended to explore intimacy within adolescent samples. For example previous research conducted by Mayseless and Scharf (2007) explored autonomy and intimacy using an adolescent sample. The study found that those with avoidant attachment styles displayed lower levels of capacity for intimacy in both friendship and romantic relationships. Adolescents with a secure attachment showed a higher capacity for intimacy and experienced closer friendships. In addition, and most importantly, this research found autonomous adolescents displayed higher mature intimacy as was evidenced in their capacity for intimacy in both friendships and romantic relationships (Mayseless & Scharf, 2007). These findings support Holmes' theory that intimacy and autonomy are both important in relationships in a reciprocal nature, which relates to secure attachment. Despite the findings of this study further investigation of this area has been limited.

It is crucial to examine intimacy given that intimacy has been highlighted as important to mental well being and in its absence can pose vulnerability to depression (Williams, et al., 2001). Although limited research had been conducted, past research has implicated intimacy and found that security of attachment related positively to intimacy and negatively to psychological distress (Pielage, et al., 2005). Insecure attachment has been associated with high psychological distress and negatively with intimacy (Pielage, et al., 2005). Further, it has been indicated that an ambivalent attachment style is negatively associated with the experience of intimacy (Bray, 2002; McCarthy & Maughan, 2010) and that mature intimacy relates to individuality, the ability to be 'separate' within a relationship and to have a capacity for autonomy (Shulman, Laursen, Kalman & Karpovsky, 1997). This implicates the role of intimacy with attachment. Further, it has been evidenced that even individuals who 'fear intimacy' still present with a need to be close to another person, as intimacy has been recognised as a human need important to psychological health (Doi & Thelen, 1993). This highlights the importance of intimacy and implicates it as being important for mental health. The importance of intimacy has been outlined as a stage within Erikson's psychosocial theory of development.

3.3.2 Support for Erikson's psychosocial stage of 'intimacy vs. isolation'

Despite Erikson's theory highlighting the importance of achieving 'intimacy' during young adulthood, much of the research exploring 'intimacy' and its link to depression has been explored predominately with adolescent samples. For example, research conducted by Williams, Connolly and Segal (2001) explored intimacy and its link to cognitive vulnerability to depression in adolescents, and found that adolescent girls who experienced low intimacy in romantic relationships displayed cognitive reactivity in a negative mood. Negative mood is associated to the onset of a depressive episode and may be a potential risk factor for depression at a later stage in life (Williams, et al., 2001). Despite highlighting the potential risk for developing depression later on in life, research has largely neglected to explore this area further within adult samples, with only few studies doing so.

In particular, few studies have explored Erikson's psychosocial stages of development, and more specifically that relating to young adulthood and intimacy. In light of this, recent research conducted by Mackinnon, Nosko, Pratt, & Norris (2011) sought to examine Erikson's (1963) psychosocial development model in young adults, by testing hypotheses regarding a positive relationship between intimacy and generativity. Results found that both romantic and friendship intimacy contributed to generativity concern as predicted, and this was irrespective of current relationship status, gender, depressive symptoms, optimism and subjective well-being. This supports Erikson's framework of close interpersonal relationships being paramount during the young adulthood stage. Findings also support Erikson's model, with a positive relationship being found between romantic and friendship intimacy and generativity concern. This suggests that the more successful experiences with intimate personal relationships may facilitate conflict resolution during the stage 'intimacy vs. isolation' and facilitate progression to the next stage of 'generativity' (Mackinnon, Nosko, Pratt, & Norris, 2011). This study supports the relevance of examining intimacy during young adulthood, in line with Erikson's model.

Although research is limited in this area, one previous study did however explore intimacy and its role in young adulthood, its link with attachment, and relationship to

depression. This research was conducted by Pielage, Luteijn and Arrindell (2005) who examined the role of intimacy, adult attachment and psychological distress in both a community and clinical sample. Results indicated the clinical sample to be more insecurely attached in contrast to the community sample. The clinical sample reported less intimacy in their existing relationships, experienced more loneliness and depression in contrast to the securely attached community sample, who reported higher levels of intimacy (Pielage, et al., 2005). The findings of this study support the link that intimacy has with attachment and depression, and highlights its relevance in young adulthood, consistent with Erikson's theory. Despite this study, few studies have explored the role of intimacy in young adulthood, its link with attachment, and relationship to depression.

So far, the link between depression and attachment has clearly emerged through much evidence found throughout the research. Despite limited studies, intimacy has been implicated as sharing a reciprocal relationship with autonomy and being linked with attachment and depression during young adulthood. However, this has been under-researched, with the majority of studies using adolescent samples (Mayseless & Scharf, 2007), despite a few studies and Erikson's theory highlighting the importance of 'intimacy' during adulthood. Unlike the limited study of intimacy, there has been much research exploring theories relating to depression and the exploration of depressive subtypes.

3.4 Exploring the theory: Autonomy (introjective) and sociotropy (anaclitic) depression 'subtypes'

Psychoanalytic (Blatt, 1974) and cognitive theories (Beck, 1983) have both illustrated the distinction between 'sociotropic / anaclitic' and 'autonomy / introjective' personality traits and the different presentation of depression associated with these traits. Beck (1983) described the 'sociotropic' personality as needing positive interpersonal interactions with others and presenting with behaviour aimed at seeking approval and nurturance. Beck (1983) hypothesised depression as being due to interpersonal loss or rejection, further explaining that this type of depression may include the individual feeling lonely, crying or feeling unlikeable. This conceptualisation has its psychoanalytic parallel

in the concept of 'anaclitic' depression, as discussed in the previous chapter (Blatt, 1974). In contrast, from a psychoanalytic framework the "self critical" personality forms when the individual has struggled to form an adequate self representation in relationships and maintains 'self worth' through achievement, abilities and individuality (Blatt, 1974). In this case depression is termed "Introjective / autonomous depression" and has been hypothesised to present when the self critical person does not meet their own internal standards or the standards of others. The individual may then experience feelings of guilt, worthlessness or inferiority (Blatt, 1974). Similarly Beck (1983) hypothesised 'autonomous depression' as occurring from achievement losses and constituting feelings of defeat, self-blame and feeling like a failure (Beck, 1983).

The main assumptions of Blatt and Beck's models are that there are cognitive representations which underlie dependent (sociotropic) and self-critical (autonomous) individuals which impact the way they interpret life events. For instance, individuals who are dependent (sociotropic) may interpret interpersonal losses as posing a devastating impact on well-being and personal self-worth, whereas individuals who are self-critical (autonomous) may interpret failure to achieve recognition or goals as posing similar devastating consequences (Beck, 1983; Blatt, 1974).

Much research has been conducted to explore these theories and models. However studies exploring these personality dimensions and depression have found conflicting results. Some research studies have explored and found evidence supporting theories on depression subtypes, as in Blatt's anaclitic / introjective sub-types, and Beck's (1983) autonomy / sociotropic subtypes of depression. Bagby, et al.'s (2001) research findings supported Beck's (1983) theory, which suggested that autonomy and sociotropy are traits that pose vulnerability to depression. In addition, previous research findings found consistencies with depression sub-types, (autonomous) self-criticism being significantly linked with a loss of interest (autonomy / avoidant) (Klien, Harding, Taylor & Dickstein, 1988) and negative evaluation of self in relation to self-imposed standards, and dependency (sociotropy) being significantly linked with interpersonal separateness (Viglione, et al., 1995) and symptomology of depression (i.e. sadness and tearfulness) (Klien, et al., 1988).

In contrast to the previous research findings discussed, research by Husky, Mazure, Maciejewski, and Swendsen (2007) used the sociotropy-autonomy scale and found that sociotropy did not demonstrate a direct effect, in general, on depressed mood, but did however following an incident of an adverse social event, as hypothesised. This study included measures to assess achievement (failures) and or adverse social events in order to explore the autonomous and sociotropy depressive subtype theory. Although the results were significant for sociotropy, the study found no support for autonomy as posing vulnerability for depression, even after an occurrence of an adverse event related to achievement, which was not consistent with the hypothesis, nor was it with the theory (Husky, et al., 2007).

Similarly, Frewen and Dozois (2006) explored Beck's theory, using similar measures to Husky, et al.,(2007), and found that negative life events can be classified into social and achievement focused themes. However it was found, that both failure-related and negative-social events had an impact on achievement domains and self-worth perception in the social domain. These results suggested that achievement and social self-worth are highly correlated. In addition the study used the Personal Style Inventory to measure sociotropy and autonomy, and did not find clear distinctive differences in the way sociotropic and autonomous individuals interpret life events (social / failure related). This finding differs from those of previous studies (Bagby, et al., 2001; Clark, Steer, Haslam, Beck & Brown, 1997; Klien, et al., 1988; Murphy & Bates, 1997; Sato, 2003; Viglione, et al., 1995; Zuroff & Mongrain, 1987).

In contrast, and in support of theory, research conducted by Zuroff and Mongrain (1987) explored Blatt's anaclitic and introjective depression, again utilising similar measures to assess achievement failures / social adverse events. It was found that the anaclitic depression state was consistent with such theory. The results indicated that for participants who reported experiencing more anaclitic depression, this was in response to rejection, as opposed to personal failure. In addition, in line with Blatt's theory, participants who were 'self critical' reported experiencing more introjective depression state, in comparison with controls, in response to both rejection and failure. This finding in response

to ‘rejection’ could be understood as the response to loss interpreted as a self-criticism and self-blame (Zuroff & Mongrain, 1987).

In regards to Beck, he himself had also conducted research with a colleague exploring his theory in the context of testing possible discrete subtypes of major depression. Haslam and Beck (1994) tested five proposed subtypes of major depression including Beck’s sociotropic and autonomous types. However their findings did not provide evidence for these subtypes as clusters that represent a discrete subtype of major depression. Following from this in 1997, Beck continued research in this area with fellow researchers. Research conducted by Clark, Steer, Haslam, Beck and Brown (1997) used a psychiatric outpatient sample, and found that personality types of sociotropy and autonomy did not differ specifically on DSM-III-R mood and anxiety disorders, which is consistent with the previous study. However when examining subscales within personality types they found that the dependent sociotropic type (subscale) was in line with Beck’s 1983 theory, as outpatients with this cluster had significantly higher scores on concerns about attachment / separation and disapproval. These two components were important in identifying psychiatric outpatients with a sociotropic personality. Autonomy was represented by individualistic achievement and independence. Overall it was found that psychiatric outpatients that exhibited sociotropic dependency had greater psychopathology and symptom severity. In addition, one autonomous cluster, being ‘independence’, was similar to sociotropic dependence in extent of symptom disturbance and maladjustment (Clark, et al., 1997).

In following years, and in support of the theory, research conducted by Sato (2003) explored sociotropy and autonomy dimensions and their relation to depression using both the Sociotropy-Autonomy Scale and the Personal Style Inventory. The results of the study suggested that sociotropy had two specific components that related to depression, firstly one being related to an individual’s dependency on others and the other component related to interpersonal sensitivity and characterised by fear of being rejection and criticized by others, and/or fear of hurting others. The study found that both of these components of sociotropy related to depression. This is consistent with other research findings that

sociotropy is a strong vulnerability factor to depression (Sohlberg, Axelsson, Czartoryski, Stahlberg & Strombom, 2006), in particular certain subscales measuring sociotropy as outlined in previous research by Beck and colleagues (Clark, et al., 1997).

Sato (2003) found a relationship between autonomy (mainly relating to problems in relationships) and depression. This was outlined as stemming from a fear of being controlled or influenced by others. The relationship difficulties were related to avoidance for the sake of maintaining or preserving a sense of control (Sato, 2003). This implication of 'avoidance' as a way of relating in the context of autonomy and depression may suggest a link to an attachment pattern. However much of the research has not included attachment in the studies of sociotropy, autonomy and depression.

The relevance of attachment to depression subtypes is also indicated by the psychoanalytic formulation which suggests a "dependent" personality may form when an individual failed to develop mature representations of the 'self' (Blatt, 1974). This then leads to the individual pursuing interpersonal relations in order to obtain self worth (Blatt, 1974). This formation of the self poses potential difficulties when the dependent individual perceives themselves at risk of, or experiences, rejection or interpersonal abandonment. This then leads to the experience of the depressive subtype of "anaclitic / sociotropic depression" and is comprised of feelings such as fear of abandonment, desire for protection and love and feelings of helplessness (Blatt, 1974).

It should be noted, as a side implication, that despite research following on from Blatt (1974) and Beck's (1983) theory having supported the convergence with sociotropy and dependency and the Beck Depression Inventory (BDI) as being strongly related to measures of sociotropy (Sato & McCann, 2000; Shahar, Soffer & Gilboa-Shechtman, 2008), this is not the case for autonomy. Research has indicated little convergence of self-criticism and autonomy and found that few items on the BDI actually relate to current autonomy measures. Some authors have suggested a refinement in the BDI and autonomy measures for future research (Sato & McCann, 2000; Shahar, et al., 2008). Although this had been recommended by some, recent research continues to utilise these well known and

credible measures. Although there is much research exploring sociotropy and autonomy in relation to the theory of depression, given discrepancies within some of the research findings, further research is still required. In particular it would be worthwhile to examine the relationship of these variables to attachment, given that Blatt's theory indicates these personality types form based on the failure to develop mature representations of 'self'.

3.5 Sociotropy, autonomy, attachment and depression

Vulnerability to depression and its relation to adult attachment, sociotropy and autonomy have been examined to a limited extent by previous research (Murphy & Bates, 1997).

Firstly, sociotropy in relation to attachment and depression has been explored by some studies, although studies have been limited in number. Research conducted by Zuroff and Fitzpatrick (1995) found dependency and sociotropy were associated with an anxious attachment style. Further, a study conducted by Bottonari, Roberts, Kelly, Kashdan and Ciesla (2007) found that insecure attachment in patients suffering depression became a predictor of threat associated with 'sociotropy' and dependency in future life stresses. These studies however neglected to explore autonomy in this context, an issue which has, however, been addressed in a few other studies.

Secondly, autonomy in relation to attachment and depression has been under-researched, with only few studies conducted. Murphy and Bates (1997) explored autonomy, depression and attachment and found significant findings regarding insecure attachment styles of avoidant-fearful and anxious-preoccupied. To clarify, fearful attachment relates to avoiding (avoidant) of close relationships due to fear of rejection and preoccupied attachment relates to a lack of self-confidence and overly dependence on others, and vulnerable to distress (anxious) when the needs of intimacy are not met (Bartholomew, 1990). Results found that avoidant-fearful attachment is associated with autonomous depression vulnerability and anxious-preoccupied attachment is associated with sociotropic depression vulnerability. In further investigation of these theories, research conducted by Permuy, Merino and Fernandez-Ray (2009) aimed to clarify the link between attachment

styles, depressive symptoms and personality aspects using an undergraduate sample of participants. Results indicated that preoccupied (anxious-insecure) and fearful (avoidant-insecure) attachment styles, shared a negative model of self and related highly to depressive items on the Beck Depression Inventory. Preoccupied (anxious-insecure) attachment was also associated with sociotropy as was fearful (avoidant-insecure) attachment with autonomy. This indicated that sociotropy mediated the relationship between the preoccupied attachment style and depression, and autonomy as mediating the relationship between a fearful attachment style and depression. This study provided support for personality dimensions as mediating the relationship between attachment styles and depression, and supported previous studies with finding a link between attachment styles, negative model of self (internal representation) and depression (Permuy, et al., 2009).

Moreover, a more recent study conducted by Bekker and Croon (2010) found that clinical participants experienced a higher level of depressive symptoms and displayed more avoidant and anxious attachment styles in comparison to the non-clinical groups. Results also found that low autonomy and an insecure attachment style were associated with depression. It should also be noted that when attachment style was controlled for, autonomy-connectedness alone did not have an association with depression (Bekker & Croon, 2010). This study did not examine the role of sociotropy. Given this, there is a need for further research to include sociotropy, autonomy, attachment and depression.

Research conducted by Reis and Grenyer (2002) from the University of Wollongong, NSW, Australia examined the distinction between possible differential patterns of attachment for the two depression subtypes of anaclitic and introjective. This study had hypothesised that a secure attachment would relate negatively with depression, while insecure attachment would be a predictor of the anaclitic and introjective depression subtypes, with perfectionism serving as a mediator of the relationship. Participants were introductory psychology students studying at the University of Wollongong, with ages ranging from 17 to 48 years and 89.8 per cent were Australian. To assess attachment, participants completed the Relationships Scale Questionnaire and Relationship Questionnaire. Perfectionism was measured using the Multidimensional Perfectionism

Scale and depressive symptoms by participants completing the Depressive Experiences Questionnaire and the Beck Depression Inventory. The study found that those with a secure attachment were less likely to report depressive experiences of either anaclitic or introjective subtypes. Insecure attachment styles, both fearful-avoidant and preoccupied-anxious were found to be predictors of depression with perfectionism partly mediating this relationship. It was found that those experiencing a preoccupied (anxious) attachment were at an increased vulnerability to experience anaclitic depressive symptoms, which was further indicated by high levels of social perfectionism, in line with theory. Further, those that reported a higher fearful-avoidant attachment displayed depressive symptoms and a greater tendency toward introjective depression. The hypothesis was supported as those who displayed high levels of perfectionism (self-oriented) related to the tendency of those with a fearful-avoidant attachment reporting introjective depression (Reis & Grenyer, 2002).

