Relationships among Attachment Avoidance, Vulnerable Narcissism, and Marital Satisfaction in Upper Echelon Businessmen

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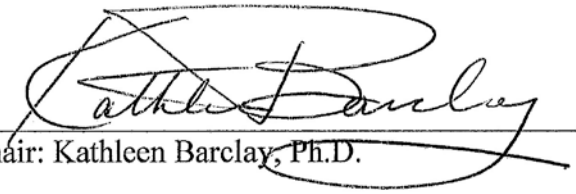

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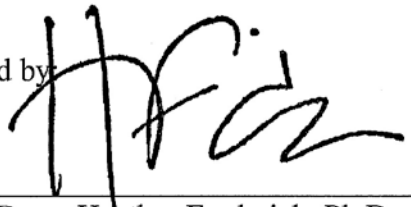

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Abstract

Low marital satisfaction among upper-echelon business executives is commonly perceived to be the result of long working hours and excessive travel. Recent studies suggest that attachment styles rather than work issues may be the actual determinants of marital satisfaction. The purpose of this quantitative correlational study was to investigate the relationship between attachment avoidance, narcissistic vulnerability, and marital satisfaction, and to examine whether vulnerable narcissism is a necessary factor in low levels of marital satisfaction among upper echelon businessmen. A limited number of studies have examined factors that influence the relation between adult attachment style and marital satisfaction. No studies to date have looked into vulnerable narcissism as one possible factor. A purposive convenience sample of 62 English-speaking upper echelon male business executives, aged 29 to 69, currently living and working in Hong Kong, was obtained through participation in an online survey. Bivariate correlations and multiple regression analyses were used. Pearson correlation results indicated that attachment avoidance was significantly correlated to vulnerable narcissism, $r = .378$, $p < .05$; vulnerable narcissism was not significantly correlated with marital satisfaction, $r = -.228$, $p > .05$; attachment avoidance was significantly and negatively correlated with marital satisfaction as measured by Social Support, $r = -.465$, $p < .05$. Sobel test results indicated vulnerable narcissism did not mediate between attachment avoidance and marital relationship, yet there was a significant indirect effect between attachment avoidance and perceived conflict via vulnerable narcissism, effect = .073, $p < .05$. Calculated Path coefficients demonstrated that the direct path from

attachment avoidance to perceived conflict became not significant once vulnerable narcissism was introduced as a mediator, effect = .098, $p > .05$. It can be concluded that vulnerable narcissism completely mediated the relationship between attachment avoidance and perceived conflict. Future researchers could expand on this study by employing measures other than self-reporting among narcissistic populations. Findings from the study would enable mental health practitioners to formulate specific treatment approaches for this type of individual, including the development of preventive measures, so that they might enjoy success without paying a heavy price in their daily lives and marital relationships.

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This dissertation is dedicated to my father-in-law, Dr. David Feign, for his kindness and love to me over the past 30 years. Even though he could not be here to witness my finishing the PhD, I know he would be proud.

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Chapter 1: Introduction

Senior-level executives often show competitive, ambitious, or aggressive behaviors. These individuals are typically purposeful in action and can be engaging when they want to impress others (Campbell & Campbell, 2009; Kaiser & Hogan, 2007). Although such behaviors often bring power and admiration, the achievements of upper echelon businessmen may help to hide psychological vulnerabilities, such as lack of confidence, feelings of inferiority, or fear of rejection, and can be used as a way of disguising a sense of inadequacy (Foster & Trimm, 2008; Resick, Whitman, Weingarden, & Hiller, 2009).

Studies of the personality characteristics of upper echelon business executives are largely focused on strategies, performance, and styles of leadership (Hogan & Kaiser, 2005; Resick et al., 2009). The personal psychological dimensions of these behaviors have been less well studied (Kellerman, 2005). A few scholars have begun to investigate the personalities and the psychological personae of upper echelon business executives in terms of self-esteem, self-evaluation, emotional stability, and narcissism (Chatterjee & Hambrick, 2007; Kaiser, Hogan, & Craig, 2008; Resick et al., 2009). However, a combination of the absence of a unifying construct reflecting the core dimensions of personality, as well as the difficulty in gaining access to these executives, has left an incomplete and superficial understanding of this population (Kaiser & Kaplan, 2006; Simsek, Heavey, & Veiga, 2010).

Upper echelon businessmen typically devote a large portion of their lives to achieving success in the workplace (Hambrick, 2007a; Rosenthal & Pittinsky, 2006).

Individuals driven to seek achievement may invest less effort with their intimate partners and may distance themselves from partners who require emotional support. Theorists associate these behavioral characteristics with narcissism (Foster, Shrira, & Campbell, 2006; Foster & Trimm, 2008).

Narcissism refers to an inflated self-view of superiority that individuals develop in childhood to protect themselves against feelings of rejection (Horton et al., 2006). Despite appearances of self-importance, narcissistic individuals continue to feel insecure and emotionally fragile, behaving in ways to cover vulnerability (Atlas & Them, 2008; Foster & Campbell, 2005). Narcissistic individuals frequently place primary importance on themselves and expect their partners to behave in affirming and enhancing ways (Foster & Campbell, 2005). Some researchers believe the purpose of such behavior is to protect narcissistic vulnerability (Besser & Priel, 2009; Foster & Campbell, 2005).

Vulnerable narcissism is a subset of narcissism believed to be rooted in parental rejection and insecure attachment (Bowlby, 1979). Individuals with vulnerable narcissism develop the compulsive self-reliance of keeping feelings inside and quietly enduring harsh conditions (Bowlby, 1979). There is thought to be a close association between vulnerable narcissism and attachment anxiety (Besser & Priel, 2009).

Marriage is associated with positive mental health and overall well-being (Bierman, Fazio, & Milkie, 2006; Kane et al., 2007). A well-functioning partnership requires both parties to play the role of caregiver and support provider (Ballen et al., 2009). Attachment researchers suggest that individuals' attachment style can influence their caregiving behaviors, which is often reflected in terms of empathy and display of

emotions (Mikulincer & Shaver, 2008). Top-tier businessmen tend to be in control and not easily swayed by emotions. Such behavior patterns enhance their effectiveness as business leaders (Resick et al., 2009). These behaviors may not be conductive to nurturing healthy intimate relationships. Some studies have identified upper echelon executives as having a high incidence of attachment avoidance (Manning, 2003), while others have linked attachment avoidance with low levels of marital satisfaction (Charania & Ickes, 2007). However, there have been no specific attempts to explain why attachment avoidance necessarily leads to low marital satisfaction among upper echelon executives. This study proposes that the mediating factor may be vulnerable narcissism.

This chapter introduces an empirical study designed to investigate attachment style and vulnerable narcissism among upper echelon business executives in relationship to marital satisfaction. The chapter begins with a background to the study, followed by the problem statement. The purpose of the current study is then presented, along with the theoretical framework. Research questions and hypotheses are followed by a discussion of the nature, methodology, significance, and key terms of this study.

Background

Narcissistic business individuals seek power and superiority (Rosenthal & Pittinsky, 2006). Work may serve a compensatory function to help upper echelon businessmen cope with their own vulnerable narcissism. Not surprisingly, many people in executive leadership positions show symptoms of narcissism (e.g., Chatterjee & Hambrick, 2007b; Rosenthal & Pittinsky, 2006; Yang, 2009).

Vulnerable narcissism. Individuals with vulnerable narcissism develop the compulsive self-reliance of keeping emotional feelings inside and enduring harsh conditions (Bowlby, 1979). These individuals are hypervigilant, because they depend on others or on external evidence to validate their self-efficacy. Such individuals are sensitive to failing, shame, and criticism, and are therefore driven to work harder to attain grandiosity (Pimentel, 2007; Pincus et al., 2009). Individuals with vulnerable narcissism use their sense of success to gain approval and to protect their sense of vulnerability (Zeigler-Hill, Clark, & Pickard, 2008). These individuals tend to avoid closeness and are therefore often unable to maintain long-lasting intimate relationships (Dickinson & Pincus, 2003). Vulnerable narcissism is sometimes associated with covert narcissism. In contrast, overt narcissism is associated with grandiose behaviors.

Attachment style and vulnerable narcissism. There is thought to be a close association between vulnerable narcissism and insecure attachment (Pistole, 1995). Both insecurely attached individuals and individuals with vulnerable narcissism seem to share a need for self-protection, deploying defense mechanisms to ensure against hurt and rejection (Pistole, 1995). Childhood experience is closely linked to an individual's attachment style, and different attachment styles result in different forms of narcissism (Otway & Vignoles, 2006). Individuals who experience anxiety in close relationships develop an attachment avoidance style, by distancing themselves from partners and avoiding closeness and intimacy (Otway & Vignoles, 2006). Vulnerable narcissism, characterized by anxiety and hypersensitivity to rejection, is believed to be closely related to adult attachment styles (Smolewska & Dion, 2005).

Attachment style and intimate relationships. An individual's personality makeup and methods of caring for a romantic partner can determine the success of the relationship (Collins, Guichard, Ford, & Feeney, 2006). Adult attachment style is a major factor in shaping the personality of an individual. Additionally, the personality influences the individual's manner of caregiving in relationships.

Individual differences in attachment style can predict the quality of intimate relationships (Foster, Kernis, & Goldman, 2007). Attachment style can be classified into two continuous dimensions, attachment-related anxiety and attachment-related avoidance (Kane et al., 2007). The anxiety and avoidance dimensions are directly related to insecure attachment. Anxiety-related attachment causes individuals to be fearful and worried about being abandoned or rejected (Thomaes et al., 2009). Avoidance-related attachment makes individuals reluctant to depend upon others, with the result that these individuals are inclined to avoid intimacy. People classified with secure attachment style are low in anxiety and avoidance (Butzer & Campbell, 2008).

The quality of early attachment with significant caregivers is believed to have a direct effect on adult romantic relationships, especially regarding the manner of emotional expression (Simpson et al., 2007). Developmental experience has a long-term effect on people's adult experiences in relationships (Simpson et al., 2007). Vulnerable narcissistic individuals find attractive relationship partners to help boost self-esteem but are averse to partners who desire emotional intimacy (Foster & Campbell, 2005; Zeigler-Hill et al., 2008). Such individuals often have problematic ways of coping with intimate relationships (Collins et al., 2006).

Marital Satisfaction. Upper echelon businessmen tend to work hard to maintain their positions (Chen, Trevino, & Hambrick, 2009). These businessmen invest more time at work, which they find rewarding, and spend less time at home. In assigning a higher priority to work than to family, these businessmen develop conflicts in marital relationships (van Ecke, 2007).

Individuals who enjoy responsive care in supportive marriage or committed relationships exhibit better health than those who aren't in committed relationships (Umberson, Williams, Powers, Liu, & Needham, 2006). Adult attachment theory offers a conceptual framework for understanding the psychological and contextual factors that contribute to marital satisfaction (Pietromonaco & Barrett, 2006). Attachment studies established an association between adult attachment and marital satisfaction (Marchand-Reilly & Reese-Weber, 2005). Secure attachment has been a predictor of marital satisfaction, since secure individuals are more equipped to cultivate mutually supportive relationships (Rini et al., 2006). Other studies suggested that both men and women perceived avoidant partners to be less caring and supportive, which can lead to unsatisfactory marriages (Pietromonaco & Barret, 2006).

The global work culture. The participants in this study were English-speaking upper echelon male business executives currently living and conducting business in Hong Kong. These individuals are natives of different cultural environments and hold diverse national identities, but can be identified as having a single global identity with shared values, known as *global work culture* (Ang et al., 2007; Shokef & Erez, 2006). The

global work culture environment overrides national, organizational, and ethnic differences (Erez & Gati, 2004).

Upper echelon business executives conduct business in the multinational business arena and the global market (Chen et al., 2009; Thomas et al., 2006). Thus, these individuals tend to maintain a group identity distinct from the identities of other classes of people. Regardless of whether upper echelon business executives live in or outside their country of origin, they have a transnational identity not bounded by their own national cultures (Amiri et al., 2010; Leung, Bhagat, Buchan, Erez, & Gibson, 2005). In this study *culture* refers to the global work culture shared by upper echelon executives (Hofstede, 1994; Triandis, 2006).

Businessmen. Men occupy 98.5% of all senior executive positions in top-performing global companies (Harvard Business Review, 2010). Narcissistic personality disorder (NPD) is estimated to be 50 to 75% more prevalent in men than in women (DSM-IV-TR; American Psychiatric Association, 2000). Therefore, the study focused on males.

Problem Statement

Low marital satisfaction among upper-echelon business executives is widely perceived to be the result of overwhelming work demands, such as long working hours and excessive traveling (Chen et al., 2009; Hambrick, Finkelstein, & Mooney, 2005). Recent empirical and clinical research has shown that attachment styles, rather than work demands per se, may have contributed to results in low level of marital satisfaction (Foster & Trimm, 2008; Neustadt, Chamorro-Premuzic, & Furnham, 2006).

Additionally, vulnerable narcissism has been shown to drive some people to attain career success as a way to hide insecurity and gain acceptance (Zeigler-Hill et al., 2008). High-ranking executives tend to focus heavily on career issues to avoid confronting inner feelings of vulnerability or an inability to establish intimate relationships (Foster & Campbell, 2005). Therefore, vulnerable narcissism may be a possible factor in low levels of marital satisfaction among this population.

Numerous studies investigated the link between attachment style and marital satisfaction (e.g. Butzer & Campbell, 2008; Kane et al., 2007). Only a limited number of studies have examined factors that influence the relation between adult attachment style and marital satisfaction (Hatch, 2008). There has not been any study looking into vulnerable narcissism as a factor that may influence the relations between attachment avoidance style and marital satisfaction. Understanding the factor of vulnerable narcissism may illuminate the negative role that may contribute to less satisfying marital relationships. Additionally, most existing literature studying relationship satisfaction has focused on experiences of the person who is in need of support, while less attention has been given to the person providing support. (Feeney & Collins, 2001).

These issues lead to the research question of whether individuals with both vulnerable narcissism and attachment avoidance experience strain and dissatisfaction in marital and other close relationships, and whether narcissism is necessarily a mediating factor. Vulnerable narcissism has not been evaluated as a mediator between attachment avoidance and marital satisfaction, nor have attachment avoidance and vulnerable narcissism been examined jointly as explanatory variables in predicting the level of

marital satisfaction. Examining these relationships may be useful in changing the perception of root causes of marital problems among upper echelon businessmen and provide clinical practitioners with a basis for developing new treatment strategies for marital and personal relationship issues among this population.

Purpose

The purpose of this quantitative study was to investigate relationships among attachment avoidance, vulnerable narcissism, and marital satisfaction in upper echelon male executives. The study was correlational and cross-sectional in design. The participants were English-speaking upper echelon male business executives, aged 29 to 69, currently living in and conducting business in Hong Kong. Upper echelon executives belong to the Global Work Culture (Fischer et al., 2009). People of Global Work Culture come from diverse national backgrounds, yet share similar socioeconomic status, as well as a common set of values, behaviors, and ethics not bound by their national cultures (Adair, Tinsley, & Taylor, 2006; Leung et al., 2005). Attachment avoidance was defined as an independent variable. Attachment avoidance is a form of attachment style, in which individuals tend to distance themselves from building intimate relationship and avoid any form of dependency on others. They have an inability to offer emotional support to partners when partners are in distress (Fraley & Marks, 2011). Marital satisfaction was defined as a dependent variable, defined as an individual's perception of support from their spouse. Vulnerable narcissism is a personality trait. Vulnerable narcissists are hypersensitive and inhibited and they tend to rely upon external validation to maintain their sense of self-worth (Dickinson & Pincus, 2003; Zeigler-Hill, Clark, & Pickard,

2008). Vulnerable narcissism was defined as a dependent variable with respect to attachment avoidance, and as both an independent variable and a mediator variable with respect to marital satisfaction. The relationship among the three variables is presented in Figure 1.

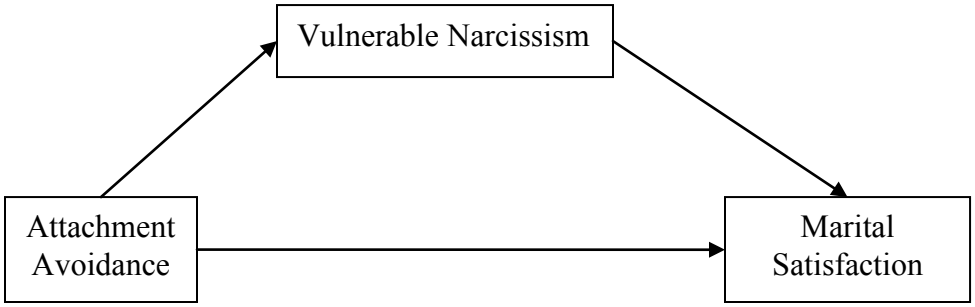


Figure 1. The Mediating Relationship among Attachment Avoidance, Vulnerable Narcissism and Marital Satisfaction

Attachment avoidance was measured by the Avoidance and Anxiety subscale of the Experience of Close Relationship-Revised (ECR-R) scale (Fraley, Waller, & Brennan, 2000; see Appendix A). Vulnerable narcissism was measured by the Pathological Narcissism Inventory (PNI; Pincus et al., 2009; see Appendix B). The Social Support subscale of the Quality of Relationships Inventory (QRI; Pierce, Sarason, & Sarason, 1991; see Appendix C) was used to assess the level of marital satisfaction. Data were gathered by means of a one-time online survey. Bivariate correlations were computed to determine the pairwise relationships among each of the three variables. A multiple regression analysis was performed to investigate the role of vulnerable narcissism as a mediator between attachment avoidance and marital satisfaction. According to an a priori power analysis (Faul, Erdfelder, Buchner, & Lang, 2009), a minimum of 73 individuals was the target sample size to conduct the study. Although the

sample size of 73 as computed by G*Power was not collected, post hoc analysis of the final model (IV: avoidance; Mediator: narcissism; DV: conflict; F (2,59) = 5.944; R-squared = .1677) indicated the achieved power .879, which is large. That means given the alternative hypothesis is true, the probability of finding a significant result is 87.9%.