When considering the results of this previous study, it needs to be acknowledged that less than 30 per cent of the sample population reported more than moderate depressive symptoms and there is a clear need for future research to utilise more of a clinically depressed sample when exploring these depressive subtypes (Reis & Grenyer, 2002). The findings of this study press the need for future research to explore these variables using a clinical sample.

While a body of theory and research does exist on exploring attachment, intimacy, depression, and depression subtypes of anaclitic / sociotropy and introjective / autonomy, with some studies exploring the relationship between them, no studies have been conducted exploring how they all interrelate. In particular, few Australian studies have been conducted exploring these factors.

3.6 Summary of the research relating to theoretical underpinnings

Previous research has explored attachment and highlighted its important impact on depression vulnerability throughout adulthood, with its impact on adult relationships. Despite this, few studies have explored adult attachment in the context of intimacy as

playing a role in depression vulnerability. Despite theory argued by Holmes discussing a reciprocal relationship between autonomy and intimacy, this area has been under researched with minimal research exploring this notion of a balance between autonomy and intimacy in relation to security of attachment (Holmes, 1997). Further, only a few studies have explored this using a young adult sample, despite the importance highlighted for 'achieving intimacy' during this life phase, as already identified through Erikson's (1968) theory of psychosocial stages. Studies that have been conducted exploring autonomy and intimacy have done so using an adolescent sample (Mayseless & Scharf, 2007).

Furthermore, many of the previous studies have explored intimacy in relation to its 'capacity' rather than current experience of intimacy (Mayseless & Scharf, 2007), even though, as previously highlighted, achieving an experience of intimacy is important during the young adult phase. Intimacy has been highlighted as important to mental well being and in its absence can pose vulnerability to depression (Williams, et al., 2001). Given this vulnerability to depression, further exploration of the 'experience of intimacy' and its association to 'depression' is required. Further, given that intimacy is important during young adulthood, it is necessary for studies to explore this in relation to depression using a young adult sample. When exploring relationships, Sato (2003) reported studies of autonomy and depression focused on difficulties in relationships (Lynch, Robins, Morse, 2003), such findings highlight the importance of relationships in this context. The importance of relationships has been implicated by theory with Erikson's model regarding intimacy during young adulthood. Further, this approach to understanding depression has been explored based on theories regarding the personality dimensions of autonomy and sociotropy (Robins, Ladd, Welkowitz, Blaney, Diaz, & Kutcher, 1994).

Much of the previous research has explored depressive subtypes of sociotropy and autonomy, with few studies including attachment and intimacy. In addition, few Australian studies have been conducted, while those that have been discussed used student samples and recommended future studies include clinically depressed samples. This area requires further exploration.

3.7 Clarifying the aims of the current study

The overall aim of the current study is to examine depression in relation to security of attachment, intimacy, autonomy and sociotropy in young adulthood. The study aims to explore 'experience of intimacy' in young adults, in relation to attachment and whether this predicts depression. Moreover, despite theory developed by Holmes (1997), there has been little empirical research about the way autonomy and intimacy relate, and therefore the study aims to examine this relationship further.

In addition, based on theory of different types of depression, as interpersonal elements have been identified as related to sociotropic traits and "anaclitic depression", the study aims to explore this idea by examining relationships between depression, sociotropic vulnerability and the experience of intimacy.

Although research has explored attachment, intimacy, autonomy and sociotropy, they have been explored separately in their relation to depression, and there is a lack of research that explores all these variables together in determining depression. In light of this, the current study aims to explore the way the variables predict depression and to examine which of the variables best distinguish between clinically depressed and community samples.

3.8 Significance of the study

Previous studies have highlighted the importance of intimacy and 'non vulnerable' autonomy in an individual's ability to sustain and maintain healthy relationships (Doi & Thelen, 1993; Holmes, 1997; Mayseless & Scharf, 2007; Pielage, et al., 2005; Shulman, et al., 1997). Further, an imbalance of this reciprocal relationship could be potentially detrimental as depression has been associated with lack of intimacy and insecure attachment styles (Pielage, et al., 2005; Williams, et al., 2001).

Much of the literature predominantly focuses on attachment styles and has expanded from the early work of Bowlby. Further, previous research has examined intimacy and the capacity for intimacy, but there is a lack of research focusing on autonomy

and its association to the experience of intimacy. Additionally, previous studies have predominantly explored 'intimacy' in adolescent samples. However based on Erik Erikson's theory, intimacy is necessary to the psychosocial development during the life phase of young adulthood. In light of this, the experience of intimacy and autonomy in a young adult sample requires further exploration as both play a key role in relationships, which are centrally important during this life phase. Furthermore Holmes (1997) emphasised the importance of a shift in research from attachment to intimacy with a focus on autonomy, given his theory of the reciprocal relationship between intimacy and autonomy and their links to depression.

The current study has been developed based on the need to further explore autonomy and intimacy in the context of attachment styles and their relationships to depression. This need has become apparent given the direction of the literature, and the highlighted importance in previous studies that have begun to explore this area. The current study aims to contribute to this area of research and to provide further understanding of the associations existing between experiences of intimacy, autonomy, security of attachment and their relationship to depression. Further and more importantly the study aims to examine these variables in the context of a comparison between a clinically depressed and community sample.

In addition, both psychoanalytic and cognitive theories have indicated two different types of depression associated with 'dependency/sociotropic' features and or with 'autonomous' personality traits. 'Dependency/sociotropic' features are present when the individuals' sense of self is based on interpersonal relations with others. Therefore depression is associated with the absence of interpersonal relations or the experience of rejection. Based on this notion, it would be indicated that individuals possessing problematic sociotropic features and who are currently depressed would have experienced some kind of rejection or interpersonal absence. However there is limited research, particularly research conducted with an Australian adult sample exploring and testing the idea of this theory. To further test the idea of this theory, it would be beneficial to explore

whether individuals during young adulthood, that are experiencing depression with problematic sociotropic traits are also experiencing low intimacy in their current situation.

In relation to autonomy (when problematic), depression occurs when achievements or goals are not reached as the 'sense of self' is internalised and not based on interpersonal relations to others. In this instance when autonomous features are problematic and indicate as 'critical self', depression would be associated with personal failures not due to interpersonal relations and experience of intimacy. Although this appears contradictory to theory of Holmes (1997), it should be highlighted that Holmes identifies a reciprocal relationship between intimacy and autonomy as the need for requiring a 'positive balance' in relationships. Whereas depression associated to the autonomous individual relates to autonomy at a problematic level, when the individual has formed a 'self critical' sense of self. Holmes (1997) theory postulates autonomy as the ability to also be together and separate within the relationship which implies 'non dependency' and self-efficacy, whereas the depression associated with autonomy relates to the 'critical self' sense of self.

In light of this, the current study also aims to examine the role of sociotropy, autonomy, attachment and intimacy in predicting depression. In addition, to examine these variables within a depressed and community sample to further explore their association with the ideas identified in the underlying theory of depression.

Further exploring variables relating to theory of two different underlying types of depression could provide additional understanding, and build on findings of previous studies which have suggested such knowledge as useful to assist with future treatment plans for individuals suffering with depression.

3.9 Research Questions and Hypotheses

Based on previous research findings, motivated by relevant theoretical underpinnings, and the weaknesses identified in previous studies, five research questions have been formulated. The first research question concerns three variables posited by theory to be predictors of intimacy. The second and third research questions follow this up

by examining specific theory-based predictions about the direction of relationships between intimacy and other variables. The final two research questions concern variables associated with depression, with the fourth question focusing on predictors of depression and the fifth on discriminating between a clinically depressed group and a comparison group from the general community.

1) To understand more about the variables relating to the experience of intimacy, do autonomy, sociotropy, and security of attachment predict intimacy?

2) To test a theoretical proposition argued by Holmes (1997), do autonomy and intimacy share a positive relationship?

3) To examine the theory regarding the type of depression associated with sociotropy, will individuals with sociotropic vulnerability traits and depression experience low intimacy?

4) To understand more about the variables discussed in relation to depression and based on the importance of 'intimacy' highlighted during young adulthood, the role of attachment, and the implication of both personality dimensions sociotropy and autonomy, do the experience of intimacy, attachment styles, and personality traits of sociotropy and autonomy predict depression?

5) To further understand the differences between community and clinical groups will insecure-avoidant attachment (attachment style A), secure attachment (attachment style B), insecure-anxious attachment (attachment style C), intimacy, autonomy and sociotropy discriminate between a clinically depressed and community sample?

Based on the research questions designed for the current study, the following hypotheses have been postulated with the first four hypotheses looking at the relationships between variables as predicted by previous theories:

1. It is hypothesised autonomy, sociotropy and security of attachment will predict intimacy

2. It is hypothesised intimacy and autonomy are positively correlated

3. It is hypothesised that sociotropy and depression will predict low intimacy

4. It is hypothesised that attachment style (insecure-avoidant, secure, insecure-anxious), intimacy, autonomy and sociotropy will predict depression

In addition, to look at all the variables in the extent to which they discriminate between a clinically depressed and community sample, hypothesis five has been formulated:

5. It is hypothesised that the variables attachment style A (insecure-avoidant), attachment style B (secure), attachment style C (insecure-anxious), intimacy, autonomy and sociotropy will discriminate between a clinically depressed and community sample

Chapter 4

Method

4.1 Introduction

This chapter reports and elucidates the stages of the methodology. This incorporates the relevance of the selected method of quantitative design chosen and its justification for its purpose in this study. The selection criteria of the participants and the measures chosen will be outlined. Sequentially the steps taken to analyse the data are provided. Finally, reliability and validity is discussed specifically to the quantitative measures chosen.

4.2. Research Design

The study design is of a quantitative nature, using four self report questionnaires to assess adult attachment style, intimacy, personality traits sociotropy and autonomy, and depressive symptoms. A background questionnaire was also included to obtain demographic information relevant to the study. A young adult sample was recruited as the study aims to explore *intimacy* as one of the variables. This was based on Erik Erikson's (1968) theory regarding psychosocial stages of development, where intimacy vs. isolation is a marker important during the life phase of young adulthood. As achieving intimacy is important during this stage of development, a young adult sample is preferred for the purpose of enriching this study. In relation to defining exact age necessary to recruiting participants it should be noted that an exact age has not been clearly established in theory, merely an approximation. In light of this, and in line with the theory, previous authors exploring the work of Erikson have approximated the age bracket of this stage as between 25 to 40 years of age (Weiland, 1993). Based on this, the age group for participants was determined with age selection criteria being between 25 and 40 years of age. For the purpose of this study both a community and clinic sample were utilised in order to examine and determine the difference between a clinical group and community group in relation to the variables of interest. Both samples completed questionnaire packs and different coloured consent forms were used to distinguish between the two groups. Quantitative

analysis allowed for examining the relationships between variables and determining those relating to depression.

4.3 Sample

4.3.1 Overall sample

A total number of 105 participants were recruited for the current study. Participants are defined as young adults (aged 25 to 40 years) and comprised both a clinical and community sample. There were 32 participants in the clinical sample and 73 in the community sample. Approximately 90 questionnaire packs were distributed to potential community participants, and 73 (81%) were returned. Of approximately 100 questionnaire packs distributed to clinical and counselling services 32 were returned. It is not known exactly how many packs were collected by potential clinical participants.

4.3.2 Clinical Sample

The clinical sample participants were sought from community health organisations, counselling services, Anxiety Disorders Association of Victoria and Beyond Blue. These organisations were selected on the basis that they treat mainly high prevalence disorders, mostly depression, in contrast to mental health organizations which frequently treat low prevalence disorders (such as psychotic disorders) and dual diagnoses. The study was able to be advertised at these organisations in accordance with ethics approval. Recruitment sought participants who *self reported* a diagnosis of depression, and did not involve inspection of clinical records. In order to recruit these participants self diagnosed as experiencing ‘depression’, ethics approval was obtained from relevant bodies to grant permission for recruitment.

4.3.3 Community Sample

The community sample was obtained through various church, sporting and recreation community groups in the Melbourne Metropolitan area. In addition to these

groups, some higher education undergraduate students and TAFE students undertaking courses at Victoria University (mature aged students 25 to 40 years) also participated.

4.4 Power analysis

A minimum number of 100 participants in total were sought for the current research in order to establish statistical power.

A power analysis had been conducted for the current study for both a multiple regression (see Appendix K) and correlation analysis (see Appendix L). A priori power analysis for multiple regression indicated that the study was required to obtain a minimum of 77 participants in total (n=77) to have 80% power for detecting a small sized effect when the significance level is set at .05. A priori power analysis for correlation indicated that the study was required to obtain a minimum of 82 participants in total (n=82) to have 80% power for detecting a small sized effect when the significance level is set at .05.

Furthermore, for the purpose of the current study a discriminant function analysis using all the variables will determine which of the variables best discriminate membership between the clinically depressed and community group. This will enable further exploration of the variables in relation to which of the variables best determines depression. To assess the appropriateness of this test based on the sample size aimed for this study, it is considered a 'rule of thumb' that the smallest sample size in the discriminant function analysis should at least be 20 per predictor when using approximately 4 to 5 predictors (indicating a total sample of 80 suitable when using 4 predictor variables). Further the sample size of the smallest group needs to be greater than the number of independent (predictor) variables (Francis, 2001). Also unequal sample sizes are acceptable for this analysis. Therefore, it is concluded that the current study has enough participants in each sample in order to meet the required sample size for this type of statistical analysis.

4.5 Measures and Instruments

Each participant was provided with five self-report questionnaires, the questionnaire packs included one background questionnaire, adult attachment questionnaire, intimacy

scale, personality measure of sociotropy and autonomy and depression measure. Enclosed in each pack was an information to participant sheet, that was different for each sample (clinical and community) outlining details of the current study. Each pack also included a consent form (see Appendix G) to be completed. Different coloured consent forms were used to distinguish between community and clinical sample participants' completed questionnaires. The questionnaire booklet was expected to take approximately 35 to 40 minutes to complete, and incorporated the following measures:

4.5.1 Background information

Participants were asked demographic information such as their age, sex, information about relationship status, and mental health (see Appendix B).

4.5.2 Attachment

4.5.2.1 Adult Attachment Questionnaire

Hazan and Shaver's Adult Attachment Questionnaire (1987) integrates concepts of attachment theory to examine the study of romantic relationships and was constructed based on Bowlby's early work. It is designed to measure attachment style, constructed on the concept of relationships being based on early childhood internalizations of parental relationships.

4.5.2.2 Classification of attachment styles

The three types of attachment incorporated in the questionnaire are Secure, Insecure-Avoidant and Insecure-Anxious/Ambivalent and were constructed by Hazan and Shaver (1987) based on Ainsworth et al.'s (1978) descriptions of the emotional and behavioural characteristics of each of the attachment styles (Stein, Jacobs, Ferguson, Allen & Fonagy 1998). *Secure attachment* is linked with closeness, trust, and an absence of 'fear of intimacy' or jealousy (Stein et al., 1998). Securely attached individuals understand that they can make their needs known and trust their partner will be responsive to them. Any differences that present can be worked through with problem solving. *Anxious-Ambivalent*

attachment involves extreme jealousy, obsessive preoccupation with the availability of the partner, vulnerability to fear, anxiety or loneliness and falling in love easily. Anxious-ambivalent attached individuals do not feel satisfied with the available emotional closeness and lack confidence in their partner's availability. *Avoidant attachment* includes avoidance of intimate social contact, particularly during periods of stress, and attempts to compensate through non-social activities. Individuals with an avoidant attachment style are distant from others and skeptical to trusting others (Stein et al., 1998).

Previous research conducted by Sperling, Foelsch and Grace (1996) indicated limitations of the Hazan and Shaver Adult Attachment Questionnaire (1987) given its categorical nature. Previous research assessing adult attachment measurements compared the Hazan and Shaver Adult Attachment Questionnaire (1987) to other measurements using analysis of variance. Results indicated no significant differences for internal reliability and subscale intercorrelation in comparison with other measures of attachment. Results suggested that although Hazan and Shaver's scale is simple, it appears to be a vigorous categorical measurement (Sperling et al., 1996).

4.5.2.3 Revised Hazan & Shaver Three Category Measure

Adult attachment style was measured using the Revised Hazan & Shaver (1987) Three Category Measure (Borg, 2003). While the original Hazan & Shaver (1987) questionnaire provides categorical data, an attachment score was required for the data analysis. This revised version incorporates an attached likert scale in order to measure each attachment style as three continuous variables based on a rating from 1 to 5 (Borg, 2003). Therefore the Revised Hazan & Shaver Three Category Measure provides both categorical data and an attachment score required for the data analysis (see Appendix C). Participants indicated their score in relation to how alike or not alike they are to each of the three attachment styles. Participants were required to read through each of the three self descriptions (for each attachment style A, B and C) and place a tick next to the one that best describes how they feel in close / intimate relationships. For example self description of attachment style B reads "I find it relatively easy to get close to others and am comfortable

depending on them and having them depend on me. I don't worry about being abandoned or about someone getting too close". Participants are then required to rate each of the three self descriptions from 1 (not at all like me) to 7 (very much like me) that corresponds to their relationship style. The scores obtained for each attachment type (A, B and C) were used as three continuous variables to measure attachment styles in the current study. To establish reliability of this technique, the consistency of responses was measured. This involved 20 non-participants completing the measure along with the rating scale, as a pilot. Four weeks later, the non-participant samples were asked to complete the measure along with the rating scale again. These scores were then tested using correlation to determine test-retest reliability of this technique.

The correlation analysis indicated that the correlation measuring the relationship and consistency between responses / scores on test 1 and (four weeks later) on test 2 for: attachment style A (insecure / avoidant type) was significant and indicated a strong positive correlation $r = .915$, $p = .000$; attachment style B (secure type) was significant and indicated a strong positive correlation $r = .852$ $p = .000$; and attachment style C (insecure / anxious type) was significant and indicated a strong positive correlation $r = .812$, $p = .000$. Overall, these scores indicated that this revised measure has strong test-retest reliability.

4.5.3 Intimacy

The Miller Social Intimacy Scale (MSIS) was used to measure intimacy. This measure was developed by Miller and Lefcourt (1982). It is a 17 item scale designed to measure the maximum level of intimacy currently experienced by an individual in either friendships or romantic relationships (see Appendix D). Instructions on the questionnaire direct participants to think of someone close to them, either a romantic partner or friend when answering the following questions. Of the 17 items, the first 6 items measure frequency on a 10-point scale and instruct participants to indicate on a scale of 1 to 10 how often you do this (1 very rarely to 10 almost always). An example of such an item is "How often do you show him / her affection?" The following 11 items on the MSIS measure intensity ratings on a 10-point scale and instruct participants to circle their answer on a

scale from 1 (not much) to 10 (a great deal). An example of such an item is "How close do you feel to him / her most of the time?" The MSIS also comprises two items requiring inverse scoring, for example "How much damage is caused by a typical disagreement in your relationship with him / her?" Following inverse scoring of the two items, items for each response are added in order to obtain the intimacy variable score, with the higher the score, indicating a higher level of intimacy.

Miller and Lefcourt (1982) measured internal consistency for the MSIS by calculating Cronbach alpha coefficient. For two samples these results were reported as $\alpha = .91$, $n = 45$; $\alpha = .86$, $n = 39$. This indicated that the MSIS items measure a single construct as expected. Evidence for test-retest reliability was measured through two administrations of the MSIS across intervals to groups of unmarried student participants. The results were, $r = .96$ ($p < .001$, $n = 25$) over a two month period and $r = .84$ ($p < .001$, $n = 20$) over a one month period. These results indicated some stability in maximum level of intimacy experienced across time. Validity of this measure was also tested in the study (Miller & Lefcourt, 1982). Convergent validity was tested using an unmarried student sample. Results indicated $r = .71$, $p < .001$, $n = 45$. The study also measured discriminant validity and construct validity of the MSIS. Overall the psychometric data indicated that the MSIS is a valid and reliable measure of social intimacy (Miller & Lefcourt, 1982). In addition, a reliability analysis conducted on the total sample in the current study assessed the items in the Miller Social Intimacy Scale and found strong internal consistency with Cronbach's $\alpha = 0.888$.

4.5.4 Autonomy and Sociotropy

The Personal Style Inventory- Revised (PSI-II) was used to measure autonomy and sociotropy (see Appendix E). This comprises a 48-item self report measure developed by Robins et al., (1994) and designed to assess personality factors of sociotropy and autonomy. The scale was devised in order to measure these two personality characteristics in light of indicated vulnerabilities to depression associated with "dependency" (sociotropic traits) and "self-criticism" (autonomy traits). Responses to each item (for example "I try to please

other people too much") are made on a 6-point likert scale for participants to respond from 1 (strongly disagree) to 6 (strongly agree). The sociotropy scale comprises 24 items and consists of the following subscales: Concern about What Others Think (7 items), Dependency (7 items), and Pleasing Others (10 items). The totals for each subscale were added in order to derive the Sociotropy variable score. The Autonomy scale comprises 24 items and consists of the following subscales: Perfectionism/Self-Criticism (4 items), Need for Control (8 items), and Defensive Separation (12 items). The totals for each subscale were added in order to derive the Autonomy variable score. The PSI has been shown to have adequate factor structure, internal consistency, and test - retest reliability (Robins et al., 1994).

The autonomy and sociotropy scales have been reported to have both internal consistency and validity for both a student and clinically depressed sample (Lynch, Robins & Morse, 2003). Further, after validating the revised scale it was shown to have good factor structure, temporal stabilities and internal consistencies. The PSI is a successful measure of vulnerability factors associated with the two personality traits (Lynch, et al., 2003). Previous research exploring the stability and validity of the autonomy and sociotropy personality dimensions measured by the PSI-II tested internal consistency using Cronbach's alpha (Bagby, et al., 2001). Participants were from a clinically depressed sample. Results for the autonomy scale were .85 (n = 241) and for the sociotropy scale were .88 (n = 241). Stability estimates for autonomy and sociotropy were .76 and .73, respectively at baseline and .83 and .80, respectively at re-test. Overall, the results of this study supported the stability, convergent and discriminant validity of the autonomy and sociotropy personality dimensions, as measured by the Personal Style Inventory – Revised. It was also found that both autonomy and sociotropy were unaffected by depressed mood severity. Furthermore both autonomy and sociotropy were found to maintain stability across time (Bagby, et al., 2001). In addition, a reliability analysis conducted on the total sample in the current study assessed the items in the Personal Style Inventory-II for each subscale. Strong internal consistency was found for both sociotropy and autonomy subscales; with Cronbach's α=.931, and α=.846, respectively.

4.5.5 Depression

The depression variable was derived and measured using the Beck Depression Inventory, which is a 21-item self report scale used to measure cognitive and affective symptoms of depression in the preceding two weeks (see Appendix F). Each of the 21 items consists of four or more descriptive statements. Participants are required to read through each group of four (or more) statements carefully and pick the one statement, rated from 0 to 3, from each group which best describes the way they have been feeling during the past two weeks. For example, group 1 'Sadness' statements from 0 to 3 are: 0 I do not feel sad; 1 I feel sad much of the time; 2 I am sad all the time; 3 I am so sad or unhappy that I can't stand it. Scores are then added and the total indicates depression severity, the higher the score the higher the severity of depression (Burns, Sayers & Moras, 1994).

The Beck Depression Inventory (BDI) was developed in 1961 and adapted in 1969. The BDI-II was developed in line with the Diagnostic and Statistical Manual of Mental Disorders, fourth edition text revision (DSM-IV-TR) reflecting criteria correlating to symptoms of major depressive disorder experienced two weeks preceding the self-report. The BDI has had extensive testing for content, concurrent and construct validity, in addition to extensive tests of reliability. These studies confirm and support the reliability and validity of the BDI (Beck & Steer, 1984; Beck, Steer & Garbin, 1988; Beck, Guthy, Steer & Ball, 1984). Despite reliability and validity tests completed for the well known BDI, for the purposes of the current study a reliability analysis was conducted, and as expected found strong internal consistency among items, with Cronbach's $\alpha = .940$.

4.6 Procedure

4.6.1 Clinical Sample

After Victoria University Human Research Ethics Committee granted approval for the project (see Appendix A), clinical sample participants were recruited through contacting community health organisations and counselling services in Melbourne. The advertising of the study was a collaborative effort, between each organisation and the student researcher.

It was then decided that each organisation would distribute flyers (see Appendix J) that provided details of the study and how to partake in the study. The flyers were posted at reception advertising for those who were interested to request a questionnaire pack from their counsellor. Each of the counsellors at the organisations was provided with questionnaire packs to provide to those expressing interest in the study. Enclosed with each questionnaire pack was *information to participants* sheet (see Appendix H).

Participants were also sought from Beyond Blue and Anxiety Disorders Association of Victoria. Information about the study was posted on the research notice board on the Beyond Blue website. Details indicated for those interested to contact the student researcher by phone or email for more information or to receive a questionnaire pack. With the Anxiety Disorders Association of Victoria (ADAVIC), information about the current study was posted on the ADAVIC website and in the ADAVIC newsletter, and staff at the ADAVIC support groups handed out flyers (see Appendix J) providing information about the study. Individuals who were interested in taking part in the current study contacted the student researcher by email or phone and questionnaire packs were posted.

Each questionnaire pack, along with the questionnaires and consent form, included a pre-paid envelope to return the pack. In addition each pack included an offer to go into a draw for a $50 supermarket voucher as an incentive. Details of the offer were clearly stipulated in the Information to Participants sheet (see Appendix H). The incentive draw was offered for the clinical sample participants only on the basis that they may be a potentially more disadvantaged population. When questionnaire packs were returned and received, the consent form was separated from the questionnaires and questionnaires were stored separately and securely in a locked cabinet. The envelopes for the draw that were returned with the questionnaire packs were also stored safely and securely in the locked cabinet.

4.6.2 Community Sample

After Victoria University Human Research Ethics Committee granted approval for the project (see Appendix A), community sample participants were recruited through

approaching various sporting and recreation groups within the community. These groups included football and netball clubs, dancing groups and church groups throughout metropolitan Melbourne. Brief information about the study was discussed with each of the groups expressing interest in participating, and questionnaire packs left with groups. Individuals interested in taking part in the study completed a questionnaire pack, reading more about the study in the *information to participants* sheet (Appendix I) and returned completed questionnaires in the pre-paid envelope. In addition to community groups, student groups were also sought. This included approaching undergraduate mature aged classes at Victoria University. The student researcher spoke briefly about the study and asked those who were interested to collect a questionnaire pack. Questionnaire packs were left on a table at the front of the class. When questionnaire packs were returned and received, the consent form was separated from the questionnaires and questionnaires were stored separately and securely in a locked cabinet.

4.7 Method of data analysis

Raw data were entered into the Statistical Package for Social Sciences (SPSS-v.). The responses from the background questionnaire, Adult Attachment questionnaire, Miller Social Intimacy scale, the Personal Style Inventory - Revised and the Beck Depression Inventory were entered into the SPSS program. Once all of the raw data was entered into the SPSS program, statistical analysis was conducted to test hypotheses. Regression analysis was used to test hypotheses that autonomy, sociotropy and security of attachment will predict intimacy; that intimacy and autonomy are positively related; sociotropy and depression will predict low intimacy; and attachment style A (insecure-avoidant), attachment style B (secure), attachment style C (insecure-anxious), intimacy, sociotropy and autonomy will predict depression. In addition, the correlation matrix analysis was used to test the correlation between intimacy and autonomy.. Lastly, discriminant function analysis was used to determine which of the variables, attachment style A (insecure-avoidant), attachment style B (secure), attachment style C (insecure-anxious), intimacy, autonomy, and sociotropy will discriminate between a clinically depressed and community sample.

Chapter 5

Results

5.1 Data diagnostics

Prior to the main analyses, data was examined and checked for accuracy of data entry, missing values and assumptions of multivariate analysis. No coding errors or missing values were present in the data set. The assumptions were evaluated through SPSS-v.16.0. The data was tested for both univariate and multivariate outliers and one extreme outlier was detected and violated assumptions for the discriminant function analysis (Tabachnick & Fidell, 2007). This outlier was eliminated from the data prior to running the discriminant function analysis. Normality probability (P-P) was performed to test the assumption of normality, linearity and homoscedasticity. In an analysis of the residuals, both Cook's distance and Mahalanobis distance were used to check the data prior to regression analysis. Cook's Distance did not exceed 1, and therefore the outlier did not violate the assumptions for the multiple regression analysis, and was not removed for the regression analyses. There was no mulitcollinearity between the variables; no correlations exceeded .9 (Tabachnick & Fidell, 2007). Furthermore, the observation of scatterplots demonstrated that no violations were evident for the assumptions of homoscedascity and linearity. The analyses indicated that the assumptions were met and the data linear and within appropriate ranges.

5.2 Sample characteristics

5.2.1 Demographic Information

Clinical and community samples were recruited for the current study. The sample included 32 participants from a clinical population, being people who self-identified as experiencing depression and accessing counselling services for treatment, or seeking help through Beyond Blue or Anxiety Disorders Association of Victoria. The remaining participants (n = 73) were the community sample and were recruited across the Melbourne Metropolitan area. Participants from the community were recruited through sporting groups, church groups, recreation groups and mature aged students from Victoria

University. Demographic and background information was obtained from all the participants. Of the 105 participants, 35.2% were male with a mean age of 31.43 (*SD = 5.14)* and 64.8% were female with a mean age of 30.10 *(SD = 5.22)*. The overall mean age for the total sample (*n* = 105) was 30.57 *(SD = 5.20)*. In the clinical group, the mean age of participants was 33.25 (*SD* = 5.58), and 18.8% of participants were male (*n*=6) and 81.3% (*n*=26) female. In the community group, the mean age of participants was 29.40 (*SD* = 4.60), with 42.5% being male (*n*=31) and 57.5% female (*n*=42).

The majority of participants were born in Australia (80%, *n*=84), with 20% born in various countries: England (4.8%, *n*=5), Sri Lanka (2.9%, *n*=3), India (1.9%, *n*=2), Hong Kong (1.9%, *n*=2), and one participant from each of Kenya, Colombia, Romania, Italy, Kuwait, Vietnam, Russia, Pakistan, and Canada.

In terms of employment, among the total sample, 59.0% (*n*=62) worked full-time, 10.5% (*n*=11) were employed part-time, 16.2% (*n*=17) were studying, 3.8% (*n*=4) were occupied in domestic duties, 4.8% were unemployed and 4.8% were also not working due to disability. Information regarding employment status for both the clinical and community group can be seen below in Table 1.

Table 1

Employment status for both clinical and community sample

	Group	
	Clinical	Community
	n = 32	n = 73
Full-time employment	43.8%	65.8%
Part-time employment	12.5%	9.6%
Studying	18.8%	15.1%
Domestic duties	3.1%	4.1%
Unemployed	9.4%	2.7%
Not working due to disability	9.4%	2.7%

In the clinical group 37.5% (*n*=12) of participants were in a relationship and 62.5% (*n*=20) were single. This differs to the community sample where a higher percentage of participants were in a relationship (56.2%, *n*=41) while 43.8% (*n*=32) were not in a relationship. Information regarding relationship status for both the clinical and community group can be seen below in Table 2.

Table 2

Relationship information and marital status for both clinical and community sample

	Group	
	Clinical	Community
	n = 32	n = 73
Married	12.5 %	16.4%
Single	62.5%	43.8%
De facto	9.4%	17.8%
Widowed	3.1%	0%
Divorced	9.4%	8.2%
Separated	0%	1.4%
R/s breakup in the past 18 months	37.5%	28.8%
No r/s breakup in past 18 months	62.5%	71.2%

5.2.2 Mental health: Reported diagnoses and treatment

The demographic questionnaire also asked participants to self-report any current diagnoses, whether they self-identified as being depressed (regardless of a self-reported diagnosis), history of depression and current treatment. Of the clinical sample, 87.5% (*n*=28) reported a current diagnosis of depression. Although four participants in the clinical sample did not report a current diagnosis of depression they were maintained as part of the sample, as they self-identified as being depressed despite not reporting a formal diagnosis. Among the community group 13.7% (*n*=10) reported a diagnosis of depression. Regardless

of a self-reported diagnosis of depression, among the clinic group 96.9% (*n*=31) self-identified as being depressed, and among the community group 17.8% (*n*=13) self-identified as being depressed.