Theoretical Framework

The current study was an investigation of upper echelon business executives from the perspectives of personality theory and attachment behavior, rather than from the perspective of business success. This study provided new insight into the behavioral patterns of this high-status population. Narcissism is a prominent trait among upper-level business executives (Chertterjee & Hambrick, 2006).

Narcissism has been studied as a personality disorder. Narcissistic Personality Disorder (NPD) can be assessed according to well-defined criteria in the DSM-IV-TR (2000). NPD is a severe form of pathological narcissism which contains two variants: overt and covert (Miller et al., 2008). Theories about narcissism continue to be revised by new research evidence, and a growing body of research has suggested that narcissism can be manifested in both normal and pathological personality functioning (Pincus & Lukowitsky, 2010). Normal narcissism motivates individuals, whereas pathological narcissism causes individuals to retreat. Pathological narcissism, which is different from narcissistic personality disorder (NPD), encompasses narcissistic grandiosity and narcissistic vulnerability. There are only a few studies looking at one subset of narcissism—vulnerable narcissism—in relation to business executives and their marital relationships (Campbell et al., 2006; Chen et al., 2009; Dickinson & Pincus, 2003).

Some of the findings seem to point to a connection between vulnerable narcissism and success in some businessmen. It is fair to conclude that vulnerable narcissism may be the driving force behind the career pursuit which brings power and success. Narcissism is thought to be entrenched in attachment relationships from childhood (Bennett, 2006). Theorists suggested that an individual's insecure attachment style may contribute to vulnerable narcissism (Besser & Prier, 2009).

Attachment theory was developed by John Bowlby, who attempted to understand individuals' "attachment behavior" and "attachment behavioral system" to an attachment figure. The early interactions with significant attachment figures generate expectations and beliefs in people, and guide current and future thoughts, feelings, and behaviors regarding close relationships (Campbell et al., 2005). Attachment theory provides a framework for understanding an individual's style of managing closeness in relationships. Empirical studies were used to support the idea that the quality of early attachments may directly impact an individual's ability to maintain long-term intimate relationships in adult life (Bartholomew & Horowitz, 1991). Attachment theorists classified attachment style into two continuous dimensions: attachment-related anxiety and attachment-related avoidance (Brennan, Clark, & Shaver, 1998; Kane et al., 2007). Individuals with anxiety attachment tended to be anxious and fearful of being rejected, whereas avoidance-attached individuals tended to avoid closeness and intimacy (Brennan et al., 1998; Kane et al., 2007). Understanding the degree of individuals' attachment avoidance will give an indication of how narcissists deal with marital relationships (Besser & Priel, 2009; Otway & Vignoles, 2006).

Research Questions

To examine the role of vulnerable narcissism in mediating the relationship between attachment avoidance and marital satisfaction, the following research questions were presented.

Q1. What is the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen?

Q2. What is the relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

Q3. What is the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

Q4. To what extent does vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), mediate the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by

the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

Hypotheses

To address the research questions for this study, the following null and alternative hypotheses were presented.

$H1_0$: There is not a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen.

$H1_a$: There is a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen.

$H2_0$: There is not a significant relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H2_a$: There is a significant relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H3_0$: There is not a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H3_a$: There is a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H4_0$: Vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), does not significantly mediate the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H4_a$: Vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), significantly mediates the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

Nature of the Study

The purpose of this quantitative study was to investigate relationships among attachment avoidance, vulnerable narcissism, and marital satisfaction in upper echelon male executives. The study was correlational and cross-sectional in design. The participants were English-speaking upper echelon male business executives, aged 29 to 69, currently living and conducting business in Hong Kong. Participants were selected from a total population of approximately 3,000. Using G*Power (version 3.1.3; Faul, Erdfelder, Lang, & Buchner, 2009) to conduct a priori analysis, a sample size of 73 would achieve a statistical power of .80, assuming a two-tailed test, a medium effect size of 0.3162278, and an alpha significance level of .05.

All participants worked for companies either publicly listed or having a minimum of 100 employees locally or worldwide. Job titles included Chief Executive Officer, Chief Financial Officer, partner of the organization, corporate lawyer, senior lawyer, senior banker, senior level investment banker, senior manager, human resource director, senior sales director, or regional manager. The job title reflected responsibilities at an upper management level.

Attachment avoidance was defined as an independent variable. Marital satisfaction was defined as a dependent variable. Vulnerable narcissism was defined as a dependent variable with respect to attachment avoidance, and as both an independent and a mediator variable with respect to marital satisfaction.

Bivariate correlations were computed to determine the pairwise relationships among each of the three variables. Multiple regression modeling was used to test the

relative strength of vulnerable narcissism and attachment avoidance in predicting levels of marital satisfaction. The analysis was performed using SPSS (version 17) statistical software.

Significance of the Study

Elucidating the relationships among attachment avoidance, vulnerable narcissism, and marital satisfaction in upper echelon male business executives will offer deeper comprehension for scholars, mental health professionals, and business administrators about the complexity of the personalities and behaviors of this population. Findings from the study may enable mental health practitioners to formulate more specific treatment approaches for this type of individual. Additionally, findings may help in the development of preventive measures, so that individuals may achieve and enjoy success without paying a heavy personal and emotional price in their daily lives and marital relationships.

The current study, by focusing on covert or vulnerable narcissism, added to the general literature on narcissism. The study filled the gap in the existing literature regarding the relationship of vulnerable narcissism to personality characteristics and intimate relationships. An understanding of attachment avoidance may help to clarify how narcissists behave within significant relationships and the level of their marital satisfaction (Besser & Priel, 2009; Otway & Vignoles, 2006).

For researchers, scholars, and business administrators, the understanding of individuals with vulnerable narcissism may help predict or prevent some business decisions upper echelon businessmen may make to conceal their vulnerability. Although

the study was not an investigation of business behaviors, findings may nevertheless help eliminate some of the business errors or undesirable strategies executives may undertake that can affect organizations or the larger business community. Further studies can be conducted to determine whether intense career pursuit and low marital satisfaction both derive from vulnerable narcissism.

Definitions

Following are terms used within the context of the current study.

Attachment avoidance. Used interchangeably in the literature with the term attachment avoidance. Attachment avoidance is a form of attachment style. People with attachment avoidance view themselves as self-sufficient and invulnerable to feelings associated with being closely attached to others. They often deny needing close relationships. They often fail to support partners during stressful times and have an inability to share feelings, thoughts and emotions with partners (Fraley & Marks, 2011).

Culture. Culture refers to a system of general perceptions and belief systems influenced by an individual's heritage, ethnicity, or nationality. In this study, the term will be used to refer to the culture of upper echelon executives, who maintain a distinct identity differing from the identity of other classes of people. Members of this culture typically engage exclusively in association with other elites (Chen et al., 2009).

Global work culture. Individuals who work for international and multinational organizations share a global work culture (Fischer et al., 2009). People of the global work culture come from diverse cultural backgrounds, yet share deeper values, behaviors, and ethics not bound by their national cultures (Adair, Tinsley, & Taylor, 2006; Leung et

al., 2005). The global work culture environment overrides national boundaries and crosses beyond organizational cultures and personal identities (Erez & Gati, 2004).

Marital satisfaction. For the purpose of this study, marital satisfaction refers to individuals' perceptions of support from their spouses. Marital satisfaction was measured by the Social Support subscale of the QRI (Pierce et al., 1990).

Upper echelon businessmen. For the purpose of this study, upper echelon businessmen were defined as male executives and businessmen in high ranking positions within companies. Upper echelon businessmen include senior investment bankers, corporate lawyers (senior lawyers or partners of the firm), managing directors, company presidents, chief executive officers, or chief financial officers.

Vulnerable narcissism. Vulnerable narcissism is a personality trait. People with vulnerable narcissism are shy, hypersensitive, and inhibited individuals who tend to use external achievement to gain validation. Vulnerable narcissists attach their self-esteem to their accomplishments (Dickinson & Pincus, 2003). The term vulnerable narcissism is used interchangeably with covert narcissism (Cain et al., 2008). For clarity, vulnerable narcissism will be the term used in this study.

Summary

Upper echelon businessmen may be driven to achieve success and power (Rosenthal & Pittinsky, 2006). Vulnerable narcissism as a personality trait can be the major driving force for their motivation and actions (Zeigler-Hill et al., 2008). Various forms of narcissism result from different attachment-related experiences in childhood (Otway & Vignoles, 2006). Insecure attachment styles cause low self-esteem and fear of

rejection in individuals (Kane et al., 2007). The combination of vulnerable narcissism and insecure attachment may drive upper echelon businessmen to seek work achievements to compensate for feelings of vulnerability and attachment-related issues. These traits, however, do not promote successful intimate or marital relationships (Foster & Campbell, 2005). These findings lead to the question of whether vulnerable narcissism and attachment avoidance are related to marital relationships in upper echelon businessmen.

The purpose of this quantitative study was to investigate relationships among attachment avoidance, vulnerable narcissism, and marital satisfaction in upper echelon male executives. The study was correlational and cross-sectional in design. Relationships among attachment avoidance, vulnerable narcissism, and marital satisfaction were examined in upper echelon male business executives, aged 29 to 69. Bivariate correlations and multiple regression analyses were used. Vulnerable narcissism was evaluated as a mediator between attachment avoidance and marital satisfaction.

Chapter 2: Literature Review

The purpose of this study was to investigate the personality characteristics of upper echelon businessmen as they pertain to attachment avoidance, vulnerable narcissism and the level of marital satisfaction. The study examined career success in relation to attachment style and scale of vulnerable narcissism in the upper echelon male business population. The study looked into attachment style to see whether this characteristic has an adverse effect on the level of marital satisfaction within this population. It also looked into the correlational relationship of vulnerable narcissism and attachment avoidance to find out whether they can predict the level of marital satisfaction in upper echelon businessmen.

The following literature review begins with an overview of narcissistic personality theory and the constructs of grandiose and vulnerable narcissism. Included is a review of narcissism research associated with the upper echelon executive personality, with specific emphasis on work and marital relationship functioning. An overview of attachment theory and the construct of attachment related anxiety and avoidance is presented. Research on the relationship between attachment style and narcissism and how these two constructs play out at work and in romantic relationships is explored. Research regarding the relationship between attachment style and level of marital satisfaction, in addition to examining vulnerable narcissism as a covariate, is reviewed. Finally, literature regarding the outcome variable of the level of marital satisfaction is addressed.

The research materials and empirical evidence were obtained through searches of online databases, including ProQuest, EBSCOhost, PsycINFO, PsycARTICLES and Google Scholar databases. ProQuest Business Dateline, EBSCOhost and Google Scholar databases are particularly useful in providing full-text, peer-reviewed journals and trade publications in the areas of business and psychology. *The Leadership Quarterly* and *Harvard Business Review* offered updated business information and statistical data for this study. The main keywords in the search strategy were: *business leaders, CEO, upper echelon executive, narcissism, self-esteem, attachment style* and *marital relationship*.

Narcissism as a psychological construct emerged from psychoanalytic theory (Freud, 1986), and was later addressed in the field of object relations and self-psychology (Kernberg 1967; Kohut, 1968). Major contributions to the theory of narcissism were made in the 1970s (Kohut, 1972; Kernberg, 1970). These contributions expanded on Freud's theory that NPD originates from childhood deprivation to the theory that individuals would likely experience unsatisfactory relationships when depending upon others for validation and self esteem. In recent years narcissism has been seen as being rooted in children's early socializing experiences with parents and caregivers (Horton et al., 2006; Morf & Rhodewalt, 2001).

Research findings supported the idea that the narcissism trait is manifested and measurable beginning at age 8 (Thomaes et al., 2008). According to this theory, narcissism developed due to either inadequate parenting or overindulgent parenting in early life. Inadequate parenting resulted in poor ego development and a sense of worthlessness in children. Consequently, children developed an inflated self-view of

superiority to protect themselves against feelings of rejection, yet deep inside they felt insecure and emotionally fragile (Atlas & Them, 2008). Overindulgent parenting led children to believe that they were special and deserved praise unconditionally. Growing up in this environment, they developed grandiose self-views and a sense of entitlement. They expected ongoing external validation (Twenge, 2006).

Both socialization theories were supported by empirical evidence from adults who self-reported childhood recollections of parenting styles. Many subjects reported hostile and indifferent treatment from parents, parents who showed no empathy towards them and parents who used emotional blackmail to control them (Horton, Bleau, & Drwecki, 2006; Otway & Vignoles, 2006; Trumpeter et al., 2008). Alternatively, subjects reported indulgent parents who were extremely permissive without setting boundaries and showered them with praise (Horton et al., 2006; Otway & Vignoles, 2006). These early socializing experiences led people to become attuned to seeking rewards and avoiding punishments, as well as to strive for external validation (Thomaes et al., 2008). Another view, delineated from empirical investigations, suggested that narcissism is a personality trait characterized by a positive and grandiose sense of self and the ability to regulate self-esteem (Emmons, 1987; Wink & Gough, 1990). Individuals with these traits revealed leadership abilities, a sense of superiority, self-focus and entitlement.

Narcissism can be measured by the Narcissistic Personality Inventory (NPI). It is further defined in the *Diagnostic and Statistical Manual of Mental Disorders (DSM), Third Edition* (American Psychiatric Association [APA], 1980) as Narcissistic Personality Disorder (NPD). NPD appeared to be a categorical syndrome (Fossati et al.,

2005) exhibited by a very small minority, approximately 1% of the general population (APA, 2000). In the most recent *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (APA, 2000), narcissism was well-defined as a clinical syndrome characterized by a pervasive pattern of grandiosity, a need for admiration, high levels of superiority, self-centeredness and exhibitionism, coupled with low levels of warmth, intimacy and empathy (Campbell & Foster, 2007). These patterns were exhibited both at home and in the workplace starting in early adulthood (Thomaes et al., 2008).

Over the past 35 years, there has been debate among different disciplines over whether narcissism is defined as a personality trait or a personality disorder (Samuel & Widger, 2008). The two definitions were often used as interchangeable constructs in written scientific literature, thereby causing controversy among theorists. Although the two constructs were conceptually similar, the degree of commonality was unclear (Miller & Campbell, 2008).

Theorists suggested that narcissism was manifested in both normal and pathological personality functioning (Pincus & Lukowitsky, 2010). Normal narcissism inspired motivation in individuals who could cope with disappointment. Individuals with pathological narcissism exhibited a regulatory deficit that resulted in an inability to regulate self-esteem. This led to individuals utilizing maladaptive strategies when dealing with disappointments and threats to their positive self-image (Horowitz, 2009; Kernberg, 2009; Ornstein, 2009; Pincus & Lukowitsky, 2001; Ronningstaim, 2005b).

Normal narcissism is distributed continuously and exhibited to a greater or lesser degree by everyone (Foster & Campbell, 2007). There is a wide spectrum of theoretical and empirical studies on narcissism conducted by different psychological disciplines, yet the literature was not coordinated and fine-tuned (Cain et al., 2008; Miller & Campbell, 2008; Pincus & Lukowitsky, 2010). This has created difficulties in integrating scientific and clinical knowledge, despite the long history of narcissism as a construct in the fields of psychology and psychiatry (Pincus & Lukowitsky, 2010).

Adaptive and maladaptive features of narcissism.

Narcissism was defined as a "mixed blessing" (Paulhus, 1998, p. 1203), with both adaptive and maladaptive features (Foster & Trimm, 2008). Narcissists possessed the positive traits of being sociable, confident, self-driven, capable of maintaining stable relationships, and thriving under pressure (Foster & Campbell, 2005). The unmitigated approach model was utilized to explain motivation in narcissism (Foster & Trimm, 2008). According to this model, narcissists were strongly motivated by reward and weakly motivated by punishment. They sought rewards in the forms of emotional, psychological or financial fulfillment. Accomplishments could take the form of emotional security, career success or admiration by others. Reward could be a likely result of competition, and was therefore sought by narcissists (Foster & Trimm, 2008). They were proactive in their pursuit and "approach orientated" (Foster & Campbell, 2007, p.1 326). Similar to the self-regulatory processing model, narcissists' active approach orientation was a compensatory function for boosting self-esteem (Morf & Rhodewalt, 2001).

However, narcissists also had an impulsive side. They were erratic and inconsistent romantically (Foster, 2008; Foster, Shrira, & Campbell, 2006) and could turn aggressive when disappointed (Reidy, Zeichner, Foster, & Martinez, 2008). Narcissists' behaviors were highly motivated toward reward seeking as a high approach (Foster & Trimm, 2008). Beneath the approach motivation lay both functional and dysfunctional impulsivity (Smillie & Jackson, 2006). Narcissists actively partook in short term risky activities which could result in high reward, yet cause them long-term harm (Lakey, Goodie, & Campbell, 2006). They had low avoidance motivations due to their impulsivity and tended to have low motivations to avoid unwanted outcomes (Vazire & Funder, 2006). Theorists suggested that narcissists were predisposed to impulsive behavior due to their urge to seek reward (Foster & Trimm (2008). Yet their functional impulsivity caused them to be proactive in their reward pursuit and often positive results came about through their active courses of action (2008).

Grandiose and vulnerable narcissism. Due to the lack of a unified phenotypic expression of narcissism, researchers took steps to identify more than 50 descriptive variables in labeling pathological narcissism (e.g. overt versus covert; grandiose versus vulnerable) (Cain et al., 2008). Further, Cain et al. classified narcissistic dysfunction into two main themes: grandiose and vulnerable narcissism. The terms *covert* and *overt* narcissism were used in later studies to refer to vulnerable narcissism and grandiose narcissism, respectively. However, for the purpose of this study, the terms vulnerable narcissism and grandiose narcissism are used.