The current study attempted to seek participants without a comorbid diagnosis. However there were participants with comorbid diagnoses, mainly comorbidity with other low prevalence disorders. Among the clinical group, 25.0% (*n*=8) self-reported a current diagnosis of both depression and anxiety. Two participants (6.3%) in the clinical group reported a diagnosis of depression and comorbid anxiety and post-traumatic stress disorder; one participant reported a diagnosis of schizophrenia; one reported a diagnosis of both depression and post traumatic stress disorder; one reported a diagnosis of depression and comorbid anxiety and obsessive compulsive disorder; one reported a diagnosis of psychosis and comorbid depression and generalised anxiety disorder and one reported both depression and obsessive compulsive disorder. In contrast, only 8.2% (*n*=6) of the community group reported being diagnosed with depression alone; 5.5% (*n*=4) reported a diagnosis of anxiety or panic disorder; 5.5% (*n*=4) reported a diagnosis of both depression and anxiety and one participant reported a diagnosis of ADHD. The majority of the community group, being 79.5% (*n*=58) reported no clinical diagnosis for a psychological disorder.

In the clinical group 71.9% (*n*=23) reported suffering depression in the past in contrast to only 21.9% (*n*=16) of the community group. Among the clinical group, the majority of participants that reported a formal diagnosis of depression (including the few who did not but self identified as being depressed) were currently receiving treatment, being 90.6% (*n*=29) of the clinical group. Thirty percent (*n*=9) were being treated with medication, 23.3% (*n*=7) were receiving therapy / counselling and 33.3% (*n*=10) were receiving both therapy and medication to treat their depression. There was one person who reported being treated with medication, counselling and ECT and one reported treatment using natural remedies.

In the community group, 86% (*n*=63) reported not having a diagnosis of depression. Of the total community sample, 13.7% (*n*=10) reported a diagnosis of depression but were not currently receiving treatment.

Despite some overlap in depressive symptomology clinical and community groups were retained as groups for comparison because the clinical group was currently receiving treatment for depression and the community group was not. The analysis based on depressive symptomology was measured by the BDI-II and was undertaken in the examination in hypothesis 4. This allows for two approaches for the identification of depression, depression as identified by symptomology and depression as identified by presenting for treatment.

5.3 Descriptive Statistics

The descriptive statistics for the variables in the current study are presented in Table 3. As observed in Table 3, the variable means for the two samples of clinical and community differed significantly on Attachment Style B (secure attachment), Sociotropy and Depression scores. The results from the independent samples t-test comparing the two groups can be seen below.

Table 3

Descriptive Statistics

	Sample Group			
	Clinically Depressed (n = 32)		*Community Sample* (n = 73)	
	M	*SD*	*M*	*SD*
Attachment Style A	4.31	2.26	3.56	2.02
Attachment Style B*	3.94	1.52	4.70	1.86
Attachment Style C	3.53	2.10	2.80	1.90
Sociotropy*	101.87	20.65	89.10	20.05
Autonomy	87.81	16.52	83.86	14.60
Intimacy	120.47	24.64	126.75	25.33
Depression (BDI-II)*	25.03	12.51	11.26	9.05

*p<.05 difference between group means

Pearson's correlations were also computed as part of data diagnostics to assess the simple relationships between variables, and they are shown in Table 4. Attention is drawn below to correlations of particular interest.

Table 4

Correlation Matrix Analysis (all variables)

	Attachment Style A *r*	Attachment Style B *r*	Attachment Style C *r*	Intimacy *r*	Sociotropy *r*	Autonomy *r*	BDI-II total *r*
Attachment Style A	1	-.616***	-.115	-.293**	.045	.497***	.244*
Attachment Style B	-.616***	1	-.274**	.326***	-.176	-.354***	-.372 ***
Attachment Style C	-.115	-.274**	1	-.160	.519***	-.011	.314***
Intimacy	-.293**	.326 ***	-.160	1	.015	-.534***	-.131
Sociotropy	.045	-.176	.519 ***	.015	1	.207*	.539***
Autonomy	.497***	-.354***	-.011	-.534***	.207*	1	.270**
BDI-II total	.244*	-.372***	.314***	-.131	.539***	.270**	1

N = 105 *p=.05, **p=.01, ***p=.001

The correlation analysis between sociotropy and attachment style C (insecure anxious attachment style) was significant and indicated that sociotropy and attachment style C (insecure anxious attachment style) are positively correlated r = .519, p = .000.

The correlation analysis between autonomy and attachment style A (insecure avoidant attachment style) was significant and indicated that autonomy and attachment style A (insecure avoidant attachment style) are positively correlated r = .497, p = .000.

5.4 Data Analysis and Testing of Hypotheses

Multiple regression analyses were used to test hypotheses 1, 2, 3 and 4, hypothesis 1 being that autonomy, sociotropy, and security of attachment will predict intimacy; hypothesis 2 that autonomy and intimacy will share a positive relationship; hypothesis 3 that sociotropy and depression will predict low intimacy and hypothesis 4 that intimacy, attachment style, and personality traits of sociotropy and autonomy will predict depression. The correlation matrix analysis was also used to test hypothesis 2. A direct discriminant function analysis was used to test hypothesis 5, that the variables intimacy, attachment styles A (insecure-avoidant), B (secure) and C (insecure-anxious), autonomy and sociotropy will predict membership between the clinically depressed and community group. All statistical analyses were two-tailed and significance set at 0.05.

5.5 Predictors of intimacy

5.5.1 Autonomy, sociotropy, and security of attachment as predictors of intimacy

A multiple linear regression analysis was conducted to test hypothesis 1, to determine whether autonomy, sociotropy, and security of attachment predict intimacy. Summary of the results can be seen in Table 5 below.

Table 5

Summary of Standard Multiple Regression Analysis for Variables Predicting Intimacy

Predictor Variable	B	SE B	Beta	t	R^2	AR^2
Autonomy	-.830	.146	-.503	-5.689*	…	…
Sociotropy	.179	.101	.149	1.781	…	…
Attachment Style B (Secure Attachment)	2.452	1.233	.175	1.988*	.327	.307

N = 105 *p<.05

The results indicated that a significant amount of variation in intimacy scores was accounted for by the predictor variables, $F(3, 101) = 16.38$, p = .000. The Adjusted R-square value indicated that together 30% of the variance was accounted for by the regression equation, with 70% unaccounted for. The following factors were found to be significant predictors, attachment style B / secure attachment ($t = 1.99$, $p = .049$) and autonomy ($t = -5.69$, $p = .000$). Hypothesis 1 was therefore only partially supported as sociotropy did not contribute significantly to the analysis.

5.5.2 Intimacy and autonomy

In relation to hypothesis 2 that autonomy and intimacy will share a positive relationship, the regression analysis above indicated that autonomy is negatively connected to intimacy. This is consistent with the correlation matrix analysis seen in Table 4 which shows the relationship between autonomy and intimacy was significant and indicated that autonomy and intimacy are negatively correlated r = -.534, p = .000. Thus hypothesis 2 (predicting a positive correlation) was not supported.

5.5.3 Sociotropy and depression as predictors of intimacy

A multiple linear regression was conducted to test hypothesis 3, to determine whether sociotropy and depression will predict low intimacy. Summary of the results can be seen below in Table 6.

Table 6

Summary of Standard Multiple Regression Analysis for Variables Predicting Intimacy

Predictor Variable	B	SE B	Beta	t	R^2	AR^2
Sociotropy	.145	.139	.121	1.041	…	…
Depression	-.412	.243	-.196	-1.694	.028	.009

N = 105 *p<.05

The results indicated that there was not a significant amount of variation in intimacy accounted for by the predictors, $F(2, 102) = 1.45$, $p = .240$. Hypothesis 3 was therefore not supported.

5.6 Exploring Depression

5.6.1 Predictors of Depression

A multiple linear regression was conducted to test hypothesis 4 to determine whether attachment style, intimacy, sociotropy and autonomy would predict depression as measured by the BDI-II. Summary of the results can be seen below in Table 7.

Table 7

Summary of Standard Multiple Regression Analysis for Variables Predicting Depression

Predictor Variable	B	SE B	Beta	t	R^2	AR^2
Attachment Style A (Insecure - Avoidant)	.262	.664	.046	.394	…	…
Attachment Style B (Secure Attachment)	-1.57	.760	-.233	-2.049*	…	…
Attachment Style C (Insecure - Anxious)	.006	.653	.001	.010	…	…
Intimacy	-.010	.048	-.020	-.197	…	…
Sociotropy	.277	.058	.485	4.786*	…	…
Autonomy	.043	.087	.054	.489	.377	.339

N = 105 *p<.05

The results indicated that a significant amount of variation in depression scores was accounted for by the predictor variables, $F(6, 98) = 9.88$, p = .000. The Adjusted R-square value indicated that together 34% of the variance was accounted for by the regression equation, with 66% unaccounted for. The following factors were found to be significant predictors, attachment style B/secure attachment ($t = -2.05$, $p = .043$) and sociotropy ($t = 4.79$, $p = .000$). Thus hypothesis 4 was partially supported.

5.6.2 Discriminating between community and clinical groups

A direct discriminant function analysis was performed using six variables as predictors of membership in two groups, clinically depressed and community group. Predictors were attachment style A (insecure / avoidant type), attachment style B (secure type), attachment style C (insecure / anxious type), intimacy, sociotropy and autonomy. Of

the 105 cases, one was dropped from the analysis due to univariate outliers. For the remaining 104 cases (72 community sample and 32 clinical sample), evaluation of assumptions of linearity, normality, multicollinearity and singularity were satisfactory. Findings are summarised in Tables 8 and 9 below.

Table 8

Standardised Canonical Discriminant Function Coefficients

Predictor Variables	Function 1
Attachment Style A (Insecure-Avoidant)	.168
Attachment Style B (Secure)	-.307
Attachment Style C (Insecure-Anxious)	-.149
Intimacy	-.342
Sociotropy	.918
Autonomy	-.142

Table 9

Summary of discriminant function analysis results of variables predicting clinical or community group membership

Actual Group	N	Predicted Group	
		Clinical	Community
Clinical	32	6	26
%		18.8%	81.3%
Community	72	6	66
%		8.3%	91.7%

One discriminant function was calculated, and the discriminant function was significant (*Wilks' Lambda*= .878), Chi-square (12.914), p = .044. The discriminant function showed attachment style B and sociotropy were statistically significant with the highest F values *F* (4.186) $p < 0.05$, *F* (9.940) $p < 0.05$, respectively, indicating sociotropy and attachment style B (secure attachment) contribute the most to discriminating between the two groups. The test of equality of covariance, Box's M was not significant, indicating variances between the two groups are equal *F*(1.185) $p > 0.05$. Canonical Discriminant Functions, eigenvalues show the discriminant function explains 100% of the variation between the two groups. The Functions at Group Centroids shows the two groups are different. Findings revealed that 69.2% of the participants in the clinical and community group were correctly identified on the basis of the test scores. There were 30.8% of participants that were incorrectly classified overall. The majority of the community sample participants were correctly classified, with 91.7%, but the majority of the clinical sample were not. Only 18.8% of the clinical sample participants were correctly classified. The final hypothesis that that the variables intimacy, autonomy, sociotropy and attachment style A (Insecure / avoidant), attachment style B (secure attachment) and attachment style C (Insecure / anxious) will discriminate between a clinically depressed and community sample was supported.

Chapter 6

Discussion

6.1 Introduction

The current study explored depression and its link with attachment, intimacy, and personality traits of sociotropy and autonomy in young adults aged 25 to 40 years among a clinical and community sample. On the basis of the relevant theory, the current study aimed firstly to explore the role of intimacy within the defined young adult sample and the relationships among variables implicated by previous theories and research as relating to the experience of intimacy. The results indicated that secure attachment and autonomy were significant predictors of intimacy, though in the case of autonomy not in the way that was postulated by theory. The primary aim was to examine the variables, attachment, intimacy, sociotropy and autonomy, identified by theory as linked to depression, and to explore their relation with depression and ability to distinguish between the clinical and community group. The results indicated that a secure attachment and the personality trait of sociotropy were significant predictors of depression, and also contributed the most to discriminating between the clinical and community group.

6.2 Predictors of Intimacy

6.2.1 Autonomy, Sociotropy and a Secure Attachment

There have been parallels drawn between Bowlby's attachment model and Erik Erikson's sixth developmental psychosocial stage of intimacy vs. isolation, which involves the development and transition through young adulthood, with the importance of achieving intimacy through interpersonal relationships, in line with the secure base representations theorised by Bowlby (Pittman, et al., 2011). It has been implicated by such theory, that these internal working models are important to facilitating an understanding of how intimacy might be expressed in intimate relationships and additionally have a potential impact on resolution of Erikson's psychosocial stage of intimacy vs. isolation (Pittman, et al., 2011). Previous studies have been conducted examining autonomy, attachment and

intimacy, but have done so using an adolescent sample rather than investigating the young adult life stage discussed by Erikson, 1968. The current study sought to address this gap and aimed to explore the role of intimacy in a young adult sample. In addition, as interpersonal relationships are necessary to the experience of intimacy, sociotropy was also explored given that a "sociotropic" personality has been defined by needing positive interpersonal interactions with others (Beck, 1983) with dependency issues central to the context of such interpersonal relations. Furthermore, there have been few studies that have focused on intimacy in young adulthood and the impact of autonomy, sociotropy and secure attachment, despite their implication through theoretical underpinnings and previous research.

The results of the current study found that security of attachment and autonomy predicted the experience of intimacy (in partial support of hypothesis 1). These results were similar to and support findings of previous research studies which have also found that secure attachment related to the experience of intimacy (Mayseless & Scharf, 2007; Pielage, et al., 2005), with Mayseless and Scharf's (2007) study finding that adolescents with a secure attachment showed a higher capacity for intimacy. The current study found a positive predictive relationship between security of attachment and intimacy, similar to that found by Mayseless and Scharf. Further, the current study also found that autonomy is a significant predictor of intimacy. However this finding differs from that of previous research by Mayseless and Scharf (2007) as they explored similar variables and found adolescents who were highly autonomous displayed higher mature intimacy as evidenced in their capacity for intimacy in both friendships and romantic relationships. In contrast, the current study found there was a negative relationship between autonomy and intimacy, being opposite to the direction found by Mayseless and Scharf. In the context of the current study, a young adult sample was used to explore the experience of intimacy in line with Erikson's theory and the findings implicated the importance of having a secure attachment. This relates to individuality, the ability to have a capacity for autonomy (Holmes, 1997; Shulman, et al., 1997) as it predicts the experience of intimacy, imperative to young adulthood, in line with Erikson's model. However, the finding regarding autonomy is not in

support of theory and does not appear in line with the secure base notion; this difference will be discussed later in this chapter.

Recent research conducted by Mackinnon, et al., (2011) found support for Erikson's (1963) psychosocial developmental model in young adults by testing hypotheses regarding a positive relationship between psychosocial stages regarding intimacy and generativity. These findings highlight the resolution of the psychosocial crisis of developmental stage intimacy vs. isolation. To further consider the resolution of psychosocial crises, the fact that the current study found some similar findings to that of Mayseless and Scharf's (2007) study, which utilised an adolescent sample, may imply resolution of identity vs. role confusion among their participants. This possibility is suggested as the adolescent sample in Mayseless and Scharf's (2007) study indicated a capacity for mature intimacy. Similar to that of the current study, those who had the capacity for mature intimacy also displayed a secure attachment. The point here is whether mature intimacy and secure attachment in both the previous study and the current study may suggest resolution of Erikson's psychosocial stage of identity vs. role confusion. Perhaps this implicates support for Erikson's model and for future research to explore the relationships regarding conflict resolution within each psychosocial stage and between psychosocial stages of development. Investigating conflict regarding intimacy vs. isolation during young adulthood could provide further support for Erikson's theory.

The findings of the current study support the theory regarding attachment and young adulthood, as a secure attachment predicted intimacy among the young adult sample. This finding demonstrates support for theory, as the experience of intimacy relates to a secure attachment, meaning a healthy development that involves having a capacity for intimacy with others as identified through attachment theories by Bowlby and Ainsworth. These internal working models are important in facilitating understanding of how intimacy is achieved in adult relationships and additionally may have implications for resolution during Erikson's psychosocial stage, and may implicate concerns for those with internal working models that do not resemble a secure attachment.

In contrast to secure attachment, sociotropy was not a significant predictor of intimacy; this part of the hypothesis was not supported. Sociotropy had been argued theoretically to be underpinning a depressive sub-type, relating to anaclitic (dependent) depression. It was included in the regression model based on theory defining those with a sociotropic personality as defining themselves through interpersonal interactions, meaning their relationships with others. Therefore given this, sociotropy was included firstly to explore how it related to intimacy and whether it is a significant determinant. In this instance sociotropy did not contribute significantly to intimacy. This concept was further explored in hypothesis 2 and will be discussed below.

6.2.2 Sociotropy and Depression as predictors of Intimacy

Intimacy has been highlighted as important to mental well being and in its absence can pose vulnerability to depression (Williams, et al., 2001). During young adulthood, in line with Erikson's theory, if a young adult has not resolved conflict regarding the previous psychosocial stage this may lead to feeling threatened by entering a long-term relationship, problems with intimacy or the development of issues with being over dependent on their partner as a way to resolve identity issues. An *over dependency* can also relate to an individual developing a "dependent" personality, or sociotropic personality traits, which leads to the pursuit of interpersonal relations in order to obtain self worth (Blatt, 1974). Potential difficulties are faced when dependent individuals perceive themselves at risk of, or experience, rejection or interpersonal abandonment. Anaclitic psychopathologies relate to a preoccupation with interpersonal relations, with more of a dependent style relating to a strong focus on intimacy (Blatt, et al., 2001). This may lead to "anaclitic depression". If intimacy is not achieved during young adulthood in general, an individual may experience loneliness or isolation, and feelings of isolation may pose vulnerability to depression. Given the important role of interpersonal relations among individuals with sociotropic personality traits, and the theory regarding depression and sociotropy, the current study predicted that both sociotropy and depression would predict intimacy. However the results of the study indicated that sociotropy and depression were not significant predictors of intimacy.

In light of the current research findings testing the idea of the depressive subtype theory of sociotropic depression, it is suggested that intimacy is not directly linked to sociotropy or depression. Despite the fact that sociotropic depression relates to interpersonal rejection / abandonment, sociotropy and depression alone did not directly relate to the experience of intimacy. In comparison to the current study, some of the previous research studies that have tested the idea of Blatt and Beck's sociotropy depressive subtype theory, did so by including a measure assessing current life events / adverse events, or the interpretation of current life events relevant to sociotropic personality, being in the context of relationships, intimacy and rejection (Frewen & Dozois, 2006; Husky, et al., 2007; Zuroff & Mongrain, 1987). Research found that negative life events can be classified into social and achievement focused themes (Frewen & Dozois, 2006) and that those who experience more sociotropic / anaclitic depression experience this as consequence of an interpersonal rejection (Zuroff & Mongrain, 1987). Perhaps to have better assessed or explored the idea of sociotropic depression, the current study may have been more equipped to test the place of intimacy in relation to this theory, by incorporating a measure assessing adverse life events, as in some of the previous research. Given this, future research exploring the depressive subtype theory should continue to do so through utilising measures identified in previous research studies.

The current study suggested that depression and sociotropy do not relate to, nor impact directly on the experience of intimacy. The experience of intimacy is important in young adulthood, and understanding more about the factors impacting this experience is of importance. In regards to intimacy in young adults, the current study suggests that sociotropy and depression do not play a predictive role, whereas findings discussed earlier have suggested that security of attachment and autonomy are important factors impacting and predicting the experience of intimacy. The relationship between autonomy and intimacy was explored and is discussed in the next section below.

6.3 Intimacy and Autonomy

It has been argued by Holmes (1997) that autonomy and intimacy are related reciprocally, and a secure attachment provides the basis for both intimacy and autonomy. In this context, autonomy is represented similarly to that of Bowlby's notion of the secure base enabling an individual to be autonomous, to make choices independently, tolerate 'aloneness' and understand that a loved one is not lost and intimacy is available when needed. In this theoretical context, intimacy is therefore obtained if the loved one is able to be separate and an individual can be close to another with autonomy, and possessing an understanding that 'separation' does not mean the loved one is forever lost (Holmes, 1997). This indicates that a 'closeness' and commitment can be established as members in an adult relationship pose no threat to autonomy. Therefore being separate in a sense both inside and outside the relationship does not comprise feelings of fear of loss over abandonment (Holmes, 1997). This highlights an important relationship between intimacy and autonomy in adult relationships. Therefore the current study aimed to find support for Holmes theory as there is minimal research exploring this notion of a balance between autonomy and intimacy.

The current study hypothesised that autonomy and intimacy would be reciprocally related. This hypothesis was not supported, as the results indicated a significant relationship but a significant negative relationship. These findings suggest that autonomy has a relationship to intimacy that is not reciprocal, meaning autonomy is related to less experience of intimacy. This finding does not support Holmes theory, and does not support the notion of autonomy regarding the secure base theory by Bowlby. This finding conflicts with findings suggested by previous research studies who have highlighted the importance of intimacy and 'non vulnerable' autonomy in an individual's ability to sustain and maintain healthy relationships (Doi & Thelen, 1993; Mayseless & Scharf, 2007; Pielage, et al., 2005; Shulman, et al., 1997). Further, an imbalance of this reciprocal relationship has been suggested to be potentially detrimental to mental health (Pielage, et al., 2005; Williams, et al., 2001).

To make sense of the discrepancy between the findings of the current study and the results of previous research findings consistent with Holmes' (1997) theory, it is considered that the measures of the current study may need to be scrutinized in comparison to the meaning of autonomy in the theory. Firstly, previous research and Holmes' (1997) theory highlighted the notion of a healthy autonomy, underpinned by a secure attachment, or as Bowlby theorised 'the secure base' as earlier discussed. With this in mind, the measure used to explore autonomy in the current study was the Personal Style Inventory-II (Robins, et al., 1994), with subscales of autonomy including: Perfectionism / Self Criticism, Need for Control and Defensive Separation. These subscales appear to be measuring problematic autonomy and they appear to be different constructs / concepts to the idea of autonomy captured by Holmes' theory. Holmes' theory highlights autonomy as independence, having a tolerance for aloneness and an understanding that physical separation is not experienced as a loss, and members in the relationship pose no threat to autonomy (Holmes, 1997). These are the ideas related to theory and are not captured in the subscales in the Personal Style Inventory-II, which seem to be measuring the opposite of what Holmes (1997) theory had proposed.

In addition, as noted in the correlation matrix analysis (seen in Table 4), autonomy and attachment style A (insecure / avoidant) were moderately positively correlated, which again suggests that the autonomy measure is related to a problematic autonomy, similar to an avoidant-insecure attachment style. Furthermore, Sato (2003) found autonomy as relating to relationship problems, and was outlined as stemming from a fear of being controlled or influenced by others. The relationship difficulties were related to avoidance for the sake of maintaining or preserving a sense of control (Sato, 2003). This finding supports previous research that has indicated that an avoidant attachment style is negatively associated with the experience of intimacy (Bray, 2002; McCarthy & Maughan, 2010), which perhaps clarifies what had been measured in this hypothesis regarding autonomy and intimacy. This implication of 'avoidance' as a way of relating in the context of autonomy may suggest a link to an avoidant attachment pattern opposed to a 'healthy autonomy' theorised by Holmes, central to a secure base (Bowlby, 1980).

In light of the findings of the current study, the link between autonomy and insecure-avoidant attachment style, keeping in mind the subscales incorporated to measure autonomy, there is a need for future studies to develop or utilise a measure that captures aspects of 'healthy autonomy' in order to accurately test the idea proposed by Holmes' (1997) theory and the secure base notion. It appears to be indicated that autonomy has been interpreted and constructed as problematic within the Personal Style Inventory and there is a call to address the positive and healthy aspect of autonomy that is crucial for healthy relationships (Doi & Thelen, 1993; Mayseless & Scharf, 2007; Pielage, et al., 2005; Shulman, et al., 1997), in line with theory regarding the secure base and autonomy, with autonomous individuals defined as those who are able to draw on mental presence when the object is physically absent (Holloway, 2006).

6.4 Exploring depression

Aaron Beck's cognitive behavioural model conceptualised two types of depression (Beck, 1983), that are similar to the anaclitic and introjective depressive subtypes in Blatt's psychoanalytic model (Blatt, 1974). Depression vulnerability in Beck's cognitive model is related to personality traits of sociotropy and autonomy. Due to this evolving body of theory, which dates back as early as Freud and Klein's theories on depression, these personality domains of sociotropy and autonomy have emerged and become the topic of interest for much research over the years, including by Beck himself. The evolving body of research has shifted to incorporating attachment in the context of these personality depressive sub-types. This study aimed to continue this exploration as well as include intimacy within this context, following on from limited research that has implicated intimacy, as linked with attachment and depression (Pielage, et al., 2005), as well as the importance of intimacy during young adulthood as highlighted by Erikson's sixth psychosocial developmental stage (Erikson, 1968).

Given the implication of intimacy, and the identified role of adult attachment patterns in relation to sociotropy and autonomy, the current study aimed to address this gap in research and explored all these variables to determine which are significant predictors of

depression and those that will best discriminate between a clinically depressed and community sample. Hypothesis 4, that attachment style A (insecure avoidant), attachment style B (secure), attachment style C (insecure anxious), intimacy, autonomy and sociotropy will predict depression was partially supported, with attachment style B/secure attachment and sociotropy being the significant predictors. The final hypothesis that attachment style A (insecure avoidant), attachment style B (secure attachment), attachment style C (insecure anxious), intimacy, autonomy and sociotropy will discriminate between a clinically depressed and community sample was supported, with attachment style B/secure attachment and sociotropy contributing the most to discriminating between the two groups. These findings were consistent with those for hypothesis 4, and to an extent are similar to those of previous research. However, some findings concerning variables that were non significant are inconsistent with previous research findings.

Overall, the current study found that the clinical and community groups were significantly different, as predicted by hypothesis 5 and this was further reflected in the significant differences found in the descriptive statistics between the two group means. While secure attachment and sociotropy contributed the most to discriminating between the two groups, the model overall, including all the variables, was significant. In addition, through examining the mean differences between each group, comparing each variable, the following inferences can be made: that the community group participants were significantly more securely attached, less depressed and had lower scores on sociotropy indicating, the absence of problematic traits.

In contrast, the clinical group members, were significantly more depressed, as expected, were significantly less securely attached and displayed significantly more problematic sociotropic personality traits. These findings support the theory regarding sociotropic depressive subtypes, as problematic sociotropy traits were a significant predictor of depression, and also indicated that the clinical group members were less securely attached, in line with the theory which discusses early disruptions to attachment, issues of dependency and individuals being more likely to display less secure attachment styles (Blatt, 1974; Holloway, 2006). In line with this, the findings revealed that those

displaying a secure attachment were less depressed and possessed less sociotropic personality traits. An insecure-anxious attachment style was not a significant predictor of depression, which the theory regarding sociotropy depressive subtype stipulates as relevant to this theory. However, the way this attachment style related to sociotropy was in line with the theory and will be discussed later in this section.

The significant differences found and outlined between the clinical and community group are consistent with previous research findings by Pielage, et al., (2005) who also found similar differences between a community and clinical sample, with the clinical sample experiencing more depression in contrast to the securely attached community sample. However, one difference in comparison to this study was in relation to *intimacy* as, unlike the current study, Pielage, et al., (2005) found that members of the clinical sample reported less intimacy in their existing relationships, in comparison to the community group.

The current study did not find significant differences between the groups on intimacy, nor did it find intimacy to be a large contributor to distinguishing between the two groups, nor was it a significant predictor of depression. The mean scores of intimacy were not significantly different between the clinical and community groups. This finding differs from the findings of previous research that has identified intimacy as important to mental well being and found its absence can pose vulnerability to depression (Williams, et al., 2001). In the case of the current study, intimacy was not a vulnerability factor for depression in young adults, nor did it distinguish between the clinical and community group. One possible explanation for this finding may regard the way in which intimacy was measured. The results raise the question of whether the intimacy measure, being the Miller Social Intimacy Scale, provides a close match to Erikson's concept of intimacy during the sixth psychosocial stage. The Miller Social Intimacy Scale measures the experience of intimacy and does not include items assessing / addressing symptoms of isolation or loneliness, these factors are part of the conflict discussed during the psychosocial stage of *intimacy vs. isolation*.

Perhaps future studies exploring this theory may do so utilising a measure of intimacy that captures both aspects of the sixth psychosocial stage, being both *intimacy* and *isolation*. Further research in this area may want to explore this in depth, including exploration of resolution of the previous psychosocial stage, identity vs. role confusion, and measuring the relationship between identity and the experience of intimacy, similar to that of previous research (Mackinnon et al., 2011). Through exploring resolution of conflict between psychosocial stages, perhaps depression arises when conflicts pertinent to the psychosocial stage are not being resolved. In light of this possibility, perhaps future research may explore this regarding intimacy and isolation in young adults in the context of depression. Previous research has begun to address and explore evidence to support Erikson's theory in the context of resolution of conflict for previous psychosocial stages. This was illustrated by recent study conducted by Mackinnon et al., (2011) that sought to support Erikson's (1963) psychosocial development model in young adults by testing hypotheses regarding a positive relationship between intimacy and generativity. Perhaps a longitudinal study may assist in adequately examining Erikson's theory in this instance, as perhaps the experience of isolation may serve as a depression vulnerability factor, as opposed to intimacy itself, which the current study did not find to be meaningful or of significance. Additionally, it was interesting to observe in the demographic characteristics that there was not a large difference in relationship status between the groups, which is consistent with findings on intimacy.

In addition, although the community group members were significantly more securely attached than the clinical group members, there were no significant differences regarding the insecure attachment styles between the two groups, nor did the insecure attachment styles contribute to the prediction of depression. This finding also differs from previous research findings which have found insecure / avoidant attachment styles to contribute to the prediction of the severity of depression (McBride, et al., 2006), with those possessing an avoidant attachment style tending to experience more depressive symptoms (Rogina & Cordova, 2002) and those who perceived poor quality of early attachment

experiences, in addition to peer attachment styles, also experience more depressive symptoms (Herbert, et al., 2010).

In further contrast to the findings of the current study, Bifulco, et al., (2002) found that an insecure attachment style related significantly with clinical depression, in line with previous research that had found a direct relationship between insecure / anxious attachment styles and the experience of depressive symptoms (Wei, et al., 2005), with insecure / avoidant attachment styles directly relating to the prediction of the severity of depression (McBride, et al., 2006). There is an overwhelming body of research linking insecure attachment styles directly to depression vulnerability (Bifulco, et al., 2002; Conradi & Jonge, 2009; Herbert, et al., 2010; Pielage, et al., 2005; Scharfe, 2007; Scott & Cordova, 2002; Surcinelli, et al., 2010; Takeuchi, et al., 2010), although the current study did not find similar results. In light of this discrepancy, one possible explanation for this difference may be due to previous studies utilising different measures to assess adult attachment. Some of the previous studies utilised The Experiences in Close Relationships Questionnaire (Conradi & Jonge, 2009; Herbert, et al., 2010; Wei, et al., 2005), or Relationship Scale Questionnaire (McBride, et al., 2006; Pielage, et al., 2005; Scharfe, 2007; Surcinelli, et al., 2010) or Adult Attachment Relationship Questionnaire (Takeuchi, et al., 2010) or the Attachment Style Interview (Bifulco, et al., 2002) to measure adult attachment styles. These measures vary considerably with some including three subscales for insecure attachment styles (fearful, preoccupied and dismissive) and some only measuring attachment in romantic relationships. The Hazan and Shaver (1987) revised scale differs from the measures utilised in the previous studies.

Despite insecure attachment styles not playing a significant role in the current study, secure attachment did prove to be a key determinant, which is similar to previous research that found a link between secure adult attachment and depression (Permuy, et al., 2009). In relation to the current study, the findings indicated that based on possessing a secure attachment style, the groups did differ significantly, with members of the community group being more securely attached compared to members of the clinical group. This was significant in discriminating between the two groups. In this respect, those that were

depressed were less securely attached, which does indirectly relate to the findings of the previous research discussed even though insecure attachment styles were not significant. In line with previous research, the community group displayed more security of attachment opposed to the members of the clinical group (Pielage, et al., 2005).

The current study found sociotropy to be a significant predictor of depression, and a significant contributor to discriminating between the two groups. In contrast to the current study, previous research by Husky et al., (2007) found that sociotropy did not demonstrate a direct effect, in general, on depressed mood. However in contrast to this study by Husky et al., (2007), and similar and consistent with the findings of the current study, Sato (2003) also found that sociotropy related to depression. Overall in relation to sociotropy, the current study is consistent with the findings of previous research, much of which has found sociotropy to be a strong vulnerability factor for depression (Clark, et al., 1997; Sato, 2003; Sohlberg, et al., 2006).