Grandiosity was the core of narcissism, manifested in individuals' intrapsychic processes. Narcissistic grandiosity was expressed through arrogance and psychopathic behavior patterns (Pincus & Lukowitsky, 2010). Both patterns are associated with self-esteem dysregulation (Ronningstam, 2005a, 2005b). Arrogant narcissism led individuals to have inflated self-images and a distorted view of their powers and superiority. Consequently, they exhibited aggression, exploitative behaviors and the inability to empathize with others. Psychopathic narcissism was expressed in the form of antisocial behaviors as a way to protect an inflated self-image. Psychopathic narcissists could react to criticism with extreme rage or engage in sadistic behaviors without any remorse. Vulnerable narcissism was also rooted in self-esteem dysregulation. Vulnerable narcissists were found to be inhibited and shy. Instead of being aggressive to pursue external validation, vulnerable narcissists immersed themselves in grandiose fantasy as their way of dealing with self-esteem dysregulation (Ronningstam, 2005a, 2005b). At the same time, they were ashamed of their need to seek external approval (Dickinson &

Pincus, 2003; Pincus & Lukowitsky, 2010). These studies associated the traits of vulnerable narcissism with pathological narcissism. Yet the subject pools where vulnerable narcissism was studied mainly came from a non-clinical setting of students. This posed a limitation on the study, since the findings may not truly reflect the clinical population.

Employing a multiple regression model, different correlation patterns were found in grandiose (overt) and vulnerable (covert) narcissists (Zeigler-Hill et al., 2008). Vulnerable narcissism was shown to predict a global need of external validation (e.g. physical appearance, others' approval). On the other hand, grandiose narcissism had a strong association of entitlement, which emphasized competition and control. This study made a new distinction between the two subtypes of narcissism, in that grandiose narcissists enhanced their self-worth by getting others' attention rather than approval, and vulnerable narcissists struggled to protect their fragile self-worth by seeking others' approval in various aspects.

Approach-avoidance motivation. Approach-avoidance motivation was associated with both grandiose and vulnerable narcissism. Although grandiose and vulnerable narcissism seemed to be different, they shared the same root. Grandiose narcissists' self-worth was not tied to performance and external appraisal. They sought self-gratification and were motivated primarily by reward and to a lesser degree by punishment. On the contrary, vulnerable narcissists' self-esteem was tied to external validation; they were somewhat motivated by reward and highly sensitive to punishment (Foster & Trimm, 2008).

Studies that linked approach orientation and narcissism focused heavily on approach motivation. Although researchers have begun to compare avoidance motivation with narcissism, empirical studies in this area are still very limited (Elliot & Thrash, 2010; Vazire & Funder, 2006). A study on avoidance motivation is likely to help clarify the differences between grandiose narcissism and vulnerable narcissism (Foster & Trimm, 2008).

Avoidance motivation is a component of approval seeking (Zeigler-Hill et al., 2008). Findings in some studies indicated that there were acute differences between grandiose and vulnerable narcissism in terms of their approach orientation and levels of self-esteem (Foster & Trimm, 2008). For approach motivation, there were positive relationships with narcissism and functional impulsivity, whereas for avoidance motivation, negative relationships with both narcissism and functional impulsivity were found (Foster & Trimm, 2008). It is noteworthy that the first two studies in Foster and Trimm's (2008) research did not attempt to consider the covert-overt theory of

narcissism. Instead, they proposed a bi-mediational path model to explain how narcissism predicted functional impulsivity, partially mediated by approach motivation and avoidance motivation. Approach and avoidance motivations reflected individual differences in self-esteem (Heimpel et al., 2006). High approach with a low avoidance pattern was found in individuals with a high level of self-esteem, which was linked with grandiose narcissism. High avoidance motivation was associated with vulnerable narcissism, indicating low self-esteem. Theorists also suggested that there is an unidentified mechanism associated with avoidant approach (Foster & Trimm, 2008). Using the two constructs of approach and avoidant motivations as mediators, the study explained why narcissism, as an abnormal personality trait, was often found to be related to positive well-being.

Grandiose Narcissism, Vulnerable Narcissism and Self-esteem

Links between self-esteem and narcissism have been studied by numerous theorists, yet the results have not been consistent enough to allow definitive conclusions about these links to be reached. The mask model of self-esteem showed that there were contradictory results in terms of implicit and explicit self-esteem in the narcissistic personality (Bosson et al., 2008). Narcissism and the mask model originated from the classic psychodynamic works of Freud (1986), Kohut (1966, 1977) and Kernberg (1975). They described grandiosity as a façade masking the deep-seated feelings of inferiority within narcissists. Findings in one study (Bosson et al., 2008) suggested that narcissism resulted from unmet emotional needs in childhood, with such needs expressed in two polarized forms. They were manifested through implicit feelings of inadequacy

coexisting with explicit feelings of grandiosity, which caused individuals to be vulnerable to threats to self-worth. In order to maintain an inflated sense of self-esteem, narcissists deployed a highly defensive self-esteem which focused on self-enhancement (Morf & Rhodewalt, 2001). The defensive processes helped disguise the underlying feelings of inferiority which contributed to contingent self-esteem (Tracy & Robins, 2006).

Vulnerable narcissists relied upon others' validation to maintain a sense of self-worth; in order to maintain their sense of worth and self-esteem they had to live up to the standards set by others (Zeigler-Hill, Clark, & Pickard, 2008). Nonetheless, they were conscious of feeling inadequate and inferior. The attachment of their self-esteem to external approval made them more vulnerable to self-esteem instability. Contingent self-esteem was found to be fragile and volatile (Pimentel et al., 2006; Pincus et al., 2009).

Studies using several meta-analyses to test the mask model of self-esteem of narcissists drew inconclusive findings. Results suggested that narcissists possessed a high level of explicit self-esteem but a low level of implicit self-esteem (Bosson et al., 2008). The interactive effect between explicit and implicit self-esteem was not as observable as that suggested by previous studies. Narcissists could demonstrate a discrepancy between explicit and implicit self-esteem, but at the same time narcissists also showed a consistent pattern between implicit and explicit self-esteem (Kernis, 2005). The inconsistency could have been due to measurement tools that may have compromised the reliability of the meta-analysis. In addition, the two methods, the Implicit Association Test (IAT) and Name Letter Task (NLT), that measured implicit self-esteem, could not demonstrate cross-validity with each other. Finally, the

contradictory results obtained may simply be explained by the fact that there are different types of narcissism (Bosson et al., 2008). This confirmed the previous findings conducted by Rose (2002), that narcissism is more appropriately classified into two types, covert and overt narcissism.

In accord with the previous discussion of narcissism subtypes and self-esteem, a study by Zeigler-Hill, Clark, and Pickard (2008) suggested that the two types of narcissists would adopt different methods in regulating their self-esteem. The study hypothesized that vulnerable narcissists would use their success to gain external approval and validation. Grandiose narcissists would employ competition as their way of gaining a sense of self-worth. The idea that grandiose narcissists tended to gain attention through competitiveness rather than approval was supported by other literature (Morf & Rhodewalt, 2001).

Approach Motivation and Aggression

Narcissism was linked to high impulsivity (Vazire & Funder, 2006). The complex feelings of narcissists who wanted to look attractive yet did not like themselves were ingredients for aggression. Such conflicting feelings caused them to continue seeking admiration while devaluing others. As a result, they reacted with aggression when there was a perceived threat to their self-esteem (Sakellaropoulo & Baldwin, 2007). Narcissists tended to behave more aggressively in laboratory settings, and aggression has been empirically linked to high approach and low avoidance (Reidy et al., 2008). However, the latest studies indicated that narcissists can initiate aggression against others

even when unprovoked and without ego-threat (Martinez, Zeichner, Reidy, & Miller, 2008).

Personality Characteristics of Upper Echelon Businessmen

Narcissism was popularly regarded as a negative aspect of the upper echelon executive personality, characterized by an exaggerated sense of self-importance, obsession with success and power, and hypersensitivity to criticism (Judge et al., 2006; Resick et al., 2009). The actions of upper echelon executives were deliberate, and clearly motivated to fulfill their need for dominance and superiority (Rosenthal & Pittinsky, 2006). Nonetheless, narcissists' aggressive self-promoting behavior often helped them move up the corporate ladder (Hogan & Kaiser, 2005). Narcissistic behaviors were manifested in their executive roles. Their organizational strategies and decisions were often determined by their need to build their own public image rather than to further organizational or customer-based goals. Therefore, large-scale projects or initiatives were sometimes created to enhance their own grandiosity, which could have caused major fluctuations in organizational performance (Chatterjee & Hambrick, 2007). Their impulsivity and need for attention detracted from their ability to engage in performances that aligned with the best interests of the organization (Resick et al., 2009).

Studies have shown that the personality traits of chief executive officers (CEOs) and upper echelon executives were directly correlated to their organizations' development and culture (Giberson et al., 2009; Hambrick, 2007a). These individuals' behaviors, personal views and personalities had the potential to directly influence their decisions about allocating resources and funds, promotions, and hiring or firing of staff

and colleagues. All of these decisions could impact, shake up, or reshape a company, its stability and its future (Nahavandi, 2006). Although their organizational strategies and operations frequently reflected their personal values, personalities, and behaviors, often they were not aware of this (Hambrick, 2007b). Scholars and theorists have shown great interest in trying to elucidate the personalities associated with upper echelon executives and the impact of personality on organizations (Hiller & Hambrick, 2005; Hood, 2008; Simsek, 2007). The combination of the lack of a unifying construct that truly reflected the core of the personality of this small but privileged and influential population, in addition to difficulties gaining access to assess upper echelon executives, has left many questions unanswered (Hiller & Hambrick, 2005). Recent literature (Resick et al., 2009) on CEO personality that linked narcissism and leadership style brought out similar limitations and difficulties in studying this specific population. The study was based on historical biographical accounts of individuals collected from archival sources to determine various attributed characteristics of the individuals studied. There is likely a wide discrepancy between these and current CEO personality traits.

Core self evaluations and narcissism. Recent studies showed that there was a positive side to upper echelon executives' personalities: core self-evaluations (CSE), which was related to an individual's fundamental self-concept (Judge et al., 2005; Resick et al., 2009). This was composed of an individual's core concept of self and self-efficacy. Individuals who utilized CSE were emotionally grounded, enjoyed high self-esteem, and were capable of self-control and discipline (Resick et al., 2009). CSE was considered to be a well-rounded construct that had been used to study the executive

personality's effect on strategic vision (Hiller & Hambrick, 2005). Findings from one study suggested that upper echelon executives capable of CSE were not motivated by self-interest, nor were they approach-motivated (Resick et al., 2009). They were individuals with positive outlooks and were secure with themselves. They were comfortable utilizing colleagues' talents and rewarding them for their performances. Upper echelon business executives endowed with the ability to make CSE were dynamic and visionary in their methods of governing people at work and in their organizational strategies. Studies of high and low CSE were used to indicate different types of executives and their styles of management. Upper echelon executives with high CSE were emotionally stable, decisive and self-assured. They were instrumental for change and encouraged employees to face challenges. In contrast, executives with lower CSE were less dynamic individuals who had self-doubt and focused on self-interest. They were less capable of implementing positive change in their organizations (2009). Executives with high CSE were depicted as transformational leaders (Resick et al., 2009).

Research findings showed that though narcissistic executives shared some positive traits with high CSE top echelon executives, narcissists were clearly motivated by their desire for personal reward (Resick et al., 2009). Thus the key difference in these two groups was motivation. The CSE concept may be useful as a construct to understand upper echelon executives' management styles in the workplace (Johnson, Rosen, & Levy, 2008; Resick et al., 2009). However, CSE is a relatively new construct that is still being tested for its appropriateness in research applications (Resick et al., 2009). Core self-evaluations have been associated with transformational leadership behaviors. The CSE

concept has been substantiated in different studies of upper echelon executive management styles and entrepreneurial orientations (Bono & Colbert, 2005; Resick et al., 2009; Simsek et al., 2009). However, levels of CSE have been tested primarily on Master of Business Administration students and were positively related to self-ratings but not to peer ratings (Bono & Colbert, 2005). Additionally, levels of CSE were measured in Resick et al.'s (2009) study by using historiometric analyses comprised of historical accounts, biographical accounts and archival sources. Furthermore, data were analyzed by third-party assessors who were upper-level undergraduate students majoring in psychology. Because assessments of CSE were not actually done on upper echelon business executives, the ability to apply these assessments to executives remains questionable. CSE studies may not possess the analytical strength to assess upper echelon business executives' management styles as researchers had hoped (Simsek et al., 2009).

Numerous studies on upper echelon business executives' outlooks and personalities were focused on contingent self-esteem, control and narcissism or aggressive risk taking behavior (Chatterjee & Hambrick, 2007; Dess & Lumpkin, 2005). In contrast to other theorists, Simsek et al. (2009) used core self-evaluation as a trait to identify business executives' personalities through an entrepreneurial approach. They viewed the basis of higher core self-evaluations as a unifying construct which was more refined and complete than other concepts previously researched (e.g. Chatterjee & Hambrick, 2007; Dess & Lumpkin, 2005). This trait was indicative of upper echelon executives' core self-concept of being self-assured and innovative in leading their

organizations, and reflected the stability, certainty and efficacy of these individuals. Solid core self-evaluations definitely had a positive influence on organizations' forward development, open-mindedness and innovation. Their study also indicated that there is a lower core self-evaluation within upper echelon executives, which indicates a lack of certainty and a risk-averse attitude that is not conducive to progressive organizational strategies.

The unified construct of core self-evaluations provided a deeper insight into upper ranked executives' entrepreneurial approach for organizations. However, such a construct is one-dimensional and has a narrow scope because it fails to delve into both the personal and social cores of an individual's personality. Theorists suggested that incorporating the construct of narcissism and executives' motivation and circumstances provided a better understanding of executives' leadership patterns and their impact upon organizations (Rosenthal & Pittinsky, 2006).

There were parallels between higher core self-evaluations and grandiose narcissism versus lower core self-evaluations and vulnerable narcissism. People with higher core self-evaluations and grandiose narcissism both showed progressive, risk-taking and self-assured attitudes expected of individuals who were motivated by desired results and attention, which in turn could be linked to the strategic outcome of organizations (Hiller & Hambrick, 2005). The lower core self-evaluations shared similar traits with vulnerable narcissists, both of whom tended to have fragile self-esteem and self-doubt (Zeigler-Hill, Clark, & Pickard, 2008). One study indicated that higher core self-evaluations had a stronger impact on companies when an organization was in a state

of change or instability; therefore, they were associated with a positive entrepreneurial approach (Simsek et al., 2009). Yet the same core self-evaluation did not have the equivalent impact when an organization was stable. In this respect there was a similarity to grandiose narcissists, who tended to seek power and attention and created large-scale initiatives which may have placed their companies into a state of instability (Chatterjee & Hambrick, 2007).

On the surface it may appear that grandiose narcissistic executives were progressive or forward and had entrepreneurial spirit. However, there is a possibility that these upper echelon executives instead created changes to gain attention and power. Therefore, it was crucial to understand the motivations of the individuals associated with higher core self-evaluations. Learning the correlation could perhaps help determine the reasons why the higher core self-evaluations had no impact on stable company environments. This was not answered in Simsek et al.'s recent study (2010).

An assessment was conducted on core self-evaluations (CSE) in relation to their entrepreneurial orientation of business executives in a study on 129 upper echelon business executives (Simsek et al, 2009). The study was carried out on actual upper echelon business executives, which was quite a rare achievement, considering that getting access to this population is difficult, resulting in limited understanding in this area (Hiller & Hambrick, 2005). CSE was found to be a valid construct, yet there was a major limitation in the study. Because the sample of upper echelon business executives was only from the Irish Republic, generalizing the findings to other countries may be limited (Simsek et al., 2009). In contrast, narcissism as a construct shared common elements

with the construct of core self-evaluations described in Simsek et al.'s study (2009). Narcissism as a construct offered a wider spectrum of individuals' personality traits than core self-evaluation (Judge et al., 2006). Therefore, studying narcissism in upper echelon business executives could provide well-rounded understanding and insight into this population.

Upper echelon businessmen, narcissism and power. Managing a successful business operation or organization required individuals who were in control, emotionally non-reactive and inclined to take risks (Harrison & Clough, 2006). Many upper echelon business executives prided themselves on being able to maintain their composure while running an organization. Studies indicated that there were significant numbers of narcissistic individuals in top executive positions (Chatterjee & Hambrick, 2007; Rosenthal & Pittinsky, 2006).

Narcissistic executives were self-focused toward acquiring power and reputation through achievement, which provided them with a sense of security (Pearce, 2007; Rosenthal & Pittinsky, 2006). This hunger for power and superiority drove some narcissistic individuals to upper corporate positions in the first place. The striving for power and superiority was for ego enhancement, which influenced their management style (Pearce, Manz, & Sims, 2009; Spreier et al., 2006). Narcissistic executives were less concerned with investing their energy in empowering and motivating subordinates (Winter, 2005). They tended to be aggressive and egotistic and nurtured subordinates to show loyalty to them rather than to the organization (Spreier et al., 2006). Their self-interested motives of creating grand projects sometimes led to organizational strategies

which resulted in instability for their organizations and possibly impacted the global economy at large (Chatterjee & Hambrick, 2007; Resick et al., 2009).

The power motivation was utilized mainly for elevating their standing or position in their organization, as their self-worth was contingent upon their performance (Brown & Zeigler-Hill, 2004; Brown et al., 2009). However, narcissists had a conflicting view, in which they perceived themselves as more intelligent and better than average individuals, while at the same time not liking themselves very much. They tended to use status and dominant power to elevate to an elitist identity which defined them (Chen et al., 2009). The stratum of power shielded them from conflicting feelings and lack of self-esteem (Sakellaropoulo & Baldwin, 2007).