Further, the current study incorporated both personality dimensions of sociotropy and autonomy as determinants of depression, in line with the theoretical underpinnings of Blatt (1974) and Beck (1983), and as indicated to relate to depression vulnerability by previous research exploring the theory. Although sociotropy was a significant predictor and differed significantly between the two groups, autonomy was not a significant predictor of depression and nor did it differ between groups. These findings are similar to the recent research findings of Bekker and Croon, (2010) who also found that autonomy alone did not have an association with depression. Similar to the current study and research findings by Bekker and Croon, (2010), Husky, et al., (2007) also found no support for autonomy as posing vulnerability for depression, even following adverse events related to achievement, in line with theory for the autonomy depressive subtype. This finding by Husky et al., (2007) supports findings of the current study and implicates the possibility that the results may not have differed even if an achievements measure was incorporated to test the idea of the autonomous / introjective depressive subtype theory. In addition, and in further support of the current study not incorporating social and achievement focused measures, previous research conducted by Frewen and Dozois (2006) explored Beck's theory and found that

negative life events can be classified into social and achievement focused themes. However, like the current study, the Personal Style Inventory was used to measure sociotropy and autonomy, and Frewen and Dozois (2006) did not find clear distinctive differences in the way sociotropic and autonomous individuals interpreted life events (social-failure related).

In contrast to the findings of the current study, Sato (2003) did find a relationship between autonomy and depression. In addition to this, previous studies that have tested the depressive subtype theory have done so separately including specific measures to examine social and achievement based events, and in line with theory had found that experiencing more sociotropic depression was in response to rejection, as opposed to personal failure and those that were 'self critical' reported experiencing more autonomous depressive states (Bagby, et al., 2001; Clark, et al., 1997; Klien, et al., 1988; Murphy & Bates, 1997; Sato, 2003;Viglione, et al., 1995; Zuroff & Mongrain, 1987). In comparison the current study did not use an events measure and also explored this theory utilising an overall measure of depression, which consequently may be one possible explanation for the differing results. However, as there are conflicting findings regarding autonomy and depression throughout previous studies, further research is required to clarify the discrepancy among the research findings, including those of the current study.

The current study was similar to the majority of previous research with the findings regarding sociotropy having a strong link to depression, and a negative link to secure attachment. However to address the conflicting findings regarding autonomy, aside from the current study not including achievement based measures, the Personal Style Inventory's autonomy subscale has limited congruency with the BDI, which requires further discussion. There has been evidence supporting the convergence with sociotropy and dependency and the Beck Depression Inventory (BDI-II) as being strongly related to measures of sociotropy (Sato & McCann, 2000; Shahar, Soffer & Gilboa-Shechtman, 2008). However, research has currently indicated little convergence with self-criticism and autonomy and few items on the BDI have been found to relate to current autonomy measures, the Personal Style Inventory being among the autonomy measures used. Researchers have argued for a

refinement in the BDI and autonomy measures for future research studies (Sato & McCann, 2000; Shahar, et al., 2008). Although this had been recommended by some, as recent research continued to utilise these well known and credible measures, the current study also chose to utilise such measures. Given the results of the current study and the conflicting research findings regarding autonomy and depression, these findings may indicate that the BDI is a measure of sociotropic depression, and perhaps not of autonomy-related depression. This can be understood, given that autonomy and sociotropy depressive subtypes have clear differences. Refining or modifying measures of autonomy so they are congruent with the BDI, as suggested by some researchers, may be changing the autonomy measure that has been developed based on strong theoretical underpinnings. This would change the purpose of the investigation, as *autonomy* would no longer be measuring what it was intended to, and would possibly be resembling items more consistent with sociotropy (given this is congruent with the BDI-II). Therefore there is need for future research to develop measures of depression congruent with measures of the autonomy depressive subtype, in order to be equipped to explore this theory. Additionally, other depressive measures that currently exist may be more in line with the theory, such as the Depressive Experiences Questionnaire. This may be utilised for further exploration in studies testing this theory.

Blatt (1974) and Beck's (1983) theoretical underpinning of sociotropy and autonomous depression subtypes was further supported by the current study. It was evident through additional exploration in the correlational analysis, as seen earlier in the results chapter, that sociotropy was linked with an insecure anxious attachment style (attachment style C), while autonomy was linked with an insecure avoidant attachment style (attachment style A). These findings are consistent with theoretical underpinnings regarding these two personality traits.

Firstly regarding sociotropy, as found by the current study, sociotropy was linked with an insecure - anxious attachment style. This is consistent with the theory discussing sociotropy / anaclitic depressive subtype, in that it is theorised that the early attachment style formed would most likely involve an insecure anxious type, characterised by a type of

dependency that may leave the individual experiencing ongoing feelings of emptiness, feelings of abandonment, and loneliness (Blatt, 1974; Blatt, et al., 2001; Hjertaas, 2010). The core issue manifested leading to this type of depression involves a lack of feeling connected with others and a lack of a true sense of belonging, and consequently depression (Hjertaas, 2010).

Secondly regarding autonomy, as found by the current study this was linked with an insecure - avoidant attachment style. This finding is consistent with the theory of an autonomous / introjective depressive subtype, with the theory discussing this as relating to concerns about autonomy, control and complex internal issues regarding self worth (Blatt, 1974; Blatt, et al., 2001), with these individuals being more focused on establishing and maintaining a viable self-identity as opposed to achieving interpersonal warmth, feelings of trust and affection. It is argued that their earlier attachment style would most likely be an insecure, avoidant type (Holloway, 2006). Depression experienced would be "introjective depression / autonomous depression" which has been hypothesised to present when the self critical person does not meet his or her own internal standards or the standards of others. The individual may then experience feelings of guilt, worthlessness or inferiority (Beck, 1983; Blatt, 1974).

In addition, these findings are similar to that of previous research in particular that of Murphy and Bates (1997) who found that fearful-avoidant attachment is associated with autonomous depression vulnerability and anxious attachment is associated with sociotropic depression vulnerability. In addition, and similarly, previous research conducted by Zuroff and Fitzpatrick (1995) also found dependency and sociotropy to be associated with an anxious attachment style.

The relationship between sociotropy and insecure anxious attachment and the finding of sociotropy as a vulnerability factor for depression together support theory regarding the sociotropic subtype. These findings also implicate support for previous research findings that found preoccupied-anxious attachment styles as being predictors of depression, as those experiencing a preoccupied-anxious attachment were at an increased

vulnerability to experience anaclitic (sociotropic) depressive symptoms (Reis & Grenyer, 2002). The current study did not find support for this theory in regards to autonomy posing vulnerability to depression, but did find autonomy relating to an avoidant attachment style, consistent with theory. Another possible explanation for this has been implicated by recent research findings that suggested that an 'avoidant attachment' acts as an avoidant buffer against 'symptomatology' (Conde, et al., 2011). This could possibly suggest why an insecure / avoidant attachment did not predict depression. Due to these recent research findings and those of the current study, perhaps future research is required to explore the defenses served among insecure attachment styles and the protective role they play, along with potential compensating behaviours in the protection from the experience of depressive symptoms. Compensating behaviours in the context of sociotropy and autonomy would be those with regards to interpersonal relationships / dependency for those with problematic sociotropic traits and achievement focused, goal oriented behaviours for those with problematic autonomous traits.

6.5 Strengths and Limitations

One of the strengths of this study is that it addresses the under-researched issue of intimacy and depression, with the age group of the sample determined on the basis of theory. To date, only a small number of research studies have explored intimacy and depression in a young adult sample (Bray, 2002; McCarthy & Maughan, 2010) in the context of Erik Erikson's (1968) psychosocial model of development, in particular the sixth psychosocial stage of intimacy vs. isolation, where the importance of achieving intimacy during this life stage is highlighted (Erikson, 1968). Despite intimacy not proving to be of significance in the current study, it has indicated future directions for further exploration of Erikson's theoretical model. In addition, unlike previous studies, the current study attempted to include all the interconnecting variables implicated as posing depression vulnerability in Blatt's and Beck's theories of depressive subtypes. The significant findings supported relevant theoretical underpinnings, and the non significant findings highlighted implications and areas for future direction of research to clarify and raise queries regarding the limitations of certain measures utilised.

There were a number of limitations to the current study, with limitations centering on the measurement of autonomy. The results of the current study found autonomy to not be a significant predictor of depression. This finding was consistent with and similar to some of the findings of previous research as previously discussed. However, the prior research studies that did find autonomy to be linked with depression, termed "autonomous / introjective" depression, found this in response to or following an adverse event regarding personal achievements, in line with the theory. This highlights a limitation of the current study, as perhaps to best measure or test autonomy as a vulnerability factor for depression it may have been more accurate to incorporate a scale to measure achievement losses (capturing items regarding feelings of defeat, self-blame and feeling like a failure), as the theoretical underpinnings stipulate (Beck, 1983; Blatt, 1974).

In regards to autonomy, another limitation of the current study is raised when considering the autonomy measure, for two reasons. Firstly, autonomy not being a significant predictor of depression may have been impacted upon by the fact that the Personal Style Inventory's autonomy measure lacks sufficient convergence with the Beck Depression Inventory (BDI-II). Although the current study did not test for this convergence with the BDI, this has been outlined as an issue by previous studies that have found evidence for its limited convergence with the BDI. In contrast, the Beck Depression Inventory (BDI-II) and the Personal Style Inventory in relation to the sociotropy scale, has been shown to strongly relate (Sato & McCann, 2000; Shahar, et al., 2008), with findings suggesting that all fifteen items on the BDI were related to measures of sociotropy. However, in reference to autonomy, research investigating the relationship between the Beck Depression Inventory (BDI-II) and the autonomy measure in the Personal Style Inventory indicated little convergence with autonomy, finding only two items on the BDI related to the autonomy measure.

Previous studies have argued for a refinement in the BDI and autonomy measure for future research (Sato & McCann, 2000; Shahar, et al., 2008), and as discussed earlier, the current author disagrees. There are solid theoretical underpinnings clearly outlining the differences between sociotropic and autonomy depression subtypes, with previous studies

utilising different adverse event measures to assess this (i.e. achievement / social). Sociotropy being convergent with the BDI suggests that the BDI measures a sociotropic depression, and given the autonomy depressive subtype differs, there is a need for further research to develop a measure of depression congruent with problematic autonomy, as measured by the autonomy subscales (or to make use of existing measures of depression subtypes). Measuring these two depressive subtypes separately with corresponding measures will enhance accuracy when further testing this theory.

The second limitation regarding the measurement of autonomy is central to hypothesis 2, testing the idea of Holmes' (1997) theory that intimacy and autonomy are reciprocally related. This hypothesis was not supported in the current study. However this finding may have been confounded by the use of the Personal Style Inventory as the autonomy scale. Through examining subscale items for autonomy on the Personal Style Inventory, it is evident that such items are testing a problematic aspect of autonomy (in line with the associated theory), with the subscales including Perfectionism / Self Criticism, Need for Control and Defensive Separation. These domains do not capture the aspects of a "healthy autonomy" that Holmes' theory proposes in line with Bowlby's secure base notion. Holmes discussed this reciprocal relationship to intimacy in terms of autonomy as independence to be able to tolerate being alone. This involves an understanding that the loved one is not lost when physical proximity is absent and intimacy is available when needed. Therefore intimacy is obtainable if the loved one is able to separate and an individual can be close to another with autonomy and understand that 'separation' does not mean the loved one is lost (Holmes, 1997). This indicates that a commitment can be established as members in the relationship pose no threat to autonomy. Therefore, being separate in a relationship does not comprise feelings of fear of loss over abandonment (Holmes, 1997). Autonomy in this respect is not captured by the subscale autonomy items on the Personal Style Inventory, as it did not measure the idea that was hypothesised. The current study would have needed to include a separate measure to capture a healthy aspect of autonomy, or have been required to develop an autonomy measure capturing these aspects in line with theory. This would have then adequately tested hypothesis 2. Thus use

of the current measure was seen as a limitation that held the study back. However this has identified the need for future research to develop measures capturing an aspect of "healthy autonomy" in order to further contribute to the body of knowledge, and test the idea of existing theories.

Furthermore, in regards to gender, it should be noted that despite the study aiming to recruit an equal proportion of males and females (in each group) gender proportions were varied. The disproportion of male and female participants could be considered as a potential confounding variable in the current study.

Lastly, an additional point to be addressed when considering the limitations of the current study concerns the sample of the clinical group. A relatively small sample size was obtained for the clinical group members, in contrast to those members recruited for the community group. In addition, those members from the clinical sample were self-identified as having a current diagnosis of depression and also reported a number of comorbid diagnoses. The fact that the clinical sample had significantly higher BDI-II scores than the community sample supports the clinical group's self-identification as depressed. Nevertheless the study's lack of access to recorded medical diagnoses in conjunction with the small sample size recruited may limit the reliability and generalisability of the results. Future studies should aim to recruit a larger clinical sample, in order for further accuracy when research findings are generalised to the broader population.

6.6 Implications

6.6.1 Implications for theory and research

The current study makes positive contributions to the limited research conducted in Australia with young adults, exploring depression, attachment, intimacy and personality traits of sociotropy and autonomy in a community and clinical sample. Through the current study, further support was found for existing theories on security of attachment and, in line with previous research, linking secure attachment as a protective factor to depression. In addition, the current study consolidated findings regarding the personality trait of

sociotropy as a potential risk factor for depression. Although there were no significant findings implicating the importance of intimacy, or autonomy as a vulnerability factor to depression, the current study has implicated the need for further research to continue to explore the theoretical underpinnings. Despite not making a contribution to support Erikson's theory and the role of intimacy, the current study acknowledges intimacy as a concept which seems central to the study of interpersonal relationships and has raised questions about how intimacy relates to other 'interpersonal' concepts such as sociotropy and sociotropic depression. In relation to autonomy the current study has implicated that theory has captured two aspects of autonomy, problematic autonomy and healthy autonomy, with problematic autonomy relating to an avoidant attachment style, in line with introjective / autonomous depression. However a "healthy autonomy" is more consistent with Holmes' theory and future research building upon this concept would be required to develop an autonomy measure incorporating aspects of Bowlby's secure base notion, reflecting a "healthy autonomy" that would be expected to relate reciprocally with intimacy as theorised. To explore Erikson's psychosocial model regarding depression vulnerability, perhaps this may require examining variables related to existing conflict in conjunction with those representing resolution of the psychosocial stage, i.e. isolation and intimacy. Measuring resolution between stages and within each psychosocial stage may prove meaningful to adequately examine Erikson's model and any implications for mental health regarding conflict. This would require a longitudinal study be conducted.

6.6.2 Implications for practice

The current study has emphasised the importance of security of attachment, and has indicated it serves as a buffer to experiencing depression. It has been highlighted, both by theory and research, including the findings of the current study, that a secure attachment is imperative for adult mental health. Further the current study implicates the importance of attachment and highlights it as a protective or vulnerability factor to depression in young adults. When working with clients therapeutically and within evidence based models, there can be an emphasis on the delivery of specific techniques within specific or limited timeframes. While evidence based practice is imperative, it can be difficult to address

issues central to attachment in briefer timeframes. Where psychoanalytic paradigms would consider this of relevance, briefer forms of psychotherapy may not, or more specifically may not be able to cater for addressing such issues. Understandably working therapeutically to address issues regarding attachment is more readily catered for in longer term therapy. However these issues should be kept in mind, as possibly underlying problems for those clients presenting with issues of dependency / sociotropic personality traits and depression. In addition, therapists need to be mindful of compensatory behaviours utilised by clients presenting with such problematic personality traits. Consequently such behaviours may serve as an avoidant buffer unconsciously driven to protect self-worth and avoid depression in a brittle and unstable defense.

6.7 Conclusion

There has been a growing body of theory on depression, which has evolved over the years, from Freud to more recent psychoanalytic and attachment perspectives and cognitive behavioural contributions initiated by Aaron Beck. Depression is topical given its high prevalence in Australia and adverse impact on those experiencing it. The more that is known and understood about depression, the more this creates awareness, facilitates prevention and informs treatment practice. A large portion of theoretical underpinnings implicates earlier experiences as having a significant impact, focusing on security of early attachment and the forming of personality, with the potential for problematic aspects / traits to emerge depending on early circumstances. While Erikson has outlined theoretical psychosocial stages of development that individuals move through, little is known how this - intimacy vs. isolation - is pertinent to young adults and their mental health. Theories have highlighted intimacy as important and linked it to a healthy autonomy. This concept requires further exploration.

The current study contributes to the limited Australian research that has explored depression in a young adult sample exploring risk and vulnerability as postulated in the relevant theory. Problematic autonomy traits are associated with experiencing less intimacy

in relationships. Sociotropy is highlighted as a factor posing risk for depression, and security of attachment indicated to serve as a protective factor or buffer to depression.

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Appendix A - Ethics Approval

MEMO

VICTORIA UNIVERSITY | A NEW SCHOOL OF THOUGHT

TO Ms Anne Graham
School of Social Sciences and Psychology
St Albans Campus

DATE 27/07/2009

FROM Dr Harriet Speed
Chair
Victoria University Human Research Ethics Committee

SUBJECT Ethics Application – HRETH 09/66

Dear Ms Graham,

Thank you for submitting this application for ethical approval of the project:

HRETH 09/66 Exploring depression: Attachment, intimacy and personality traits

The Chair, of the Victoria University Human Research Ethics Committee assessed your application. The Chair received the application and resolved to **approve** the application without further amendment.