Narcissism and empathy. Empathy is a cognitive and affective response which allows individuals to take others' perspectives and to respond emotionally (Chen et al., 2009). Studies have shown that perceptions of empathy affected individuals' functioning as well as their general behavior. Individuals who experienced empathic concern from significant others displayed higher self-esteem and lower levels of depression (Trumpeter et al., 2008). Narcissists were known to have little empathy or consideration for others' welfare. Their inability to empathize with others' feelings could cause grave distress in marital and interpersonal relationships (Foster & Campbell, 2005). Additionally, most of their actions were motivated by personal gain, which in turn dictated investment of time and attention. Their lack of empathy often resulted in hurtful or deceitful actions directed at romantic partners, for example, keeping secrets or being unfaithful. This ultimately damaged trust and the relationship in general (Verhofstadt et al., 2008).

Narcissism and Romantic Relationships

Narcissistic behavior in upper echelon business executives was not confined to their professional lives. It also appeared in their calculating way of choosing relationship partners (Foster, Shrira, & Campbell, 2006). They preferred romantic partners who reflected well upon them in terms of status, achievement and physical attractiveness (Sakellaropoulo & Baldwin, 2007). Their ways of handling intimate partners were driven by self-benefit, in which they enjoyed the advantage of status and ego enhancement, yet avoided investing time and emotions to nurture relationships. They distanced themselves when partners sought support, emotional connection and intimacy (Foster, 2007).

Narcissism was found to be associated with infidelity and lower relationship commitment (Campbell, Rudich, & Sedikides, 2002).

Narcissists' distorted view of romantic relationships. Due to their positive self-schemas, narcissists tended to have a distorted view of their partners' experiences in the relationship (Le & Gaines, 2005). Because of their workplace organizational skills, they were over-confident in their abilities in interpersonal relationships, which led them to be biased or unreceptive to partners' complaints or signs of dissatisfaction in a relationship (Finkel, et al., 2009; Foster & Campbell, 2005). Subjectively they seemed to be able to enjoy a positive experience in romantic relationships and had no doubts about their partners' commitment to them. Yet the experience was different for their romantic partners (Foster, 2008). Studies have shown that romantic partners of narcissists frequently experienced difficulties and unhappiness in the relationship due to the narcissistic partners' insensitivity (Foster & Campbell, 2005) and lack of concern about their well-being (Foster, 2008).

In contrast to the general negative view of narcissists having commitment dysfunction in romantic relationships (Campbell et al., 2007; Campbell, Rudich, & Sedikides, 2002; Feeney, 2007), Foster and Campbell (2007) concluded that narcissism could be an advantageous factor in the functioning of romantic relationships. Narcissists felt more stable in their relationships, because they did not worry about their partners' commitment to them (Foster & Campbell, 2007). However, the findings were somewhat misleading, due to the narcissistic subjects' inability to complete the negative commitment task in the questionnaires, which was interpreted in the analysis as

indicating less dysfunction in the relationship. The more likely explanation was that narcissists tended to overlook their romantic partners' complaints in the relationships, which led them to believe the partners were more committed and that there was less dysfunction in the relationship. Foster and Campbell (2007) commented that there were no other published studies indicating that narcissism was beneficial to the functioning of romantic relationships (Foster & Campell, 2007). Perhaps further studies are needed to investigate the validity of this claim.

Narcissists and the investment model in romantic relationship. The investment model has been used for the past 25 years to study and predict commitment in individuals. However, there have been few studies using the investment model to link narcissism with relationship commitment and relationship satisfaction in narcissists and their partners (Foster, 2007). Foster (2007) linked these factors in his study. Based upon his findings, he concluded that narcissists were intolerant of low satisfaction in intimate relationships, and that low satisfaction consequently influenced their commitment to their partners. Foster's (2007) study was based on a sample of 144 romantically attached participants. He found that narcissism can be a negative factor influencing the survival of long-term relationships by demonstrating that periods of low satisfaction, which are experienced and overcome in most relationships, had a greater direct effect on the commitment of narcissists. Therefore, the likelihood of such a relationship surviving becomes slim (Foster, 2007; Foster et al., 2006).

Conclusions from one study indicated that the commitment of narcissists to romantic relationships correlated to the benefits of investment (Foster 2007). Where

there are actual gains which are worthy of high investment (e.g., status, attractiveness, sex), commitment was strong. Under such circumstances narcissism was a relatively unimportant factor with regard to commitment (Foster & Campbell, 2007). Narcissists' actions were often motivated by self-enhancement (Foster, et al., 2006) and such behaviors were also associated with the investment model employed (Rusbult et al., 2005; Panayiotou, 2005). Narcissistic individuals evaluated the worthiness of putting effort into an intimate relationship based on the benefits they could gain from that relationship (Campbell, Vrunell, & Finkel, 2006). Narcissists focused on what they could gain out of their romantic partners, but had few concerns about their partners' feelings (Foster 2008). They had little empathy toward their partners and could resort to lying to hide their mistakes (Buttell, Muldoon, & Carney, 2005). They were often on the lookout for better potential partners while remaining in their current relationships (Sakellaropoulo & Baldwin, 2007).

Narcissistic individuals were self-focused; their investment was based on fulfilling their needs or desires. They had no hesitation in making commitment decisions. When they felt a partner did not fulfill their expectations, they typically did not terminate the relationship (Foster, 2007). These individuals often adopted a dismissing-attachment avoidance style of handling their partners. Sometimes they avoided their partners altogether (Boldero et al., 2009; Gjerde, Onishi, & Carlson, 2004). Overall, intimate relationships with narcissists were frequently dictated by approach motivation, which could lead to poor relationship maintenance and stability (Foster, Misra, & Reidy, 2009).

Inconsistency appeared in long-term committed relationships involving narcissists if circumstances changed, such as when investment value was reduced. Romantic partners have noted abrupt changes in their narcissistic partners' behavior and commitment. It was not uncommon for romantic partners to experience periods of relative satisfaction and happiness in their relationship, followed by a sudden decline (Campbell et al., 2006; Foster, 2007).

Attachment Theory

Ainsworth and Bowlby (1991) jointly developed attachment theory, which was grounded in psychoanalysis, cognitive developmental psychology, control systems theory, and primate ethology. Bowlby (1979) primarily focused on attachment development and the attachment relationships of infants with their caregivers. He proposed that attachment characterizes people's behavior from infancy to adulthood and that the quality of caregiving from the primary caregiver can determine the attachment security of a person. This earliest bond formed between infants and their caregivers could dramatically impact children's thinking and behavior throughout their life. Bowlby (1979) was heavily criticized for his departure from psychoanalytic principle (Bartholomew & Horowitz, 1991). However, attachment theory retained the dynamic unconscious processes of the psychoanalytic principle, incorporating the idea that human motivation was based on security rather than drive (Fonagy, 2001).

Infants are born with a repertoire of behaviors that cause them to seek proximity to the caregiver for soothing and protection during infancy (Bowlby, 1979). Similarly, during adolescence and adulthood, individuals seek the proximity of friends, teachers or

romantic partners for support and comfort. This behavior pattern was called the attachment behavior system, which dictated individuals' connecting of self and others throughout their lives. This behavior system offered insight into human behaviors, especially with regard to responses within intimate and interdependent relationships. Additionally, it incorporates the concepts of ethological models of human development (Fraley, 2007). The attachment behavior system provided insights into the ways in which every individual forms self-perception and personality, by examining behaviors in emotion regulation (Shaver & Mikulincer, 2005).

Essentially, an attachment figure served four major functions: (a) safe haven, for comfort and soothing; (b) secure and dependable base, which allowed the child to explore the world; (c) proximity maintenance, which offered a constant sense of safety with which a child could keep close to the caregiver; (d) separation distress, which resulted from a child's separation from the caregiver (Shaver & Mikulincer, 2006). Attachment theorists suggested that through the attachment behavior system with their caregivers, children developed working models as guides to their future relationships (Mikulincer et al., 2010). Others indicated that the attachment system provided protection from potential threats for vulnerable individuals and helped to regulate negative effects (Bowlby, 1979). The psychological suffering of children can be a direct result of unresponsive, uninterested, un-empathetic, unavailable or frightening primary attachment figures during times of need. The lack of attachment disrupts the development in children of a sense of safety, security and protection. This leaves the child feeling vulnerable and anxious in coping with threatening experiences, as well as causing the child to feel rejected and

demeaned (Ainsworth, Blehar, Water, & Well, 1978; Mikulincer & Shaver, 2006). Such experiences inhibit the child's innate desire for proximity and support with attachment figures.

Since the 1980s the literature on attachment theory has been expanding. The research on attachment style has extended beyond childhood attachment orientations to include romantic and interpersonal relationship functioning in both children and adults (Mikulincer & Shaver, 2006; Simpson et al., 2007). Attachment theory has since become one of the primary approaches used in learning about early social development of children. It also formed a new basis of study of adult attachment and its relation to patterns of substance abuse (Schindler et al., 2005).

Later researchers (Bartholomew & Horowitz, 1991) proposed that childhood attachment helped shape one's internal working model of self and attitudes toward other people, thus guiding social behaviors in adulthood. According to this framework, secure attachment experiences would lead to a positive sense of self (e.g. I am love-worthy) and a positive sense of others (e.g. other people are trustworthy). As a result, securely attached people showed better social adaptation than people who were insecurely attached. The work and personal behaviors of upper echelon businessmen can be a result of the attachment experience and internal working model which they developed over time.

Attachment style. Historically, adult attachment measurement relied on the infant prototypes established by Mary Ainsworth and her colleagues (Ainsworth, Blehar, Waters, & Wall, 1978; Moran, 2005). Children's attachment styles and related behaviors

were categorized into three groups: (a) secure attachment, (b) anxious-ambivalent and insecure attachment, and (c) anxious-avoidant insecure attachment. In the 1980s Hazan and Shaver (1987) designed a categorical measure to assess the three different attachment styles in the context of romantic relationships. The three descriptions of type were based on the principle of infant attachment to caregiver, assuming that adult attachments to romantic partners were similarly seeking security and protection. In 1990, Bartholomew further expanded the measurement and proposed a four-type conceptual scheme that included the Hazan and Shaver styles and added a second kind of avoidance: dismissing-avoidance (Bartholomew & Horowitz, 1991). The four different attachment styles are: (a) secure; (b) fearful; (c) preoccupied; and (d) dismissing. These attachment styles reflect people's beliefs about their self-worth and their perception of how others view them.

Bartholomew's models were derived from two underlying dimensions: anxiety and avoidance (Bartholomew & Horowitz, 1991; Brenan, Clark, & Shaver, 1998). They described anxiety over abandonment, and avoidance of intimacy, as having a direct association with attachment security (Bartholomew & Shaver, 1998). This is consistent with Brennan, Clark, and Shaver's (1998) assessment of considering both anxiety and avoidance when measuring relationships. Brennan and colleagues established strong theoretical evidence measuring adult attachment without using a prototypical approach (Ross, McKim, & DiTommaso, 2006).

Theorists studying adult attachment classified attachment style into two continuous dimensions: attachment-related anxiety and attachment-related avoidance

(Brennan, Clark, & Shaver, 1998; Kane et al., 2007). The anxiety and avoidance subtest has been used as a continuum, rather than a categorical description, which enhanced statistical power in the analysis. The anxiety and avoidance dimensions are directly related to insecure attachment. Anxiety-related attachment has been found to be related to fear and worry about being abandoned or rejected. The avoidance-related attachment has been associated with a reluctance to depend on others and in turn to avoid intimacy. People who are classified with secure attachment style are low in anxiety and avoidance. They feel certain and secure in their relationships; they enjoy closeness and intimacy as well (DeOliviera, Moran, & Pederson, 2005; Kane et al., 2007).

Attachment and work. Literature on attachment theory has expanded over time from focusing on childhood attachment to social and interpersonal issues among dating couples and the elderly (Schindler et al., 2005). While there are limited studies on attachment and work, the extant studies tend to treat attachment as a measurable personality trait by using existing instruments that were developed to measure attachment associated with romantic relationships (Neustadt et al., 2006). Researchers who conducted a study on attachment at work (Neustadt et al., 2008), employing an adapted romantic attachment questionnaire, the Adult Attachment at Work (AAW) inventory, and the Revised Neuroticism-Extraversion-Openness-Personality Inventory (NEO-PI-R) (Costa & McCrae, 1992), found that secure/autonomous and insecure attachment factors were negatively correlated with neuroticism and positively correlated with openness to experience. Neustadt and her colleagues further conducted a study on 248 working adults to replicate previous research and to determine the relationship between attachment at

work and the Big Five personality traits (Costa & McCrae, 1992). The Big Five is a broad term which is used to describe human personality. According to regression analyses, between 15 and 20% of the variability in secure and insecure attachments at work may be caused by the factors inherent in personality traits and self-esteem. Furthermore, there were indications that even though there was a relationship between attachment at work and personality, it could not be explained in terms of high or low degrees of self-esteem. It appeared from the studies that there was a close association between attachment security at work and openness to experience, which allowed individuals to be more conscientious and exploratory in the work place (Chamorro-Premuzic & Furnham, 2005; Neustadt et al., 2006). Success at work offered a sense of security and self-protection, as well as a feeling of invulnerability to interpersonal rejection (Pittinsky & Rosenthal, 2006). Furthermore, both self-esteem and seeking attachment security were the factors that determined people's work behavior (Neustadt et al., 2006).

Research on attachment indicated that childhood attachment experiences had a long-term impact on individuals' adult relationships. It shaped individuals' attachment orientations and influenced their caregiving styles and relationship functioning (Simpson et al., 2007). Attachment orientation also influenced people at work and could determine their workplace behavior and styles of management (Hazan & Shaver, 1990; Neustadt, 2006). Based upon their study, Hazan and Shaver (1990) suggested that secure attached individuals were able to balance work and home life; they enjoyed work and had good interpersonal relationships in the workplace. Anxious/ambivalent attached individuals

tended to use work to seek approval and worked harder to gain respect. Avoidant individuals tended to be overly involved with work and often used work to avoid intimacy, which resulted in a poor general well-being and a disruptive home life.

Attachment and relationships. This study is based on the proposal that early experiences with significant attachment figures have an influence on some adult behaviors of upper echelon businessmen, especially in regard to managing work and family. The same behaviors can bring rewards on the business front, yet can be damaging to intimate relationships. Attachment theory has been used during the past 20 years to examine the association between romantic relationship outcomes and individual attachment styles. Most of the studies focused on individuals' perceptions of their own experiences within intimate relationships (Kane et al., 2007). Secure attached individuals experienced greater satisfaction and commitment compared to insecure attached individuals (Feeney, 2007). Limited studies were conducted on relationship experiences from the partners' points of view (Kane et al., 2007), though one study indicated that both men and women reported lower relationship satisfaction toward partners with high attachment avoidance (Collin et al., 2006).

Attachment and empathy. Empathy was defined as a personality trait composed of both cognitive and emotional aspects of an interpersonal relationship (Davis, 1983). It was later re-defined as an individual's ability to comprehend and understand how others feel. Empathy requires a person to be self-aware and in tune with others, and to act upon such perceptions accordingly (Bar-On, 2007).

Attachment theorists concluded that an individual's social behaviors and

relationships were rooted in attachment-related experiences with the significant caretaker. Secure attached individuals had their needs met and therefore learned to recognize others' needs. They tended to be more empathic than insecure attached individuals. Researchers have shown that low parental care has a direct correlation to antisocial traits in both men and women (Reti et al., 2002). They suggested that parental care was a major contributing factor to individuals' perspective-taking and the ability to have empathic concern for others. Chambers, Power, Loucks and Swanson (2001) showed that low parental care resulted in high psychological distress in men, which in turn interfered with their empathy. However, the controversy among theorists about the construct and nature of the term *empathy* has inhibited them from using this term widely in scholarly studies (Britton & Fuendeling, 2005). Empathy enhances social interactions and enables humans to share deep emotions. It was found to be a critical aspect of all long-term attachments (Watt, 2005). In order to express empathy in a romantic relationship, each partner had to consider the other partner's needs, irrespective of his own individual experiences and needs. They needed to be self-aware and conscious of how their actions could impact their partner's experience (Eslinger & Tranel, 2005). There are few studies focusing on adult attachment, romantic relationships and empathy. Britton and Fuendeling's study (2005) proposed that attachment avoidance tends to negatively influence empathy. Findings indicated that romantic attachment to a romantic partner correlated to empathy received from the loved one (2005). However, this study was drawn from 178 undergraduate students, of whom over 80% were Caucasian and over 50% were either not involved in relationships or not in committed relationships. The study thus has

limited scope in applying to a wider population, especially in relation to a married population.

Attachment and romantic relationships. Adult attachment style was often a reflection of an individual's childhood attachment relationship with a caregiver. People tended to exhibit consistent attachment styles from childhood to adulthood (Hazen & Shaver, 1990). An individual's need to seek and maintain closeness and proximity to significant figures helped to create a sense of physical and psychological security. Such desires and patterns were also manifested in romantic relationships (Buttell, Muldoon, & Carney, 2005). A secure attached child will likely become a secure adult partner in romantic relationships (Ward & Carlson, 2008).

Romantic attachment provided a mutual regulatory mechanism that offered both partners comfort and support (Potter-Efron, 2005). However, the childhood attachment experience in terms of autonomy and intimacy can play an important role in influencing individuals in romantic relationships (Hazen & Shaver, 1990). Studies showed that a secure partner dealt with autonomy and intimacy in relationships in a respectful and healthy manner. An anxious partner tended to be fearful of abandonment and committed to retaining a partner. The avoidant partner tended to maintain distance and independence to minimize intimacy (Buttell, Muldoon, & Carney, 2005; Long, 2009; Mahalik, Aldarondo, Gilbert-Gokhale, & Shore, 2005).