The proposed research project has been accepted and deemed to meet the requirements of the National Health and Medical Research Council (NHMRC) 'National Statement on Ethical Conduct in Human Research (2007)' by the Victoria University Human Research Ethics Committee. Approval has been granted from 27 July 2009 to 30 November 2010.

Continued approval of this research project by the Victoria University Human Research Ethics Committee (VUHREC) is conditional upon the provision of a report within 12 months of the above approval date (by***27 July 2010***) or upon the completion of the project (if earlier). A report proforma may be downloaded from the VUHREC web site at: http://research.vu.edu.au/hrec.php

Please note that the Human Research Ethics Committee must be informed of the following: any changes to the approved research protocol, project timelines, any serious events or adverse and/or unforeseen events that may affect continued ethical acceptability of the project. In these unlikely events, researchers must immediately cease all data collection until the Committee has approved the changes. Researchers are also reminded of the need to notify the approving HREC of changes to personnel in research projects via a request for a minor amendment.

If you have any queries, please do not hesitate to contact me on 9919 5412.
On behalf of the Committee, I wish you all the best for the conduct of the project.
Dr Harriet Speed
Chair

Victoria University Human Research Ethics Committee

Appendix B - Background Questionnaire

Background Questionnaire

1. Are you (Please tick)

Male ____ Female ____

2. How old are you?_____

3. What is your Marital Status? Please tick one

Married	____	Widowed	____
Single	____	Divorced	____
De facto relationship	____	Separated	____

If you ticked 'married' or 'de facto' please go to question 5.

4. Are you currently in a relationship? (Do you have a boyfriend /girlfriend or an intimate partner?). Please tick one.

Yes ____ No____

5. Have you experienced a relationship break-up or marriage separation in the past 18 months? Please tick one

Yes ____ No ____

6. What is your employment status? Please tick all that apply

Employed full-time	____	Fulltime domestic duties	____

Employed part-time ____ Unemployed ____

Student ____ Not working due to Disability ____

7. In which country were you born? (Please tick and/or specify)

a. Australia ____

b. Other _____ (please specify)

8. Are you currently experiencing depression? Please tick one

Yes ____ No ____

9. Do you have a current diagnosis as suffering with any of the following? Please tick all that apply.

depression ____ bipolar disorder ____

psychotic disorder ____ anxiety or panic disorder ____

schizophrenia ____

other psychological disorder ____ Please specify:……..

10. In the past, have you been diagnosed as suffering from depression? Please tick one

Yes ____ No ____

11. Are you currently receiving treatment for depression? Please tick all that apply

Medication ____

Counselling ____

Other ____ Please specify……

Appendix C - The Revised Hazan & Shaver (1987)

The Revised Hazan & Shaver (1987) Three Category Measure (Borg, 2003)

These questions are concerned with your experiences of romantic love in relationships (past or present). Take a moment to think about these experiences and please answer the following questions with them in mind.

*Read each of three self descriptions below (A, B and C) and then place a tick next to the **single** alternative that best describes how you feel in romantic relationships or is nearest to the way you feel. (Note: the terms "close" and "intimate" refer to psychological or emotional closeness not necessarily to sexual intimacy).*

_____**A.** I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, others want to be more intimate than I feel comfortable being.

_____**B.** I find it relatively easy to get close to others and am comfortable depending on them and having them depend on me. I don't worry about being abandoned or about someone getting too close to me.

_____**C.** I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't stay with me. I want to get very close to my partner, and this sometimes scares people away.

Now please rate each of the above descriptions (by circling the corresponding number) to indicate how well or poorly each description corresponds to your general relationship style.

Style A

1	2	3	4	5	6	7
Not at all like me	.....	.....	*Neutral / Mixed*	.....	.....	*Very much like me*

Style B

1	2	3	4	5	6	7
Not at all like me	.....	.....	*Neutral / Mixed*	.....	.....	*Very much like me*

Style C

1	2	3	4	5	6	7
Not at all like me	.....	.....	*Neutral / Mixed*	.....	.....	*Very much like me*

Appendix D - The Miller Social Intimacy Scale

Miller Social Intimacy Scale

Please think of someone close to you, either a romantic partner or a friend and answer the following questions:

-Please read each question and circle to indicate, on a scale of "1 to 10", how often you do this.

		Very Rarely			Some of the time				Almost Always		
1.	When you have leisure time how often do you choose to spend it with him / her alone?	1	2	3	4	5	6	7	8	9	10
2.	How often do you keep very personal information to yourself and do not share it with him / her?	1	2	3	4	5	6	7	8	9	10
3.	How often do you show him / her affection?	1	2	3	4	5	6	7	8	9	10
4.	How often do you confide very personal information to him / her?	1	2	3	4	5	6	7	8	9	10
5.	How often are you able to understand his / her feelings?	1	2	3	4	5	6	7	8	9	10
6.	How often do you feel close to him / her?	1	2	3	4	5	6	7	8	9	10

-Please read each question and circle to give your answer on a scale from "1 (Not Much) to 10 (A Great Deal)"

		Not Much			A Little				A Great Deal		
7.	How much time do you like to spend alone with him / her?	1	2	3	4	5	6	7	8	9	10
8.	How much do you feel like being encouraging & supportive to him / her when he / she is unhappy?	1	2	3	4	5	6	7	8	9	10
9.	How close do you feel to him / her most of the time?	1	2	3	4	5	6	7	8	9	10
10.	How important is it to you to listen to his / her very personal disclosures?	1	2	3	4	5	6	7	8	9	10
11.	How satisfying is your relationship with him / her?	1	2	3	4	5	6	7	8	9	10
12.	How affectionate do you feel toward him / her?	1	2	3	4	5	6	7	8	9	10
13.	How important is it to you that he / she understands your feelings?	1	2	3	4	5	6	7	8	9	10
14.	How much damage is caused by a typical disagreement in your relationship with him / her?	1	2	3	4	5	6	7	8	9	10
15.	How important is it to you that he / she be encouraging & supportive to you when you are unhappy?	1	2	3	4	5	6	7	8	9	10
16.	How important is it to you that he / she show you affection?	1	2	3	4	5	6	7	8	9	10
17.	How important is your relationship with him / her in your life?	1	2	3	4	5	6	7	8	9	10

Appendix E - The Personal Style Inventory - II

The Personal Style Inventory - II

(Robins, Ladd, Welkowitz, Blaney, Diaz, and Kutcher, 1994)

Here are a number of statements about personal characteristics. Please read each one carefully, and indicate whether you agree or disagree, and to what extent, by circling a number.

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
1	I often put other people's needs before my own.	1	2	3	4	5	6
2	I tend to keep other people at a distance.	1	2	3	4	5	6
3	I find it difficult to be separated from people I love.	1	2	3	4	5	6
4	I am easily bothered by other people making demands of me.	1	2	3	4	5	6
5	I am very sensitive to the effects I have on the feelings of other people.	1	2	3	4	5	6
6	I don't like relying on others for help.	1	2	3	4	5	6
7	I am very sensitive to criticism by others.	1	2	3	4	5	6
8	It bothers me when I feel that I am only average and ordinary.	1	2	3	4	5	6
9	I worry a lot about hurting or offending other people.	1	2	3	4	5	6
10	When I'm feeling blue, I don't like to be offered sympathy.	1	2	3	4	5	6
11	It is hard for me to break off a relationship even if it is making me unhappy.	1	2	3	4	5	6
12	In relationships, people are often too demanding of one another.	1	2	3	4	5	6
13	I am easily persuaded by others.	1	2	3	4	5	6
14	I usually view my performance as either a complete success or a complete failure.	1	2	3	4	5	6
15	I try to please other people too much.	1	2	3	4	5	6
16	I don't like people to invade my privacy.	1	2	3	4	5	6
17	I find it difficult if I have to be alone all day.	1	2	3	4	5	6
18	It is hard for me to take instructions from people who have authority over me.	1	2	3	4	5	6

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
19	I often feel responsible for solving other people's problems.	1	2	3	4	5	6
20	I often handle big decisions without telling anyone else about them.	1	2	3	4	5	6
21	It is very hard for me to get over the feeling of loss when a relationship has ended.	1	2	3	4	5	6
22	It is hard for me to have someone dependant on me.	1	2	3	4	5	6
23	It is very important to me to be liked or admired by others.	1	2	3	4	5	6
24	I feel badly about myself when I am not actively accomplishing things.	1	2	3	4	5	6
25	I feel I have to be nice to other people.	1	2	3	4	5	6
26	It is hard for me to express admiration or affection.	1	2	3	4	5	6
27	I like to be certain that there is someone close I can contact in case something unpleasant happens to me.	1	2	3	4	5	6
28	It is difficult for me to make a long-term commitment to a relationship.	1	2	3	4	5	6
29	I am too apologetic to other people.	1	2	3	4	5	6
30	It is hard for me to open up and talk about my feelings and other personal things.	1	2	3	4	5	6
31	I am very concerned with how people react to me.	1	2	3	4	5	6
32	I have a hard time forgiving myself when I feel I haven't worked up to my potential.	1	2	3	4	5	6
33	I get very uncomfortable when I'm not sure whether or not someone likes me.	1	2	3	4	5	6
34	When making a big decision, I usually feel that advice from others is intrusive.	1	2	3	4	5	6
35	It is hard for me to say "no" to other people's requests.	1	2	3	4	5	6
36	I resent it when people try to direct my behaviour or activities.	1	2	3	4	5	6
37	I become upset when something happens to me and there's nobody around to talk to.	1	2	3	4	5	6

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
38	Personal questions from others usually feel like an invasion of my privacy.	1	2	3	4	5	6
39	I am most comfortable when I know my behaviour is what others expect of me.	1	2	3	4	5	6
40	I am very upset when other people or circumstances interfere with my plans.	1	2	3	4	5	6
41	I often let people take advantage of me.	1	2	3	4	5	6
42	I rarely trust the advice of others when making a big decision.	1	2	3	4	5	6
43	I become very upset when a friend breaks a date or forgets to call me as planned.	1	2	3	4	5	6
44	I become upset more than most people I know when limits are placed on my personal independence and freedom.	1	2	3	4	5	6
45	I judge myself based on how I think others feel about me.	1	2	3	4	5	6
46	I become upset when others try to influence my thinking on a problem.	1	2	3	4	5	6
47	It is hard for me to let people know when I am angry with them.	1	2	3	4	5	6
48	I feel controlled when others have a say in my plans.	1	2	3	4	5	6

Appendix F - The Beck Depression Inventory (BDI-II)

BDI-II

Date:

Name: _____ Marital Status: _____ Age: _____ Sex: _____

Occupation: _____ Education: _____

Instructions: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the **past two weeks, including today.** Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

1. Sadness
- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- 3 I am so sad or unhappy that I can't stand it.

2. Pessimism
- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse.

3. Past Failure
- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.

4. Loss of Pleasure
- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.

5. Guilty Feelings
- 0 I don't feel particularly guilty.
- 1 I feel guilty over many things I have done or should have done.
- 2 I feel quite guilty most of the time.
- 3 I feel guilty all of the time.

6. Punishment Feelings
- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.

7. Self-Dislike
- 0 I feel the same about myself as ever.
- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.

8. Self-Criticalness
- 0 I don't criticize or blame myself more than usual.
- 1 I am more critical of myself than I used to be.
- 2 I criticize myself for all of my faults.
- 3 I blame myself for everything bad that happens.

9. Suicidal Thoughts or Wishes
- 0 I don't have any thoughts of killing myself.
- 1 I have thoughts of killing myself, but I would not carry them out.
- 2 I would like to kill myself.
- 3 I would kill myself if I had the chance.

10. Crying
- 0 I don't cry any more than I used to.
- 1 I cry more than I used to.
- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

_____ Subtotal Page 1 Continued on Back

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11. Agitation

0 I am no more restless or wound up than usual.
1 I feel more restless or wound up than usual.
2 I am so restless or agitated that it's hard to stay still.
3 I am so restless or agitated that I have to keep moving or doing something.

12. Loss of Interest

0 I have not lost interest in other people or activities.
1 I am less interested in other people or things than before.
2 I have lost most of my interest in other people or things.
3 It's hard to get interested in anything.

13. Indecisiveness

0 I make decisions about as well as ever.
1 I find it more difficult to make decisions than usual.
2 I have much greater difficulty in making decisions than I used to.
3 I have trouble making any decisions.

14. Worthlessness

0 I do not feel I am worthless.
1 I don't consider myself as worthwhile and useful as I used to.
2 I feel more worthless as compared to other people.
3 I feel utterly worthless.

15. Loss of Energy

0 I have as much energy as ever.
1 I have less energy than I used to have.
2 I don't have enough energy to do very much.
3 I don't have enough energy to do anything.

16. Changes in Sleeping Pattern

0 I have not experienced any change in my sleeping pattern.

1a I sleep somewhat more than usual.
1b I sleep somewhat less than usual.

2a I sleep a lot more than usual.
2b I sleep a lot less than usual.

3a I sleep most of the day.
3b I wake up 1–2 hours early and can't get back to sleep.

17. Irritability

0 I am no more irritable than usual.
1 I am more irritable than usual.
2 I am much more irritable than usual.
3 I am irritable all the time.

18. Changes in Appetite

0 I have not experienced any change in my appetite.

1a My appetite is somewhat less than usual.
1b My appetite is somewhat greater than usual.

2a My appetite is much less than before.
2b My appetite is much greater than usual.

3a I have no appetite at all.
3b I crave food all the time.

19. Concentration Difficulty

0 I can concentrate as well as ever.
1 I can't concentrate as well as usual.
2 It's hard to keep my mind on anything for very long.
3 I find I can't concentrate on anything.

20. Tiredness or Fatigue

0 I am no more tired or fatigued than usual.
1 I get more tired or fatigued more easily than usual.
2 I am too tired or fatigued to do a lot of the things I used to do.
3 I am too tired or fatigued to do most of the things I used to do.

21. Loss of Interest in Sex

0 I have not noticed any recent change in my interest in sex.
1 I am less interested in sex than I used to be.
2 I am much less interested in sex now.
3 I have lost interest in sex completely.

_____ Subtotal Page 2
_____ Subtotal Page 1
_____ Total Score

Appendix G - Consent Form

CONSENT FORM FOR PARTICIPANTS INVOLVED IN RESEARCH

INFORMATION TO PARTICIPANTS:

We would like to invite you to be a part of a study exploring depression in relation to attachment, intimacy, and personality traits. My name is Theresa Marasco, I am currently studying in the Doctor of Psychology course at Victoria University and I will be conducting this study under the supervision of Anne Graham. You will be asked to complete five questionnaires asking about how you relate to others and your mood or how you feel. The main risk of participating is that completing the questionnaires may bring to mind distressing thoughts or circumstances. All information provided will be kept confidential. After you return the questionnaires, we will immediately separate the consent form from the questionnaires. Consent forms will then be stored separately to questionnaires on Victoria University premises. You are free to withdraw your participation at any time.

CERTIFICATION BY PARTICIPANT

I, ……. (Write your name here)

certify that I am between the age of 25 to 40 years, and I am voluntarily giving my consent to participate in the study: **Exploring depression: Attachment, intimacy and personality traits** being conducted at Victoria University by: Anne Graham (Ph: 9919 2159) and Theresa Marasco (Ph: 0402 317 533)

I certify that I have read the Information to Participants and I understand the aims of the study, together with any risks and information about where to seek assistance if required, and that I freely consent to participation involving the below mentioned procedures:

- Completing all five questionnaires (listed below)
  - Background Questionnaire
  - Adult Attachment Questionnaire
  - The Miller Social Intimacy Scale
  - The Personal Style Inventory
  - Beck Depression Inventory

I certify that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way. I have been informed that the information I provide will be kept confidential.

Signed: …….. **Date:** ……..

If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781

Appendix H - Information to Participants (Clinical Sample)

SEEKING PARTICANTS FOR RESEARCH ON DEPRESSION INFORMATION TO PARTICIPANTS

VICTORIA UNIVERSITY | A NEW SCHOOL OF THOUGHT

You are invited to participate

We are seeking participants for a research project entitled:
Exploring depression: Attachment, intimacy and personality traits
This project is being conducted by a student researcher: **Theresa Marasco** as part of a **Doctor of Psychology (Clinical Psychology)** course at Victoria University under the supervision of **Anne Graham** from the School of Social Sciences and Psychology.
If you are

- Aged between 25 and 40, and
- Currently receiving help for depression

You are invited to participate in this research

Project explanation

The project is exploring attachment, intimacy, and personality traits and how they relate to depression. Past research has suggested that depression is related to people's experiences of relationships, including experiences of intimacy and feelings of dependence and independence. Much of the past research has been with adolescents. This study aims to explore the connections between depression, and experiences of relationships, intimacy, dependence and independence in adults aged 25 to 40 years

What will I be asked to do?