Attachment styles and relationship satisfaction. Mikulincer and Shaver (2005) proposed that there is a close relationship between attachment style and relationship satisfaction. Attachment security provided a certainty and foundation on which to build

interpersonal attachments. The secure attached relationship could be reassuring and also helped individuals to better deal with emotional distress, thereby leading to better relationship satisfaction. In addition, the secure base allowed individuals to fulfill other psychological needs, such as exploring strange environments and providing security to the partner, thus leading to more care-giving behaviors towards one another (Mikulincer et al., 2010). Stability and contentedness in an intimate relationship could help an individual cope better with job stress and experience increased job satisfaction (Parayitam & Kalra, 2008). An individual's personality make-up and ways of caring for their romantic partner could determine the success of the relationship (Collins, Guichard, Ford, & Feeney, 2006).

Adult attachment style was a major factor in shaping the personality of an individual, which in turn influenced the individual's care-giving in relationships. Individual differences in attachment style could predict the quality of intimate relationships (Ford et al., 2007). Attachment style did not just predict the individual's relationship experience, but it also predicted the experience of the partner (Kane et al., 2007). Kane and her colleagues studied 305 couples to explore the association between each individual partner's attachment style and their partner's relationship experiences. Findings revealed that in heterosexual relationships, the female partner's attachment anxiety predicted low relationship satisfaction by the male partner; whereas the male partner's attachment avoidance predicted a low level of relationship satisfaction by the female partner. Structural equation modeling showed that insecure attached individuals

tended to be less satisfied in relationships due to their perception of partners as less effective caregivers (Mikulincer et al., 2010).

It has been demonstrated that an individual's attachment style influenced his emotional experience, and further helped shape the future of personal romantic relationships (Simpson, Winterheld, Rholes & Orina, 2007). Research findings reported that dating adults who had been securely attached to their parents were more easily calmed by their romantic partners in stressful situations. Individuals experienced more secure attachment when partners were willing to be available and engaged in emotional support. In comparison, individuals felt insecurely attached when partners simply offered a straight concrete solution without emotional support (Simpson et al., 2007).

Attachment theorists formulated a strong prediction about the impact of attachment on relationship satisfaction. Empirical studies showed that secure attachment, with low levels of avoidance and anxiety, positively predicted relationship satisfaction in both long-distance and geographically proximal couple relationships (Pistole, 2010; Roberts & Pistole, 2009). Roberts and Pistole (2009) examined relationship satisfaction in college students who were in long-distance and geographically proximal relationships. The researchers found, through multiple regression analyses, that low attachment avoidance, low attachment anxiety and living apart contributed to higher levels of relationship satisfaction. Similar results were also found in terms of sexual satisfaction (Butzer & Campbell, 2008). Butzer and Campbell (2008) studied 116 Canadian married couples varying in age from 21 to 75 years old. Using a self-reported adult attachment measure, it was indicated that individuals with higher levels of anxiety and avoidance

reported lower levels of sexual satisfaction. Further, the relationship between sexual and marital satisfaction was stronger for more anxious attached individuals and those with more anxious attached spouses. Horne and Bliss (2009) studied 75 cohabitating U.S. and Canadian female same-sex couples. They concluded from multiple regression results that attachment anxiety and avoidance mediated the negative association between gender discrepancy and relationship satisfaction. Anxious and attachment avoidance was linked to the increased level of fear and discomfort in individuals. In turn, it reduced the level of satisfaction in couple relationships. Attachment theorists suggested that avoidant attached individuals tended not to feel gratitude when their partners behaved positively towards them while anxious attached individuals experienced mixed emotions under the same circumstances (Mikulincer, Shaver & Slav, 2006). Many of the studies have major limitations, in that sample populations were drawn from undergraduate students, some of whom did not even have committed relationships.

There are several general shortcomings in literature which associated attachment and marital satisfaction. First, there is inconsistency of measurements used to quantify adult attachment in studies, i.e. the three adult attachment style categories (Hazan & Shaver, 1987); adult attachment scale (Collins & Read, 1990); four-category model (Bartholomew & Horowitz, 1991); attachment measure (Brennan et al., 1998; Fraley, 1994). Second, the inconsistency also applies to the use of dimensional measure (i.e. secure or insecure) of attachment style versus use of categorical measure (i.e. empathy, caregiving). This makes it difficult to do comparisons between studies or come to a unified conclusion in terms of attachment style and marital satisfaction.

Attachment and narcissism. There was agreement among many researchers that the attachment bond with parents during childhood had a long-term impact on an individual's perceptions and ways of handling relationships in adulthood (Bartholomew & Horowitz, 1991; Simpson et al., 2007). The attachment styles described by Ainsworth, Blehar, Waters, and Wall (1978) were associated with narcissism (Otway & Vignoles, 2006; Pauli-Pott et al., 2009). Both the attachment style and type of narcissism could influence upper echelon businessmen's patterns of behavior at work and at home. Empirical data showed that attachment and narcissism had a strong theoretical linkage (Bennett, 2006; Pistole, 1995). Using canonical correlation, Smolewska and Dion (2005) reported that covert narcissism showed greater association with attachment anxiety and avoidance, when compared to overt narcissism. In contrast to other studies, Otway and Vignoles (2006) compared four structural equation models (SEM) by using 120 United Kingdom adults in a nonclinical sample to predict overt and covert narcissism based upon childhood recollections. They reached similar findings in their research results, showing that childhood attachment had a greater impact on covert narcissism than on overt narcissism. Besser and Priel (2009) provided further insight into understanding the relationship between attachment anxiety and covert narcissism. First, attachment anxiety positively correlated to covert narcissism. Second, both attachment anxiety and covert narcissism provided unique predictive powers with regard to emotional responses in romantic rejection. Finally, Besser et al. (2009) supported the notion that covert narcissism was determined by attachment anxiety, but not by overt narcissism. This provided evidence that covert narcissism is shaped by early social interactions. Similarly,

Dickinson and Pincus (2003) reported that vulnerable narcissists tended to exhibit insecure attachment style, with negative self-image.

Vulnerable narcissists tied their sense of self-worth to external validation and they were more focused on avoiding rejection and pain. Narcissistic individuals used achievement to compensate for their sense of inadequacy. Yet there is no specific study linking vulnerable narcissism and work behavior, especially in the upper echelon business population. The recent study conducted by Campbell (2010) indicated that studies on work-related behavior of narcissistic individuals mainly focused on overt narcissism. Vulnerable narcissism as a construct is still under-explored, especially in business settings.

Grandiose Narcissism, Vulnerable Narcissism and Attachment in Romantic Relationships

Preoccupation with their own needs and security, as well as avoidance in relationships, caused vulnerable narcissists difficulties in maintaining long-term intimate relationships (Dickinson & Pincus, 2003). Smolewska and Dion (2005) classified vulnerable narcissism in covert and overt forms. Findings in the study indicated that covert narcissists experienced high levels of anxiety in romantic relationships due to their negative self-concept and fear of rejection. In turn, that anxiety provoked actions which caused partners to reject them, resulting in self-fulfilling prophecies (Smolewska & Dion, 2005). Avoidance and anxiety served as defense mechanisms in vulnerable narcissists. Applying attachment avoidance to significant relationships was their way of protecting their fragile self-esteem (Pistole, 1995). This concept was supported by Dickinson and

Pincus (2003), who showed that anxiety and avoidance in relationships are common among vulnerable narcissistic individuals. They also show higher levels in avoidant personality and fearful attachment. These individuals are preoccupied with their sense of security and have difficulties maintaining long-term intimate relationships (2003). Smolewska and Dion (2005) also suggested in their study that covert narcissists had difficulties regulating their emotions in romantic relationships. This finding was consistent with later research conducted by Zeigler-Hill and Pickard (2008) in which they concluded that vulnerable narcissism was exemplified by contingent self-esteem where individuals sought the validation of others. These individuals were highly sensitive to criticism and tried to avoid negative feedback (Atlas & Them, 2008). Vulnerable narcissists were self-reliant individuals without a sense of security which would have allowed them to function with certainty and openness. This inhibited them from forming healthy intimate relationships (Feeney, 2007).

Dependency and relationship satisfaction

There was a general belief that dependence was a sign of personal inadequacy that should be discouraged (Feeney, 2007). However, instead of viewing dependence as a sign of weakness (Fine & Glendinning, 2005), attachment theory postulated that close emotional bonds with relationship partners helped in the development of true independence and self-sufficiency in individuals (Feeney, 2007; Fine, 2005). Building a secure foundation and reliance on significant others was described as an intrinsic part of human nature that promoted healthy functioning in couple relationships (Feeney, 2007). When individuals made themselves responsive and available to close relationship

partners in times of need or crisis, it did not result in dependence and helped promote independence and self-reliance. The acceptance, support and security provided in return had long-term effects on building independent functioning in partners. The acceptance of the dependency of partners had the same impact on independent functioning in couples with long-term stable relationships (Feeney, 2007). The same type of emotional responsiveness to partners also associated with the same type of positive and healthy dependency indicated by Bornstein (2005). Positive and secure bonds equally encouraged both partners' independence (Bornstein, 2005; Faith, 2009).

Narcissists did not like partners who sought emotional connection with them; they viewed this as a sign of dependence (Foster, 2007). They considered the desire for intimacy from their partners a demand which required their emotional investment. Narcissistic individuals based their investment upon return or benefit. Because they generally preferred partners who made them look good rather than needing them emotionally (Campbell, Brunell, & Finkel, 2006; Campbell & Foster, 2007), it was reasonably concluded that narcissistic individuals preferred to have partners who did not depend upon them emotionally.

Summary

Upper echelon businessmen represent a small but elite population which has the power to influence the global economy (Hambrick, 2007b). Incisive decision making, devotion to the job, and a willingness to put career above other obligations and responsibilities may have contributed to career success (Pittinsky & Rosenthal, 2006). There has been interest in learning about the personalities and characteristics of these

powerful individuals, particularly with regard to the social and psychological factors that drove them to achieve success. Organizational studies and other research associated upper echelon businessmen's behavior with narcissistic personality. Social psychologists determined that attachment style was a factor that drove these people to achieve as a way to compensate for their feelings of insecurity. Recent studies have begun to focus on vulnerable narcissism to explain the character of this type of narcissistic individual. However, study on the construct of vulnerable narcissism is still very limited. This study is focused on elucidating the mediating role of vulnerable narcissism and to determine whether there is a relationship between the level of marital satisfaction and attachment avoidance in upper echelon businessmen.

Chapter 3: Research Method

As the global economic crisis unfolded in 2008, the world learned the extent to which upper echelon businessmen could dominate financial markets and impact the global economy (Kaiser, Hogan, & Craig, 2008). This group of businessmen was purposeful and driven to reach the pinnacle of success in their industries (Wanasika, 2009). The psychological characteristics linked to the behaviors of upper echelon businessmen remain underexplored (Boal & Hooijberg, 2001; Resick et al., 2009). Studies indicated that the characteristics of this group of businessmen could be detrimental to their personal relationships (Hazan and Shaver, 1990). This study's core proposal is that there is a relationship among individual attachment style, narcissistic traits and marital satisfaction in upper echelon businessmen. The research goals are two-fold: first, to explore whether vulnerable narcissism is a psychological factor that drives upper echelon businessmen to use career achievement to compensate for their perceived lack of self-worth. Second, whether attachment avoidance is positively correlated to low levels of marital satisfaction, which are linked with the narcissistic trait. Considering that the main constructs in this study—vulnerable narcissism and attachment avoidance—are well established in terms of theory and measurement methods, a quantitative research method was used.

Most people seek a balance of career success and family harmony. For some high-ranking business executives, career success can come at the high price of marital dissatisfaction. Upper echelon businessmen can be driven by their vulnerable narcissism. Vulnerable narcissism is associated with the attachment style of these executives.

Anxious and attachment avoidance style leaves upper echelon businessmen feeling vulnerable and having low self-worth, while tending to seek ways to compensate for these feelings. The combination of insecure attachment style and vulnerable narcissism that causes upper echelon businessmen to search for power and leadership also isolates them from their feelings of vulnerability, as well as other types of interpersonal feelings such as empathy and understanding (Winter, 2005). Upper echelon businessmen may have personality traits such as vulnerable narcissism and anxious or attachment avoidance style which leads to success in business, but failure in establishing successful and satisfying marital or intimate relationships.

Q1. What is the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen?

Q2. What is the relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

Q3. What is the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

Q4. To what extent does vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), mediate the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

Hypotheses

The current study was designed to explore the relationships among attachment avoidance, vulnerable narcissism and marital satisfaction of upper echelon businessmen. Given that the main constructs concerned in this study are well-established in terms of theory and measurement methods, a quantitative research method were used for its strength in studying specific relationships and exerting control over confounding variables in testing the following hypotheses:

$H1_0$: There is not a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen.

$H1_a$: There is a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen.

$H2_0$: There is not a significant relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H2_a$: There is a significant relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H3_0$: There is not a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H3_a$: There is a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H4_0$: Vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), does not significantly mediate the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction,

as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H4_a$: Vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), significantly mediates the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

As reviewed in previous chapters, it has been suggested that upper echelon businessmen exhibit lower levels of marital satisfaction and higher levels of narcissistic vulnerability (Finkel, et al., 2009). $H1_0$ to $H3_0$ tested the zero order correlation between the three variables concerned. Based upon previous studies, it has been suggested that attachment avoidance positively correlates to vulnerable narcissism, marital satisfaction negatively correlates to vulnerable narcissism, and attachment avoidance negatively correlates to marital satisfaction. Finally, the predictive power of vulnerable narcissism and attachment avoidance were tested using a multiple regression model ($H4_0$).

Research Methods and Designs

The first, second and third hypotheses utilized a correlational design to test the correlation among three variables: attachment style, vulnerable narcissism and marital satisfaction. Correlational research allows researchers to quantify and detect the relationship between two or more variables. Through the correlation coefficient, the study can establish the directions and strength of the observed relationships.

For the fourth hypothesis, the Sobel test (Preacher & Hayes, 2004) was conducted to evaluate whether a possible mediating relationship exists between attachment avoidance and marital relationship through the pathway of vulnerable narcissism in upper echelon businessmen. SPSS macro was used in this analysis (Preacher & Hayes, 2004).

The multiple regression method is a versatile means of data analysis. It is an appropriate method in examining an independent quantitative variable in relationship to any other factors such as predictor variables. It allows the researcher to examine the effects of a single variable or multiple variables with or without the effects of other variables taken into account (Cohen, Cohen, West, & Aiken, 2003). This method was therefore used in the present study in attempting to establish whether the predictor variables of vulnerable narcissism and attachment avoidance could predict the level of marital satisfaction of upper echelon businessmen.

Participants

Participants were upper echelon businessmen ranging in age from 29 to 69, from a total population of approximately 3,000. The age range contained a spectrum from younger businessmen with some accomplishments to seasoned and successful businessmen. Qualified participants were required to fit specific criteria regarding company size and job title. These individuals were fluent English-speaking business executives who currently live in Hong Kong and conduct business locally and internationally. They came from diverse cultural and national identities but share the values and identities of Global Work Culture.

Acceptable participants had to work for organizations which are either publicly listed or have a minimum of 100 employees either locally or worldwide. Their job titles reflected responsibilities at an upper management level, which included: CEO, CFO, partner of the organization, corporate lawyer, senior lawyer, senior banker, senior level investment banker, senior manager, human resource director, senior sales director or regional manager. Using salary scale as a basis to define whether individuals can be classified as senior level or upper echelon businessmen may not be accurate, because many senior level managers' income is not based purely on their annual salary. Their benefits may include stock options and bonuses, which are not necessarily included in annual salary figures and therefore may be hard to quantify. Individuals may be reluctant to disclose these figures. For these reasons, only job title and company size were used to define participants as upper echelon business individuals (*Wall Street Journal,* October 2009; Nishii, 2007).

Only men were included in the study. While many women occupy positions as upper echelon business executives, they are still vastly outnumbered by men. A recent study conducted by the *Harvard Business Review* (Jan. 2010) of 2000 top performing companies in the world indicated that only 1.5% of CEOs were women. This number was even smaller than the Fortune 500 Global list, which showed 2.6% were women (*Harvard Business Review*, Jan. 2010; Nishii et al., 2007). In theory, narcissism is often described as a predominantly male characteristic, as well as a more acceptable personality trait in men. At times, the trait may carry a connotation of being manly

(Maccoby, 2000). It was estimated that Narcissistic Personality Disorder is 50 to 75% more prevalent in men than in women (DSM-IV, APA, 2000).

Another criterion for selecting participants was their romantic relationship status. As this study was about marital and relationship satisfaction, participants needed to be currently or previously married or in a committed relationship.

Power analysis and sample size. Many studies have shown a moderate to strong effect of narcissistic personality on interpersonal interaction (Miller, Campbell, & Pilkonis, 2007; Vazire & Funder, 2006). In this study, the target sample size was 73, based on a calculation using G*Power and assuming a weak effect size ($R^2 = 0.10$; $\alpha = .05$; power = .80). G* Power 3.1.3 software (Buchner, Erdfelder, Faul, & Lang, 2007) was used to perform a priori power analysis calculations. This meant that 73 was the minimum sample size to perform a statistical test with power = .80. This figure was consistent with the sufficient statistical power needed to carry out multiple regression analysis. The number of participants had been factored in an alpha level of .05 and two predictor variables.

Sampling method. A nonprobability sampling method was utilized in this study to collect a purposive sample. A nonprobability sampling method focuses on selecting subjects who fit a specific set of criteria (Trochim & Donnelly, 2007). Individuals recruited through publications of professional organizations of the international business community in Hong Kong were considered as a purposive sample.

Notices were posted in newsletters and electronic bulletins of six professional organizations to invite people to participate in the study. The combined population of

these organizations is approximately 3,000 business executives. Men who fit the criteria of upper echelon male business executives were invited to answer an online questionnaire. A secure website was set up through which participants answered the questionnaire. Participants had to sign a consent form on the home page of this website. A password-protected, coded identity was assigned to each participant prior to partaking in the study.

Materials/Instruments

An online self-report questionnaire was used in this study. The first part of the questionnaire required participants to provide demographic data, including gender, age, job title, current or previous marital status, career ranking and a few details about the company for which they worked. These variables were used as an indicator of the participants' suitability in this research and statistical control for later analyses. The remainder of the questionnaire measured the two major variables of this study. A minimum of 90% (102) of the 113 questions in the questionnaire were required to be answered to be counted as complete. Ten percent, or 11 questions, was used as an allowance for participants who chose not to answer certain questions which may have made them uneasy or for other personal reasons.

Experience of Close Relationship-Revised Scale (ECR-R). Attachment avoidance was measured by the Avoidance and Anxiety subtest of the Experience of Close Relationship-Revised scale (ECR-R; Appendix A) (Fraley, Waller, & Brennan, 2000). The ECR-R is an instrument listed as a public domain inventory which assesses an individual's attachment style with respect to attachment-related anxiety and

attachment-related avoidance in romantic relationships. Attachment-related anxiety refers to the extent that a person feels secure vs. insecure in response to a partner's availability and responsiveness. Attachment-related avoidance refers to the extent that a person feels uncomfortable being close to others versus feeling secure depending on others. This is a 36-item measure assessing how a partner experiences current and past romantic relationships.

Participants rated their experience on each item by using a 7-point Likert-type scale from "strongly disagree" to "strongly agree". ECR-R was developed by Fraley and his colleagues (2000) and inventory items were based on an item-response theory analysis using four other self-report adult-attachment questionnaires. Internal consistency reliability was reported to be 0.91 and 0.94 for the Anxiety and Avoidance factors respectively (Fraley et al., 2000). Using a short form of the ECR, Wei et al. (2007) reported a replicable factor structure of the original scale, as well as evidence of construct and discriminant validity. The Avoidance and Anxiety subtest is used as a two-by-two model in which participants are categorized in one of two categories. Low anxiety and low avoidance indicate secure attachment. High anxiety and low avoidance is classified as enmeshed preoccupied attachment. Low anxiety and high avoidance is defined as avoidant-dismissing attachment style, whereas high anxiety and high avoidance indicates fearful-attachment avoidance style. The anxiety and avoidance subtest is used as a continuum rather than a categorical description, thereby enhancing statistical power in the analysis.

Pathological Narcissism Inventory (PNI). The Pathological Narcissism Inventory (PNI; Appendix B) (Pincus et al., 2009) is a 52-item 6-point scale ranging from 0 (*not at all like me*) to 5 (*very much like me*), assessing seven dimensions of narcissistic grandiosity and narcissistic vulnerability. The authors granted written permission to use the PNI in this study. The PNI has a higher order factor structure consistent with the theoretical structure of pathological narcissism and was validated via confirmatory factor analysis (Wright, Lukowitsky, Pincus & Conroy, 2010). The PNI was developed to fill the void of other instruments or unidimensional scales to measure pathological personality traits or aspects of narcissistic grandiosity and vulnerability (Pincus et al., 2009); for example, the Psychological Entitlement Scale (Campbell, Bonacci, Shelton, Exline, & Bushman, 2004) and the Hypersensitive Narcissism Scale (Hendin & Cheek, 1997).

The PNI is applicable to both clinical and nonclinical populations and is the only measure which widely assesses both narcissistic grandiosity and narcissistic vulnerability (Cain et al., 2008; Pincus & Lukowitsky, 2010; Pincus et al., 2009; Wright et al., 2010). Nonclinical samples of 2,801 subjects indicated that the PNI is positively correlated with depressive temperament, shame, aggression and interpersonal problems, and negatively correlated with self-esteem and empathy (Marino, Pincus, & Menard, 2009: Pincus et al., 2009; Tritt, Ryder, Ring, & Pincus, 2010). Two recent studies conducted by Wright and colleagues (2009) indicated that the PNI consists of a two-dimensional high order factor structure which assesses aspects of narcissistic grandiosity and vulnerability. It also covers seven lower order factors on overt and covert aspects in pathological narcissism.

In addition, the PNI has strong measurement invariance at all levels and across genders and alpha range from .80 to 0.93. Studies demonstrated the construct validity of PNI scores (Cain et al., 2008; Pincus et al., 2009; Pincus & Lukowitsky, 2010). Recent research conducted by Marino and colleagues (2009) offers more evidence of meaningful differential associations with external constructs.

Quality of Relationships Inventory (QRI). The Quality of Relationships Inventory (QRI; Appendix C) (Pierce, Sarason, & Sarason, 1991) was developed to assess the supportive and conflictual aspects of close relationships (Pierce, 1991). The authors granted researchers use of the inventory for research purposes. The 25-item 4-point Likert scale index QRI has been widely used in both clinical and nonclinical populations measuring support, conflict and depth in intimate relationships, such as spousal or romantic partnerships (Verhofstadt, Buysse, & De Corte, 2007). Response options range from *1 = not at all* to *4 = very much*. Cronbach's reported alphas of each dimension were 0.86, .60 and 0.78, respectively. The higher scores indicate higher levels of relationship conflict, greater depth of feelings toward the partner and higher levels of perceived support, respectively. They have been proven useful tools to predict individuals' adjustments in terms of loneliness and general mental well-being. The QRI is also considered a useful and easily administered marital and family assessment instrument (Verhofstadt, Buysse, Rosseel, & Peene, 2006). In this study, the social support subtest was used. The psychometric properties of the QRI scales have been studied in a broad range of methodologies including cross-sectional, longitudinal and experimental. Results from the psychometric study indicated that the QRI has good

reliability, validity and test-retest stability (e.g., Verhofstadt, Buysse, Rosseel, & Peene, 2006).

Validity and Reliability of Tools. For validity, exploratory factor analysis (EFA) was conducted for the PNI, the social support subtest of QRI and the ECR-R. Given that the construct of vulnerable narcissism is two-dimensional in nature, EFA was expected to reproduce the factor structure reported in previous literature (Pimentel et al., 2004; Pincus et al., 2009). Additionally, the social support subtest of QRI might show a one-factor model in EFA. Lastly, EFA might also reproduce the 2-factor model of the avoidance and anxiety factors of the ECR-R, as suggested in previous literature (Brennan et al., 1998; Fraley et al., 2000). The estimate of internal consistency reliability tends to be .90 or higher for the two ECR-R scales (Wei et al., 2007). Reliability of the scales was tested by calculating the internal reliability using Cronbach's alpha, where 0.7 was set as the minimum requirement of reliability.

Operational Definition of Variables

Independent variable. *Attachment avoidance* is used to define how an individual feels uncomfortable being close to others versus secure depending on others. Avoidance and anxiety are the two underlying dimensions of Attachment Theory that are further defined into four prototypic attachment styles by attachment researchers (Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998). This study's hypothesis was that attachment avoidance and anxiety were associated with low marital satisfaction in top tier businessmen. Attachment avoidance was measured in this study by the avoidance and anxiety subtest of the Experience of Close Relationship-Revised

scale (ECR-R) (Fraley, Waller, & Brennan, 2000).

Dependent variable. *Marital satisfaction* is defined as an individual's perceptions of support and depth of feelings from partners. This indicates the levels of relationship conflict and depth of feelings individuals have towards their partners as well as their perception of the support given by their partners. Marital satisfaction was measured by the social support subtest of Quality of Relationships Inventory (QRI). QRI (Pierce, Sarason, & Sarason, 1991) is a 25-item 4-point Likert scale index measuring the relational dimensions of conflict, depth and support a person experiences when under stress.

Covariate. *Vulnerable narcissism* is a personality trait. People with this type of personality construct are shy, hypersensitive and inhibited individuals. They tend to use external achievement to gain validation. Vulnerable narcissists attach their self-esteem to their accomplishments (Dickinson & Pincus, 2003; Pincus et al., 2009). Vulnerable narcissism is measured by the Pathological Narcissism Inventory (PNI). The PNI (Pincus et al., 2009) is a 52-item 6-point scale which measures seven aspects of vulnerable and grandiose narcissism: contingent self-esteem, exploitativeness, self-sacrificing self-enhancement, hiding the self, grandiose fantasy, devaluing others and need for others, and entitlement rage. In this study, both the contingent self-esteem subtest and the devaluing others and need for others subtest were used to measure this mediating variable.

Data Collection and Processing. Data were collected from individual members of different business groups, such as local chapters of the Young Presidents Organization

(YPO), American Chamber of Commerce in Hong Kong, Canadian Chamber of Commerce in Hong Kong, the Hong Kong Family Law Association, and local chapters of the Rotary Club. The total combined population of these business organizations is approximately 3,000. Notices were posted in the newsletters and electronic bulletins of these professional organizations to invite people to participate in the study. Men who fit the criteria of upper echelon male business executives were invited to answer an online questionnaire. A secure website page with sufficient information about the study was posted. The information was limited to an extent that did not prejudice participants' views when answering the questionnaire. At the end of the home page there was a consent statement for potential subjects to read. Once they indicated their consent, a password and a coded identity were assigned to them automatically by the system and they were then able to proceed to and complete the questionnaire. Every technical effort was made to maintain the confidentiality of participants and their information. The online questionnaire anonymously collected responses and sent aggregate information into a remote database. Every effort was made to insulate this confidential data from external access.

There were limitations inherent in collecting questionnaire data online. The response rate could not be controlled. It was anticipated that the response rate might be lower compared to face-to-face interviews. The number of potential subjects was difficult to anticipate and estimate. While participants were answering the online questionnaires, the setting could not be observed or controlled, nor could any external

circumstances which might influence their mood or their ways of responding to the questions be observed.

Data Analysis. The four hypotheses were tested with the statistical package provided by SPSS 17.0.

$H1_0$: There is not a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen.

$H2_0$: There is not a significant relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H3_0$: There is not a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H4_0$: Vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), does not significantly mediate the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction,

as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

For $H1_0$ through $H3_0$, correlation analysis was used to test the relationship between vulnerable narcissism, attachment avoidance and marital satisfaction. Higher-order correlation was calculated, with the effect of demographic data (e.g. age, income) controlled, so as to obtain a more accurate understanding of the relationships between the variables.

For $H4_0$ a multiple regression model was adopted. The Sobel test (Preacher & Hayes, 2004) was conducted to evaluate whether a possible mediating relationship exists between attachment avoidance and marital relationship through the pathway of vulnerable narcissism in upper echelon businessmen. SPSS macro was used in this analysis (Preacher & Hayes, 2004).

Methodological Assumptions, Limitations, and Delimitations

This study was operated on several assumptions. First, that participants would have a sufficient level of education to read and understand the instruments and questionnaire. Second was the assumption of honesty on the part of participants. It was further assumed that individuals would be forthright in identifying their work status and responding to the questionnaires and instruments. As the data were collected through the Internet, the possibility existed that individuals would not appropriately self-identify. Results were confidential, so no attempts were made to solicit identities or business affiliations. It was assumed that the protection of personal identity and confidentiality built into the data collection methodology would ensure sufficient confidence to

participants and provide no motivation for dishonesty. The participants in the study were solicited from a broad range of organizations and were therefore assumed to be representative of upper echelon businessmen. According to the theoretical framework of the study, applying theories of narcissism to this particular group of participants was appropriate.

The main limitation of this study was that the design was correlational in nature, which makes it hard to conclude a causal relationship between variables. The main reason is that variables like vulnerable narcissism, attachment avoidance, career status and marital status cannot be manipulated in experiments, and thus multiple regression was used. This method was selected as the most appropriate to investigate such research questions because attachment avoidance and vulnerable narcissism are developed from multiple experiences since birth, which makes them nearly impossible to manipulate experimentally. It would be ethically inappropriate to induce such negative personality traits as attachment avoidance and vulnerable narcissism in the participants. Further, the study focused on upper echelon executives from the Global Work Culture, and findings might not apply to other populations.

Since vulnerable narcissism is a personality trait that is relatively stable across time, it is very unlikely that it is under the influence of marital status, if $H3_0$ is rejected. The conclusion that vulnerable narcissism can be linked to marital dissatisfaction is theoretically sound. The measurement tools used in this study came from American studies, which led to the question of whether the constructs could be fully replicated in the multicultural international population. Previous studies have suggested ways of

ensuring the validity of measurement tools, such as doing preliminary analysis of the factor structure of the scales. Multiple regressions were used to control possible confounding variables, thereby ensuring the internal validity of this study. Lastly, the current study clearly defined the target population and it did not attempt to extend or generalize the results to other populations or situations.

Ethical Assurances

The current study was a quantitative study which involved human subjects. Subjects answered questionnaires regarding their personal and work behaviors. The study was conducted in Hong Kong. Ethical assurances were a prime consideration during and after this research, beginning with the protection of confidentiality and privacy of the participants. Confidentiality and privacy protections were incorporated into the design of the study to minimize the potential risk of breaching confidentiality. Participants in this research were businessmen and many were likely to have highly visible positions in their companies or could be well known in the Hong Kong business community. Protection of their identity and collected data were absolutely vital during and after the research. Every effort was made to insulate the confidential questionnaire data from encroachment. Collecting data through the internet helped ensure anonymity.

Informed consent was a crucial step prior to the research. Because questionnaire data were collected online, a home page was set up to post relevant information about the study. Interested participants were asked to review the home page. At the end of the home page there was a consent statement for potential subjects to read. Once they indicated their consent, a password and a coded identity were assigned to them in order to

proceed to complete the questionnaire. Every step was taken to protect the confidentiality and identity of participants and their information, to ensure no harm would be inflicted upon participants during or after the study. The online questionnaire anonymously collected responses and aggregated information into a remote database. Detailed design of the online questionnaire with maximum protection of the confidential data were done in Hong Kong. No data were collected until an assurance for formal approval of the study was obtained from the Institutional Review Board. On the home page of the website designed for this study the intentions of the research were introduced, and the benefits and risks for potential subjects who participated in the study by completing the questionnaire was clearly stated. Information on confidentiality, consent and how the confidential information would be handled was presented. If at any point a subject wished to discontinue with the study he was free to do so.

Protecting participants from harm was an important ethical assurance. Answering questionnaires regarding marital satisfaction might potentially stir up some existing issues or stress in participants. While it was assumed that participants would suffer no harm or distress by responding to questionnaires online, participants were instructed on the home page to stop responding to the questionnaire if they experienced stress. In the event that individuals felt distressed after responding to the questions they were prompted to avail themselves of the contact number, included in the questionnaire material, of a local mental health provider.

The research process had to demonstrate the researcher's professional and scientific responsibilities to the subjects and to the business community. Every measure

was undertaken to meet the highest professional standards and to ensure subjects and data would not be exploited or harmed as a result of the research. Participants were identified by a code number only. No individual particulars or identities would be revealed or discussed in research findings, publications or conferences. In addition, it was the researcher's duty and commitment to ensure every detail of the research was accurate and honest as a way of honoring participants who volunteered their time and put their trust in the researcher by participating in the research exercise.

Summary

This was a quantitative and correlational study focused on determining whether there is a relationship between attachment avoidance, vulnerable narcissism, and level of marital satisfaction in upper echelon businessmen. Attachment avoidance and vulnerable narcissism were used as a predictor of the level of marital satisfaction.

Given that both attachment avoidance and vulnerable narcissism were hypothesized to correlate negatively with marital satisfaction, it was theoretically interesting to see which of them would make more accurate predictions regarding marital satisfaction when put into the same multiple regression model. The study hypothesized that vulnerable narcissism is stronger and more sufficient in explaining levels of marital satisfaction than attachment avoidance.

Chapter 4: Findings

Because attachment style and narcissism both have the potential to influence interpersonal behavior and relationships, these two constructs can impact the marital satisfaction of individuals. The purpose of this dissertation study was to investigate whether relationships exist among attachment avoidance, vulnerable narcissism, and marital satisfaction in upper echelon male executives, and to what extent, if any, vulnerable narcissism mediates the relationship between attachment avoidance and marital satisfaction. A limited number of studies have examined factors that influence the relation between adult attachment style and marital satisfaction. No studies found to date have examined vulnerable narcissism as one possible factor. In order to determine whether vulnerable narcissism mediates the relationship between attachment and marital satisfaction, a survey study was carried out, in which upper echelon male executives were asked to complete an online questionnaire. This chapter presents descriptive statistics about the participants. First, the demographics of the study sample are identified. Statistical analysis of the results and an evaluation of the four hypotheses in this study are then followed by a summary and interpretation of the study's findings.

Notices were posted on the websites of various business organizations, chambers of commerce, and financial and professional institutions, to recruit participants to complete a secure, anonymous online survey questionnaire. The initial response was 35 completed surveys. A second notice was posted after three weeks to appeal for more participants.

A total of 67 surveys were submitted; however, five had completed fewer than 90% of the questions. After those surveys which were less than 90% complete were removed from the data set, 62 were retained for analysis. The demographic information of age, job title, company size and current relationship status are presented in Table 1. Of the 62 completed survey responses, participants ranged in age 29 years to 69 years. All participants were male. Reporting levels showed 8 chief executive officers (CEO), 2 chief financial officers (CFO), 9 managing directors, 4 presidents, 11 business owners/partners, 1 human resources director, 8 regional directors/managers, 4 senior sales directors, 3 senior lawyers, and 12 other senior executives. Reporting company sizes showed 14 publicly listed, 23 from companies with between 100 to 250 employees, 9 from companies with 251 to 500 employees, and 16 from companies with 500 or more employees. Reporting current relationship status showed 32 in their first marriage, 12 in a second or later marriage, 6 currently in a committed relationship, 4 separated, not currently in a committed relationship, 8 divorced, and not currently in a committed relationship. Sample means, standard deviations and reliabilities of the scales used are presented in Table 2.