If you give your consent to participate in this study, you will be involved in completing five questionnaires;

- Background Questionnaire
- Adult Attachment Questionnaire
- The Miller Social Intimacy Scale
- The Personal Style Inventory
- Beck Depression Inventory

In total, it will take approximately 35 to 45 minutes to complete all the questionnaires. You are not required to provide your name or any other personal information; your identity will remain anonymous. The questionnaires will ask you to circle which response best describes you or how you are feeling. These will include questions around: how you relate to others, your relationship/s, and your mood/how you feel.
A pre-paid envelope addressed to Victoria University will be provided along with the questionnaires, so once you have completed they can be posted back to the student researcher.

All questionnaires that have been completed and returned will be stored in a safe and secure place, with the two researchers stipulated above being the only individuals allowed access.

What will I gain from participating?

In choosing to participate, you have the opportunity to take part as a participant in exploratory research.Also the results of the study will contribute to the body of knowledge about depression and attachment, intimacy and personality traits (dependency/independence).

How will the information I give be used?

The student researcher will write about the findings of the study in her thesis. The findings may also be published or presented at conferences. In all reports of the study only group findings will be discussed. No information about individuals will be presented or written up.

What are the potential risks of participating in this project?

The main risk is that completing the questionnaires may bring to mind distressing thoughts or circumstances. If any participant should become distressed, please discuss the distress you are experiencing or the issues that have arisen with your current counsellor or case worker.

How will this project be conducted?

The project will involve 100 participants between the ages of 25 to 40 years. Fifty of these participants will be from a clinical sample, recruited through community health organisations and the beyond blue website. The other 50 participants will be recruited from the general community and Victoria University, mature aged students studying at both higher education and TAFE courses. Participants will be requested to read the 'Information to Participants' form. Participants will then complete the questionnaires and return them to the student researcher via the addressed pre-paid envelope provided. After questionnaires have been returned, the data will be analysed.

Who is conducting the study?

Victoria University

Principle Researcher
Anne Graham
Ph. 9919 2159
Anne.Graham@vu.edu.au

Student Researcher
Theresa Marasco
0402 317 533
Theresa.Marasco@live.vu.edu.au

Any queries about your participation in this project may be directed to the Principal Researcher listed above. If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781

Draw for voucher

To show our appreciation for your participation, you have the option of going into a draw for a $50 Coles / Myer voucher. Should you want to take part in the draw you need to complete the sheet inside the envelope labelled "draw". There is a space for you to write your name and contact number. Then seal the 'draw' envelope and include in the prepaid return envelope along with the questionnaires. Once all questionnaires have been received, all the sealed safely stored envelopes will be placed into a box and one drawn out. Only the envelope drawn will be opened and the winner of the draw contacted. To maintain confidentiality all other envelopes will remain sealed and unopened and shredded immediately.

Appendix I - Information to Participants (Community Sample)

INFORMATION TO PARTICIPANTS INVOLVED IN RESEARCH

VICTORIA UNIVERSITY | A NEW SCHOOL OF THOUGHT

You are invited to participate

If you are aged between 25 and 40, you are invited to participate in a research project entitled:
Exploring depression: Attachment, intimacy and personality traits
This project is being conducted by a student researcher: **Theresa Marasco** as part of a **Doctor of Psychology (Clinical Psychology)** course at Victoria University under the supervision of **Anne Graham** from the School of Social Sciences and Psychology.

Project explanation

The project is exploring attachment, intimacy, and personality traits and how they relate to depression. Past research has suggested that depression is related to people's experiences of relationships, including experiences of intimacy and feelings of dependence and independence. Much of the past research has been with adolescents. This study aims to explore the connections between depression, and experiences of relationships, intimacy, dependence and independence in adults aged 25 to 40 years.

What will I be asked to do?

If you give your consent to participate in this study, you will be involved in completing five questionnaires;

- Background Questionnaire
- Adult Attachment Questionnaire
- The Miller Social Intimacy Scale
- The Personal Style Inventory
- Beck Depression Inventory

In total, it will take approximately 35 to 45 minutes to complete all the questionnaires. You are not asked to write your name on the questionnaires but are asked to sign a consent form, which will be separated from the questionnaires as soon as we receive them. The questionnaires will include questions about: how you relate to others, your current relationships/friendships, and your mood or how you feel, and you will be asked to circle the response that best describes you or how you are feeling.
A pre-paid envelope addressed to Victoria University will be provided along with the questionnaires, so once you have completed them they can be posted back to the researcher.
All questionnaires that have been completed and returned will be stored in a locked cabinet at Victoria University, with the two researchers stipulated above being the only individuals allowed access.

What will I gain from participating?

In choosing to participate you have the opportunity to take part in a study that will contribute to the body of knowledge about depression and attachment, intimacy and personality traits (dependency/independence).

How will the information I give be used?

The student researcher will write about the findings of the study in her thesis. The findings may also be published or presented at conferences. In all reports of the study only group findings will be discussed. No information about individuals will be presented or written up.

What are the potential risks of participating in this project?

The main risk is that completing the questionnaires may bring to mind distressing thoughts or circumstances. We trust you will think carefully about this before deciding to participate. If you find that you become distressed after participating we suggest you consult with your current G.P, and request a referral to see a psychologist.
Alternatively if any participant should become distressed they will have access to the contact details of a registered psychologist Gerard Kennedy 0418 312 160.

How will this project be conducted?

The project will involve at least 100 participants between the ages of 25 to 40 years. Fifty of these participants will be people who are suffering from depression, recruited through community health organisations and the beyond blue website. The other 50 participants will be recruited from the general community and Victoria University, mature aged students studying at both higher education and TAFE courses. Participants will be requested to read the 'Information to Participants' form. Participants will then complete the questionnaires and return them to the student researcher via the addressed pre-paid envelope provided. After questionnaires have been returned, the data will be analysed.

Who is conducting the study?

Victoria University

Principal Researcher
Anne Graham
Ph 9919 2159
Anne.Graham@vu.edu.au

Student Researcher
Theresa Marasco
Ph 0402 317 533
Theresa.marasco@live.vu.edu.au

Any queries about your participation in this project may be directed to the Principal Researcher listed above.
If you have any queries or complaints about the way you have been treated, you may contact the Secretary, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC, 8001 phone (03) 9919 4781.

Appendix J - Flyer for community health organisations / counselling services (to recruit clinical sample)

ARE YOU EXPERIENCING

DEPRESSION

VICTORIA UNIVERSITY
MELBOURNE AUSTRALIA

You are invited to participate in a research study looking at how depression may be related to our:

- **Experiences of relationships**
- **Experiences of intimacy**
- **Feelings of dependence and independence**

If you are

- **Aged Between 25 and 40, and**
- **Currently receiving help for Depression**

You are invited to be part of this study conducted by Theresa Marasco and Anne Graham from the School of Social Sciences and Psychology at Victoria University

Help us contribute to the body of knowledge about Depression by completing some confidential questionnaires

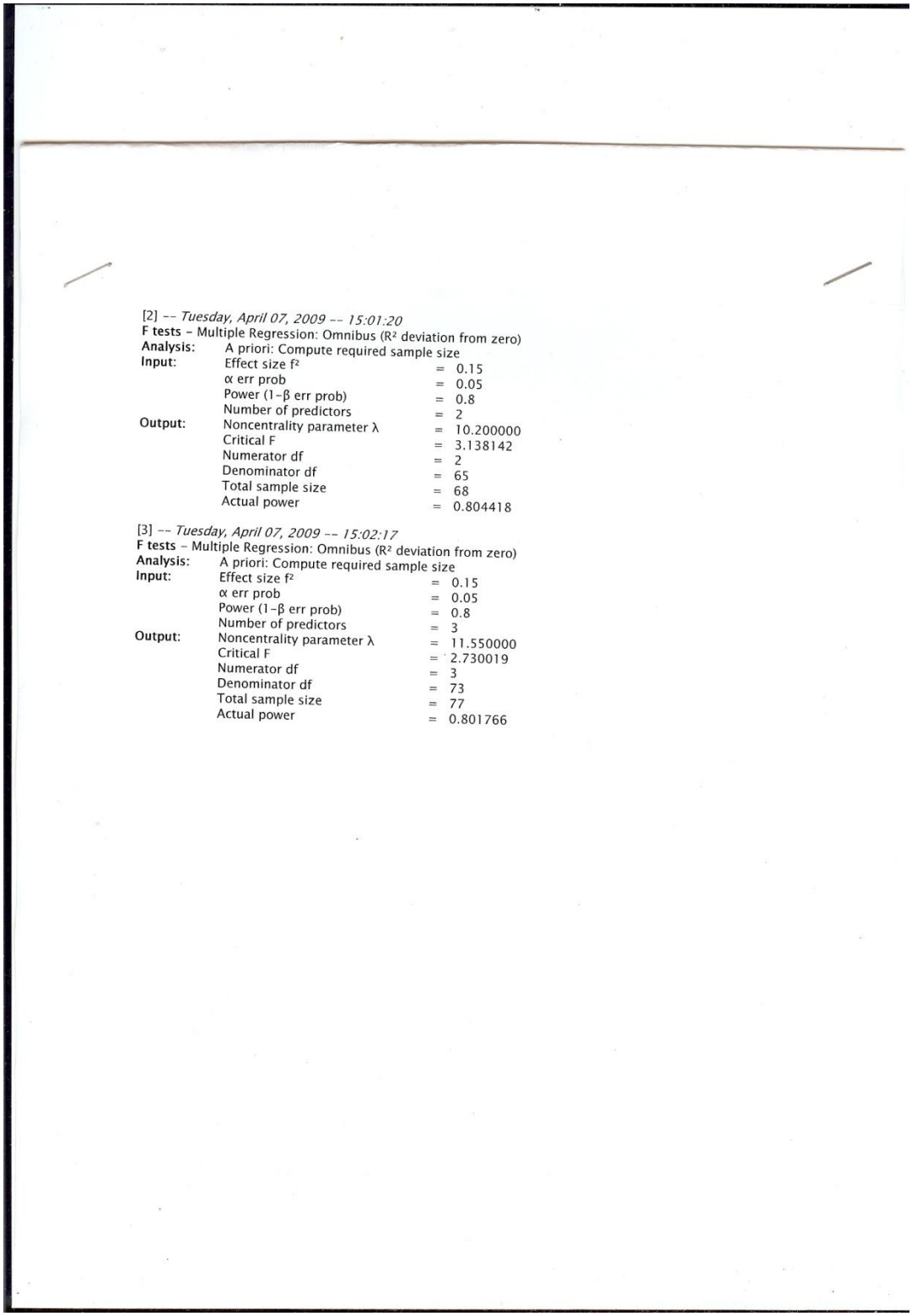
Ask your counsellor to give you a research pack that includes the questionnaires and a stamped returned envelope.

We appreciate your time. Participants go into the draw to win a

$50 Coles / Myer Voucher

For more information contact Theresa Marasco on 0402 317 533

Appendix K - Power Analysis: Multiple Regression



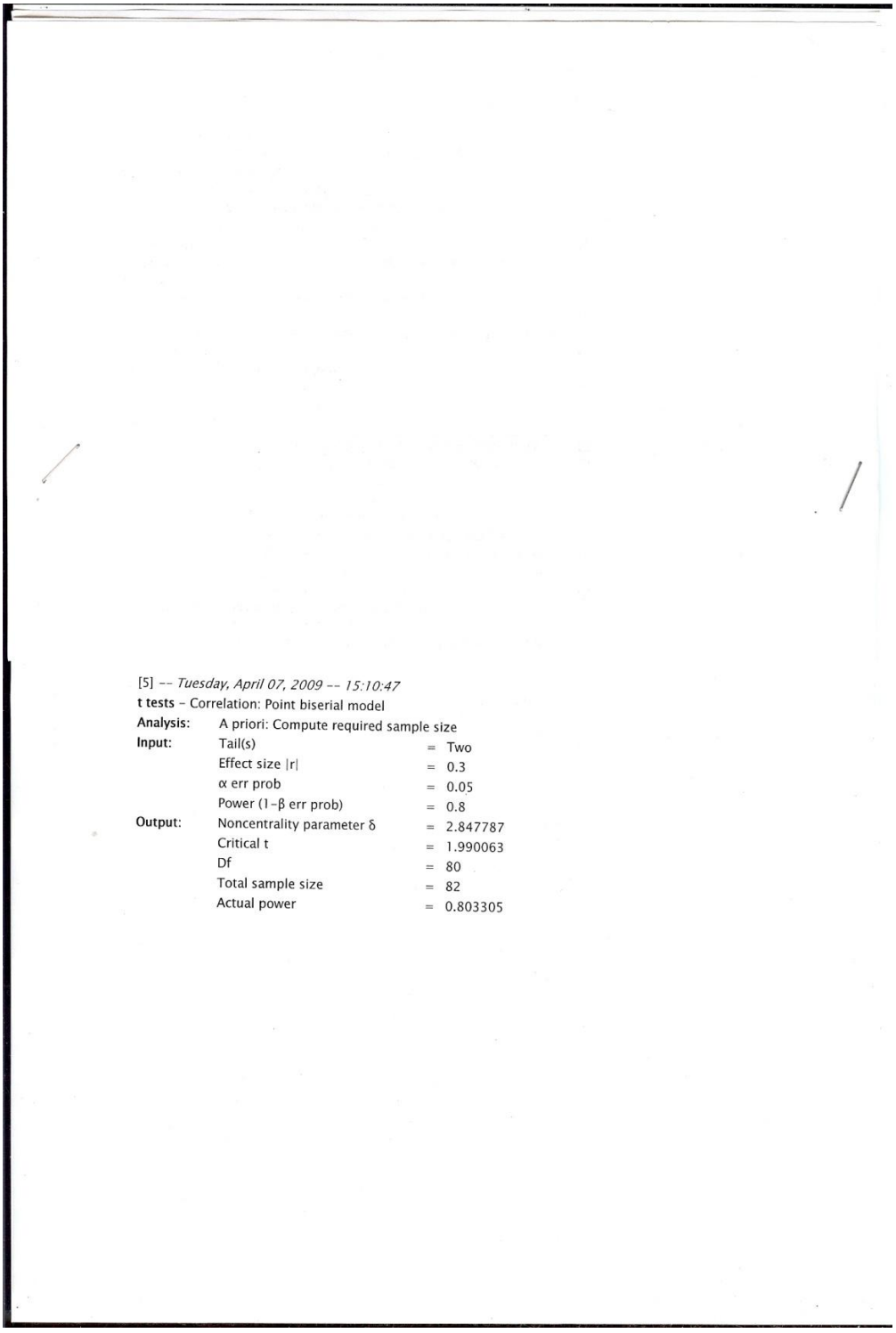
[2] -- *Tuesday, April 07, 2009 -- 15:01:20*
F tests - Multiple Regression: Omnibus (R^2 deviation from zero)

Analysis:	A priori: Compute required sample size	
Input:	Effect size f^2	= 0.15
	α err prob	= 0.05
	Power (1-β err prob)	= 0.8
	Number of predictors	= 2
Output:	Noncentrality parameter λ	= 10.200000
	Critical F	= 3.138142
	Numerator df	= 2
	Denominator df	= 65
	Total sample size	= 68
	Actual power	= 0.804418

[3] -- *Tuesday, April 07, 2009 -- 15:02:17*
F tests - Multiple Regression: Omnibus (R^2 deviation from zero)

Analysis:	A priori: Compute required sample size	
Input:	Effect size f^2	= 0.15
	α err prob	= 0.05
	Power (1-β err prob)	= 0.8
	Number of predictors	= 3
Output:	Noncentrality parameter λ	= 11.550000
	Critical F	= 2.730019
	Numerator df	= 3
	Denominator df	= 73
	Total sample size	= 77
	Actual power	= 0.801766

Appendix L - Power Analysis: Correlation



[5] -- *Tuesday, April 07, 2009 -- 15:10:47*
t tests - Correlation: Point biserial model

Analysis:	A priori: Compute required sample size	
Input:	Tail(s)	= Two
	Effect size |r|	= 0.3
	α err prob	= 0.05
	Power (1-β err prob)	= 0.8
Output:	Noncentrality parameter δ	= 2.847787
	Critical t	= 1.990063
	Df	= 80
	Total sample size	= 82
	Actual power	= 0.803305