Table 1
Demographic Information

	Frequency	Percentage
Age		
29-39	13	21.0
40-49	24	38.7
50-69	25	40.3
Job Title		
CEO	8	12.9
CFO	2	3.2
Managing Director	9	14.5
President	4	6.5
Business owners/ partners	11	17.7
HR Director	1	1.6
Regional Director / Manager	8	12.9
Senior Sales Director	4	6.5
Senior Lawyer	3	4.8
Other senior executives	12	19.4
Company information		
publicly listed	14	22.6
100-250 employees	23	37.1
251-500 employees	9	14.5
more than 500 employees	16	25.8
Current status		
first marriage	32	51.5
second or later marriage	12	19.4
currently in a committed relationship	6	9.7
separated, not currently in a committed relationship	4	6.5
divorced, not currently in a committed relationship	8	12.9

Table 2
Means and Standard Deviations for Scores and Reliability of the Subscales of Attachment Style, Narcissism and Marital Satisfaction in the Sample (N = 62)

	Mean	Standard deviation	Reliability
Attachment			
Avoidance	3.415	1.107	.900
Anxiety	3.129	1.183	.916
Narcissism			
Grandiosity	2.726	.814	.886
Vulnerability	1.978	.892	.949
Marital satisfaction			
Social Support	3.164	.659	.850
Perceived Conflict	2.563	.670	.907
Depth	3.161	.682	.847

Since the Sobel test is regression based, the assumptions for multiple regression analysis were checked to see whether the mediation model was reliable or not. First, the regression equation did not encounter the problem of multicolinearity, as tolerance equals .857 in the model which is much larger than the value of .10 that shows a substantial level of colinearity among the variables. Second, from the scatterplot of the residuals for regressing perceived conflict with avoidance and vulnerable narcissism, it can be seen that the residuals are distributed evenly around the mean 0. That implies the uncorrelated errors assumption in regression analysis. Therefore, the mediation analysis is reliable. See Figure 2.

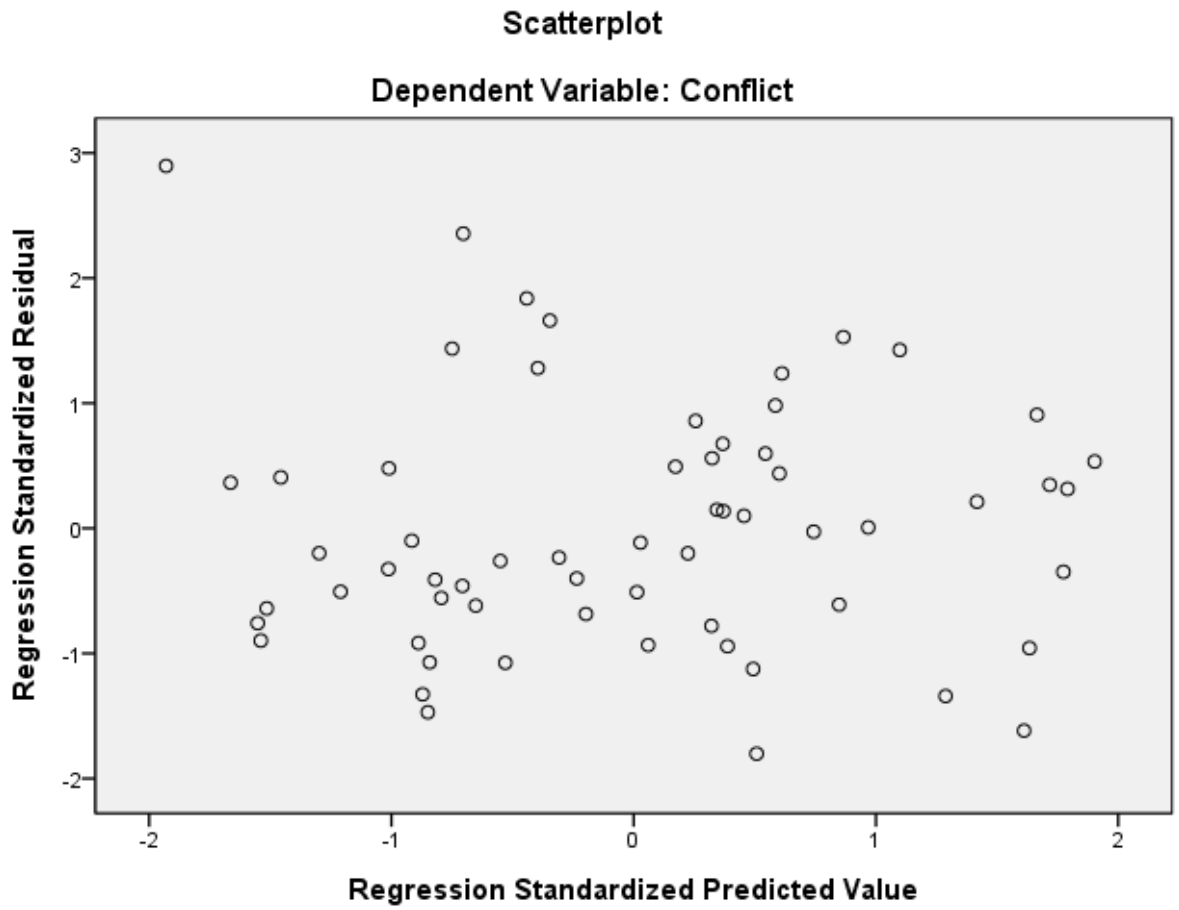


Figure 2. Scatterplot depicting the relationship between standardized predicted and residual extraversion/surgency scores

The actual number of participants in the survey was 67, which was smaller than the target response rate of 73. This may be due to unique factors of the target population, a privileged, elite socioeconomic class of upper echelon businessmen, who are not easily accessible. Previous studies on this population focused on business-related behaviors and seldom on their personal and intimate relationship behaviors. During the stage of data collection, resistance was encountered when approaching some chambers of commerce to advertise or to invite their business members to participate in the study. The officers of some of these chambers responded with a combination of caution and skepticism that

members of their privileged group could be offended if the study involved revelations of their personal relationships or other non-business-related matters. Cooperation from some other business organizations was limited. The extreme difficulty of access to the target population was the major reason causing the lower number of survey responses. Nevertheless, a sufficient number of organizations cooperated, and 62 completed responses, representing 85% of the target sample size, should be considered a significant number for the novel research conducted for the study.

A priori power analyses are based on hypothesized effect sizes, while post hoc power analyses rely on actual collected data, enabling researchers to determine whether low power threatens the internal validity of their findings. (Onwuegbuzie & Leech, 2004). Post hoc testing of the data collected for this study, using G*Power 3.1.3, showed a power of 0.879, which is high, confirming the high reliability of the survey findings.

Results

To examine the study's research questions and hypotheses, Pearson's correlation analyses were conducted to test for the first, second, and third hypotheses about the linear relationship between attachment style, vulnerable narcissism, and marital satisfaction. The correlations of the subscales used in this study are presented in Table 2. For the fourth hypothesis, the Sobel test (Preacher & Hayes, 2004) was conducted to evaluate whether a possible mediating relationship exists between attachment avoidance and marital relationship through the pathway of vulnerable narcissism in upper echelon businessmen.

Q1. What is the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen?

$H1_0$: There is no significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen.

$H1_a$: There is a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen.

Results of the correlation analysis between the three variables: attachment avoidance, vulnerable narcissism and marital satisfaction are presented in Table 2. Attachment avoidance was found to be statistically significant and positively correlated with vulnerable narcissism, $r = .378$, $p < .05$ and the null hypothesis was rejected.

Q2. What is the relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

$H2_0$: There is no significant relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H2_a$: There is a significant relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

Results from the correlation analysis indicated that vulnerable narcissism was not statistically significant and was negatively correlated with marital satisfaction, $r = -.241$, $p > .05$ and the null hypothesis was not rejected. See Table 3.

Q3. What is the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

$H3_0$: There is no significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H3_a$: There is a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see

Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

According to the results, attachment avoidance was statistically significant and negatively correlated with marital satisfaction, $r = -.465$, $p < .05$ and the null hypothesis was rejected. The higher degree of attachment avoidance the more negative influence on the martial satisfaction of upper echelon businessmen. See Table 3.

Q4. To what extent does vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), mediate the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen?

$H4_0$: Vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), does not significantly mediate the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

$H4_a$: Vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), significantly mediates the relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al.,

2000; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

Vulnerable narcissism is not significantly correlated with marital satisfaction and such relationship does not constitute a mediating relationship between attachment avoidance and marital relationship, therefore the proposed mediating relationship was not analyzed. The null hypothesis was accepted. See Table 3.

Table 3
Correlations among Attachment Avoidance, Vulnerable Narcissism and Marital Satisfaction

	Avoidance	Anxiety	Grandiosity	Vulnerability	Social Support	Conflict	Depth
Avoidance	1						
Anxiety	.511**	1					
Grandiosity	.132	.212	1				
Vulnerability	.378**	.610**	.566**	1			
Social Support	-.465**	-.509**	-.063	-.241	1		
Perceived Conflict	.282*	.534**	.248	.381**	-.437**	1	
Depth	-.418**	-.166	.162	.073	.674**	-.162	1

* Corrections which are significant at .05 level.
** Correlation is significant at the 0.01 level (2-tailed).
a. Listwise $N = 62$

Since the targeted sample of 73 has not been achieved after exhausting all possible avenues, a post hoc analysis of the final model was conducted. The post hoc analysis of the final model (IV: avoidance; Mediator: narcissism; DV: conflict; F (2,59) = 5.944; R-squared = .1677) indicated the achieved power .879, which is large. That

means given the alternative hypothesis is true, the probability of finding a significant result is 87.9%.

Evaluation of Findings

The study was an investigation of the correlational relationship among attachment avoidance, vulnerable narcissism and marital satisfaction, and to what extent, if any, vulnerable narcissism mediates the relationship between attachment avoidance and marital satisfaction in upper echelon businessmen. The study expanded on existing investigations that various theorists have conducted in applying attachment theory toward understanding the development of the various forms of narcissism (Bernett, 2006; Kernberg, 1975; Kohut , 1971).

H1: There is a significant relationship between attachment avoidance, as measured by the Avoidance and anxiety subscale of the ECR-R (Fraley et al., 2000; see Appendix A), and vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), in upper echelon businessmen.

Attachment and narcissism are considered as interfacing with one another in relational and intrapsychic dimensions. Theorists suggested that the attachment model is correlated to adult psychopathology and to Narcissistic Personality Disorder (Bernett, 2006; Pistole, 1995). This study explored vulnerable narcissism as a subset of narcissism, and the possible correlation with attachment avoidance in upper echelon businessmen. This is demonstrated by the current findings that attachment avoidance is of statistical significance, and is positively correlated with vulnerable narcissism, $r = .378$, $p < .05$. The result supports the current theory that attachment and narcissism are

correlated. The positive correlation coefficient indicates a higher level of attachment avoidance is associated with a higher level of vulnerable narcissism.

H2: There is no significant relationship between vulnerable narcissism, as measured by the PNI (Pincus et al., 2009; see Appendix B), and marital satisfaction, as measured by the Social Support subscale of QRI (Pierce et al., 1990; see Appendix C), in upper echelon businessmen.

Narcissism is a well-defined clinical syndrome. Narcissism was recently redefined as normal and pathological personality functioning (Pincus & Lukowitsky, 2010). This study was focused on the pathological personality functioning of narcissism in which narcissistic individuals adopt maladaptive strategies in coping with threats of self-esteem (Horowitz, 2009; Kernberg, 2009; Ornstein, 2009; Pincus & Lukowitsky, 2001; Ronningstaim, 2005b). The findings of the current study coincided with previous studies that narcissism does not significantly correlate with marital satisfaction. However, this study was an investigation into the possible correlation between vulnerable narcissism and marital satisfaction in upper echelon businessmen.

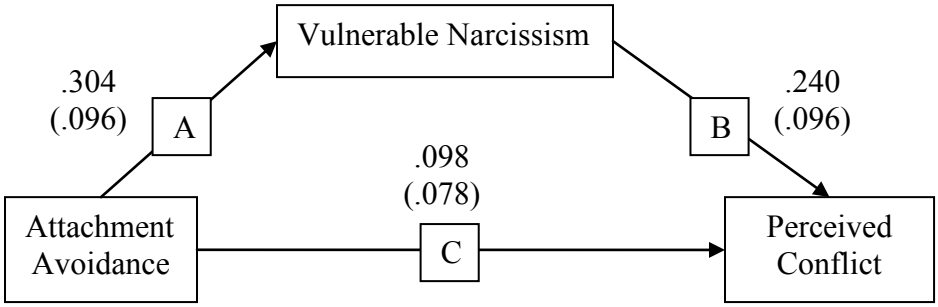
Studies have been conducted on pathological narcissism as a whole without differentiating the two different constructs of grandiose and vulnerable narcissism. The current study expanded on these to specifically investigate vulnerable narcissism in relation to marital satisfaction in a specific, privileged population of business leaders. The current study's findings indicated that vulnerable narcissism is not statistically significant and negatively correlated with marital satisfaction, $r = -.241$, $p > .05$.

H3: There is a significant relationship between attachment avoidance, as measured by the Avoidance and Anxiety subscale of the ECR-R (Fraley et al., 2009; see Appendix A), and marital satisfaction, as measured by the Social Support subscale of the QRI (Pierce et., 1990; see Appendix C), in upper echelon businessmen.

During the past two decades literature on attachment theory extended the focus beyond childhood attachment to include romantic and interpersonal relationship functioning in adults (Mikulincer & Shaver, 2006; Simpson et al., 2007). Attachment theorists predicted that an individual's attachment style could impact upon relationship satisfaction (Pistole, 2010; Roberts & Pistole, 2009). This current study extended the focus beyond avoidant attachment style and marital satisfaction. The purpose of this study is to investigate whether the factor of vulnerable narcissism can impact the marital satisfaction of an attachment avoidant male partner. The result of this research is demonstrated by the current findings that attachment avoidance is of statistical significance and negatively correlated with marital satisfaction, $r = -.465$, $p < .05$. The result supports the finding that the higher the degree of attachment avoidance, the greater the negative influence on the martial satisfaction of upper echelon businessmen. Therefore the null hypothesis was rejected.

In the present study mixed results were found in correlations among attachment avoidance, vulnerable narcissism and marital satisfaction. According to the meditational model (Baron and Kenny, 1986), the non-significant correlation between vulnerable narcissism and social support led to the implication that vulnerable narcissism does not

mediate between attachment avoidance and marital satisfaction. However, there was an interesting finding from the correlation matrix. As attachment avoidance correlated significantly with vulnerable narcissism (r = .378, $p < .05$) and vulnerable narcissism correlated significantly with the Perceived Conflict subscale in QRI (r = .381, $p < .05$), it was suspected that a mediating relationship existed among the three variables. From the Sobel test, it was indicated that there was a significant indirect effect between attachment avoidance and perceived conflict via vulnerable narcissism (effect = .073, $p < .05$). The calculated Path coefficients are shown in Figure 3. The direct path from attachment avoidance to perceived conflict became not significant once vulnerable narcissism was introduced to the model as a mediator (effect = .098, $p > .05$). It can be concluded that vulnerability completely mediated the relationship between attachment avoidance and perceived conflict.



Note. The estimated path coefficients are marked with asterisks at .05 significance level. The numbers in brackets denote the standard errors.

Figure 3. The Path Coefficients among Attachment Avoidance, Conflict and Vulnerable Narcissism

In Figure 3, the indirect effect of attachment avoidance to perceived conflict is the product of the path coefficient from attachment avoidance to vulnerable narcissism (.304)

and that from vulnerable narcissism to perceived conflict (.240), while the direct effect is .098. The total effect measures the extent to which the dependent variable changes when the independent variable increases by one unit. In contrast, the indirect effect (sometimes referred to as mediated effect) measures the extent to which the dependent variable changes when the independent variable is held fixed and the mediator variable changes to the level it would have attained had the independent variable increased by one unit. In linear systems, the total effect is equal to the sum of the direct and indirect effects ($C + AB$ in the model above). In nonlinear models, the total effect is not generally equal to the sum of the direct and indirect effects, but to a modified combination of the two.

Summary

The findings of the study supported the hypotheses that attachment avoidance is significantly correlated with vulnerable narcissism. In addition, attachment avoidance is significantly correlated with marital satisfaction. However, the study's findings did not support the hypothesis that vulnerable narcissism is significantly correlated with marital satisfaction of upper echelon businessmen. Overall, the research findings did not support the hypothesis that vulnerable narcissism mediates the relationship between attachment avoidance and marital satisfaction.

The present research parallels existing research regarding the significant correlation between attachment style and narcissism, and between attachment style and marital satisfaction (Feeney, 2007; Foster, 2008; Kane et al., 2007). It expands specifically on the correlation between attachment avoidance and vulnerable narcissism as well as the correlation between attachment avoidance and marital satisfaction. Both

findings indicated significant relationships between the variables. The current research also parallels existing research regarding narcissism and marital satisfaction (Finkel et al., 2009; Foster, 2008). It expands specifically on the correlations between vulnerable narcissism and marital satisfaction. Both findings indicated no significant relationships between the variables. The findings of the current research offer a new understanding that while vulnerable narcissism does not mediate between attachment avoidance and marital satisfaction, yet vulnerable narcissism completely mediates between attachment avoidance and perceived conflict.

Chapter 5: Implications, Recommendations, and Conclusions

Recent global financial crises have sparked concern about the ethics of corporate leaders worldwide. Empirical research indicated that the 2008 financial crisis was a result of the widespread narcissistic culture in the United States (Twenge & Campbell, 2009). In recent years, more studies have linked organizational failure to pathological leadership, and specifically to pathological narcissism characteristics (Arjoon, 2010). Increasing numbers of publications on behavioral and organizational behavior suggest that narcissistic top executives breed narcissistic organizational cultures, which have led to the decline of ethical business practices (Arjoon, 2010; Blair, Hoffman & Helland, 2008; Duchon & Drake, 2009).

Empirical studies showed that pathological narcissism stems from childhood rejection, which causes individuals to compensate for their insecurity through an inflated sense of superiority (Horton et al., 2006). These traits help drive some business executives to pursue career success (Resick et al., 2009). Yet the same traits may not be conducive to maintaining healthy and sustainable intimate relationships. Previous studies suggested that there is a connection between narcissism and childhood attachment style (Besser & Priel, 2009). Other research associated attachment style to level of marital satisfaction (Charania & Ickes, 2007). There is often a general perception that marital dissatisfaction among senior executives is due to their frequent travel (Chen et al., 2009; Hambrick, Finkelstein, & Mooney, 2005).

This study examined the relationship among narcissism, attachment style and marital satisfaction in the elite population of upper echelon business executives. The

majority of prior research on business executives has primarily focused on business behavior, yet there are few studies on their interpersonal relationships. Only a small number of studies have examined factors influencing the relation between adult attachment style and marital satisfaction (Hatch, 2008). No study has been found which analyzes vulnerable narcissism as a factor that may influence the relation between attachment avoidance style and marital satisfaction. Understanding vulnerable narcissism as such a possible factor may illuminate the negative role it may contribute to less satisfying marital relationships.

The purpose of this quantitative study was to examine whether there is a significant relationship between attachment avoidance and vulnerable narcissism; vulnerable narcissism and marital satisfaction; and attachment avoidance and marital satisfaction, in upper echelon businessmen. Pearson's correlation analyses were conducted for the first three hypotheses to test the linear relationship between the variables. The significant relationship between attachment avoidance and vulnerable narcissism was measured by the Avoidance and Anxiety subscale of the Pathological Narcissism Inventory (PNI; Pincus et al., 2009) and Experience of Close Relationship-Revised Scale (ECR-R; Fraley, Waller, & Brennan, 2000), respectively. The significant relationship between vulnerable narcissism and marital satisfaction was measured by the PNI (Pincus et al., 2009) and the Social Support subscale of the Quality of Relationships Inventory (QRI; Pierce, Sarason, & Sarason, 1991), respectively. The significant relationship between attachment avoidance and marital satisfaction was measured by the PNI (Pincus et al., 2009) and QRI (Pierce, Sarason, & Sarason, 1991), respectively. The

SPSS macro analysis of the Sobel test (Preacher & Hayes, 2004) was conducted for the fourth hypothesis, to evaluate whether a possible mediating relationship exists between attachment avoidance and marital relationships through the pathway of vulnerable narcissism in upper echelon businessmen. Participants ($N = 62$) were recruited through postings and advertising at different business chambers of commerce and at various financial and business networking sites in Hong Kong.

The primary limitation of this study was the difficulty in gaining access to this specific elite business population. However, this limitation of access was not confined to this study, but to studies of this population in general. Stratified probability sampling was used to achieve the likelihood of accessing representative samples of the population. Although contact was made with various business chambers of commerce and business executives' organizations, some resistance was met due to exclusivity and self-imposed protection of business members. Although the sample size of 73 as computed by G*Power was not collected, post hoc power analysis showed that the achieved power is .879 which is large. The findings of the study indicated a correlation among attachment avoidance, vulnerable narcissism and marital satisfaction, which might not be exclusively applicable to top business executives. However, the study focused specifically on upper echelon businessmen; therefore it could not definitively be claimed that the findings are applicable to the general population.

A discussion of the implication of the study is presented in this chapter. It is followed by discussion of study outcomes in relation to previous research and the

potential influences of the limitations on this study's outcome. Recommendations for clinical application and proposals for future research are also included.

Implications

Since the 2008 global economic crisis there has been increased interest among scholars linking narcissism to organizational failure and unethical business practice (Arjoon, 2010; Blair, Hoffman & Helland, 2008; Duchon & Drake, 2009). Yet for a long time narcissism as a construct has been oversimplified in many studies, without differentiating between normal and pathological narcissism. Most studies of narcissism in the workplace focused on business and work behavior, while few have looked into the interpersonal relationships of business people in relation to pathological narcissism. Previous studies proposed that there is a close link between attachment style and relationship satisfaction, yet such studies have mainly focused on non-clinical subjects, i.e. college students. The present study specifically investigated pathological narcissism and vulnerable narcissism in relation to attachment style and marital satisfaction using upper echelon businessmen as subjects.

The focus of the study was specifically on vulnerable narcissism to examine personality characteristics and intimate relationships, which helped to fill the gap in the existing literature on narcissism. While the result shows that vulnerable narcissism does not mediate between attachment avoidance and marital satisfaction, yet vulnerable narcissism completely mediates between attachment avoidance and perceived conflict. Even though vulnerable narcissism may not directly correlate to marital dissatisfaction, yet the perceived conflict experienced by upper echelon businessmen can have an

indirectly negative impact upon their way of handling intimate relationships and relationships in general. The unexpected findings can be useful to researchers, scholars, and business administrators to gain a better understanding of vulnerable narcissistic senior business executives. Such information may help predict or prevent some business decisions that upper echelon businessmen may make in the event of perceived conflict. In the current global financial climate their business decisions and behaviors can impact the world as a whole.

Conclusions for attachment avoidance, vulnerable narcissism and marital satisfaction . The present study expanded beyond the existing research and specifically focused on the interpersonal relationships of upper echelon businessmen by investigating whether there are significant relationships among attachment avoidance, vulnerable narcissism and marital satisfaction. Significant effect was found in support of the first hypothesis, that there was a significant relationship between attachment avoidance and vulnerable narcissism. Significant effect was also found in support of the third hypothesis, that there was a significant relationship between attachment avoidance and marital satisfaction among upper echelon businessmen.

Previous research has found that anxiety in close relationships causes some individuals to distance themselves and adopt an attachment avoidant style as their protective measure of possible rejection (Otway & Vignoles, 2006). Findings in past studies also suggested that hypersensitivity to rejection and anxiety, which are closely related to attachment anxiety, are the major components of vulnerable narcissism, (Besser & Priel, 2009; Smolewska & Dion, 2005). However, there have been no studies

investigating the relationship of these two variables specifically among upper echelon businessmen. This study helps to address that relationship in the literature.

Earlier research also indicated a possible link between attachment avoidance and low levels of marital satisfaction (Charania & Ickes, 2007). A number of studies on attachment and relationships concluded that an individual's attachment style directly influences his caregiving style in intimate relationships (Foster, Kernis, & Goldman, 2007; Simpson et al., 2007). The reported dissatisfaction within relationships by intimate partners was due to attachment avoidance and the narcissistic partner's lack of emotional displacement and support (Ballen et al., 2009; Charania & Ickes, 2007). Furthermore, the same attachment style influences individuals' emotional experiences in their manner of participation in intimate relationships. People with attachment avoidance seem to have an inability to experience relationships positively and feel dissatisfied with their partners (Pistole, 2010; Roberts & Pistole, 2009; Shaver & Slav 2006; Simpson, Winterheld, Rholes & Oriña 2007). No previous studies have been found which investigated the relationship between attachment avoidance and marital satisfaction among upper echelon businessmen.

Conclusions for vulnerable narcissism and marital satisfaction. The second research question of the present study examined whether there is a significant relationship between vulnerable narcissism and marital satisfaction in upper echelon businessmen. Previous research showed that narcissism was associated with less relationship dysfunction (Le & Gaines, 2005; Finkel, et al., 2009; Foster & Campbell, 2005). The current study's correlation analysis found no significant results, yet it was suggested that

vulnerable narcissism was negatively correlated to marital satisfaction. The earlier studies on narcissistic individuals primarily focused on narcissism as one construct, without differentiating between normal and pathological narcissism. Studies focused specifically on vulnerable narcissism showed a different result in individuals' relationship satisfaction. Research findings indicated that vulnerable narcissistic individuals have difficulties in maintaining long-term intimate relationships due to their need for self protection and avoidance in relationship (Dickinson & Pincus, 2003). Their fear and anxiety of rejection led them to experience negatively in intimate relationships (Smolewska & Dion, 2005).

The findings in the present study are consistent with previous studies using narcissism as one construct, yet contradict previous studies specifically focused on vulnerable narcissism. No study has been found specifically focusing on vulnerable narcissism and marital satisfaction in upper echelon businessmen, thus one main difference between the present study and previous studies is the research population. The present study used a clinical population that currently hold positions which classify them as upper echelon businessmen, whereas the non-clinical population of the majority of previous studies used undergraduate female students with an average age of 19. The male gender was purposely chosen for the current study because statistics showed that 95% of all senior executive positions are occupied by men (Harvard Business Review, 2010). Additionally, Narcissistic Personality Disorder (NPD) is estimated to be 50 to 75% more prevalent in men than in women (DSM-IV-TR; American Psychiatric Association, 2000).

The inconsistency between this and previous studies is perhaps also due to the self reporting survey in the study. Vulnerable narcissistic individuals are reported to be self-protected, anxious and sensitive to criticism (Smolewska & Dion, 2005). The self reporting survey in the present study might have provoked similar anxiety when confronting deeply personal questions about themselves. The possibility of them not answering such questions honestly remains a possibility. The speculation of such a possibility is supported by an interesting trend in the five incomplete surveys. All respondents completed the first two pages of the survey: the demographic information and personal views of intimate relationships (PNI). However, all five incomplete surveys failed to finish page three, the view of themselves (QRI), and left the survey. Perhaps the questions stirred up some uneasiness at taking a deeper personal view of themselves.

Conclusions for mediating effect of vulnerable narcissism between attachment avoidance and marital satisfaction. The fourth research question of the present study examined to what extent, if any, vulnerable narcissism mediates the relationship between attachment avoidance and marital satisfaction. The non-significant correlation between vulnerable narcissism and marital satisfaction implied that vulnerable narcissism does not mediate between attachment avoidance and marital satisfaction. The proposed mediating relationship was not analyzed. No study has been found which investigated vulnerable narcissism's mediating effect between attachment avoidance and marital satisfaction. The present study examined the possible factor of vulnerable narcissism in attempting to explain why attachment avoidance can lead to low marital satisfaction. The findings indicated vulnerable narcissism was not a mediating variable.

This may in part be due to the possibility that the Social Support scale of the Quality of Relationship Inventory (QRI) does not alone explicitly denote a measure of marital satisfaction. Instead, marital satisfaction was measured in terms of perceived available support within a significant relationship.

Previous studies showed that narcissistic individuals tended to have a distorted view of their partners' experiences in the relationship (Le & Gaines, 2005). Their perception of a happy experience in the intimate relationship could have been colored by their own positive self-schemas (Foster, 2008; Le & Gaines, 2005). The result may have come out differently if both the Perceived Conflict and Relationship Depth subscales of the measurement had been included. However, there was an interesting finding from the correlation matrix. As attachment avoidance correlated significantly with vulnerable narcissism ($r = .378$, $p < .05$) and vulnerable narcissism correlated significantly with the Perceived Conflict subscale in QRI ($r = .381$, $p < .05$), it was suspected that a mediating relationship existed among the three variables. It is suspected that vulnerable narcissism mediates the relationship between attachment avoidance and perceived conflict. The results from the Sobel test confirmed this hypothesis.

Limitations. There are several limitations in this current study. The correlational design in testing the first three hypotheses precludes identifying the causal relationship among the three variables. Self-report measures among this specific population can pose an issue of construct validity. The issue remains whether some subjects' answers in the survey were truly what the study intended to measure. Previous research indicated narcissistic individuals have a distorted perception of their partner's experience in the

couple relationship (Le & Gaines, 2005). Additionally, such perceptions can lead to their distorted view of marital satisfaction (Foster, 2008). Subjects statistically classified as high in narcissism might have held the same distorted view of marital satisfaction when answering the survey. This factor can influence the construct validity. Lastly, vulnerable narcissism is a subset of narcissism, which is still under-researched as a construct. There is still an ongoing debate over the clinical presentation and assessment of grandiose and vulnerable narcissism (Miller et al., 2010; Stoessel, 2007), which has left a gap in the current literature.

Recommendations

The results of this research offer scholars, mental health professionals, and business administrators a deeper understanding about the complexity of the personalities and behaviors of upper echelon businessmen. They will enable mental health practitioners to formulate specific treatment approaches to deal with this type of individual.

More clinical writing should be dedicated to this subject, to educate mental health practitioners in identifying the presenting issues, difficulties and actual clinical pictures of this particular population, which will enable mental health professionals to look beyond the surface issues of marital difficulties in such individuals and to formulate appropriate strategies and treatment plans accordingly. Literature on attachment avoidance and vulnerable narcissism supports the finding that both variables are linked to childhood experience of inadequate parenting or rejection by parents or caregiver (Horton et al., 2006; Mikulincer & Shaver, 2006; Mikulincer et al., 2010; Thomaes et al., 2008).

Therefore, incorporating this study's findings in parental training literature will help parents to be aware of the long-term impact of such issues in child-rearing. This information can serve as preventive guidelines for parents in raising children. Scholars and mental health professionals can utilize the factors and findings of the study to advise the business sector, especially human resources professionals. Hopefully, open discussion can help administrators and human resource personnel to be more informed about the psychological issues potentially faced by their executives, and to provide appropriate support.

Future research options. The population for this study was chosen due to a predicted potentially high incidence of narcissism. However, it is possible that the link between attachment avoidance, vulnerable narcissism and marital satisfaction also exists in the general population. Therefore it is recommended that future studies be done on other populations with a larger sample size. The early detection of vulnerable narcissism and attachment avoidance in clinical settings may allow mental health practitioners to educate or develop treatments for the younger population to prevent conflicts in future intimate relationships, which is why future studies on younger populations will be crucial.

Future research should also include other forms of measures than strictly relying on self-report measures among narcissistic populations. The participation of intimate partners or spouses in surveys or face-to-face interviews will provide a more accurate view of some of the measures in marital satisfaction. Finally, future research could benefit from including both the Perceived Conflict and Relationship Depth subscales of

the Quality of Relationship Inventory (QRI) in measuring the marital satisfaction of the specific population.

Conclusions

This study obtained new information on a highly elusive population that usually is not easily accessible. The use of vulnerable narcissism as a factor to investigate the relationship between attachment avoidance and marital satisfaction has not been done in previous studies. While vulnerable narcissism as a construct lacks unified conceptual classification among theorists and researchers, its implication remains important. The gap in the literature should be further implemented. The result of this current study did not find vulnerable narcissism mediates between attachment avoidance and marital satisfaction. Yet unpredicted results indicated that vulnerable narcissism actually mediates between attachment avoidance and conflict in upper echelon businessmen. It is hoped that this study will spark interest toward further investigation of the role of vulnerable narcissism in relation to achievement pursuit in the senior executive population as well as the general population.

References

Adair, W., Tinsley, C., & Taylor, M. (2006). Managing the intercultural interface: Third cultures, antecedents, and consequences. In E.A.M. Manix, M. Neale, and Y. Chen (Eds.), *Research in managing groups and teams: National cultural and groups.* Oxford: Elsevier Science Press.

Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, N.J.: Erlbaum.

Ainsworth, M., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*, 331-341. doi:10.1037/0003-066X.46.4.333

American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd Ed). Washington, DC: American Psychiatric. Association.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th Ed., text revision). Washington, DC: American Psychiatric Association.

Amiri, A., Moghimi, S., & Kazemi, M. (2010). Studying the relationship between cultural intelligence and employees' performance. *European Journal of Scientific Research, 42,* 432-427. Retrieved from http://www.eurojournals.com/ejsr_42_3_08.pdf

Ang, S., Van Dyne, L., Koh, C., Ng, K., Templer, K., Tay, C., & Chandrasekar, N. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation, and task performance. *Management and Organization Review, 3,* 335-371. doi:10.1111/j.1740-8784.2007.00082.x

Atlas, G., & Them, M. (2008). Narcissism and sensitivity to criticism: A preliminary investigation. *Current Psychology, 27*, 62-76. doi:10.1007/s12144-008-9023-0

Ballen, N., Bernier, A., Moss, E., Tarabulsy, G. & St-Laurent, D. (2009). Insecure attachment states of mind and atypical caregiving behavior among foster mothers. *Journal of Applied Developmental Psychology, 31*, 118-125/ doi: 10.1016/j.appdev.2009.10.001

Bar-On, R. (2007). *Providing information and fostering discussion on emotional intelligence.* Retrieved from http://www.reuvenbaron.org/

Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51,* 1173-1182.

Bartholomew, K., & Horowitz, L. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226–244. doi:10.1037/0022-3514.61.2.226

Bennett, S. (2006). Attachment theory and research applied to the conceptualization and treatment of pathological narcissism. *Clinical Social Work Journal, 34*, 45-62. doi:10.1007/s10615-005-0001-9

Besser, A., & Priel, B. (2009). Emotional responses to a romantic partner's imaginary rejection: The roles of attachment anxiety, covert narcissism, and self-evaluation. *Journal of Personality, 77,* 287-325. doi:10.1111/j.1467-6494.2008.00546.x

Bierman, A., Fazio, E., & Milkie, M. (2006). A multifaceted approach to the mental health advantage of the married. *Journal of Family Issues, 27*, 554-582. doi: 101177/0192513X052841111

Boldero, J., Hulbert, C., Bloom, L., Cooper, J., Gilbert, F., Mooney, J., & Salinger, J. (2009). Rejection sensitivity and negative self-beliefs as mediators of associations between the number of borderline personality disorder features and self-reported adult attachment. *Personality and Mental Health, 3*, 248-262. doi:10.1002/pmh.93

Bono, J., & Colbert, A. (2005). Understanding responses to feedback: The role of core self-evaluations. *Personnel Psychology, 58*, 171-203. doi:10.1111/j.1744-6570.2005.00633.x

Bornstein, R. (2005). Dependency across the life span. In R. F. Bornstein (Ed.), *The dependent patient: A practitioner's guide* (pp. 39–55). Washington, DC: American Psychological Association. doi:10.1037/11085-003

Bosson, J., Lakey, C., Campbell, Zeigler-Hill, V., Jordan, C., & Kernis, M. (2008). Untangling the links between narcissism and self-esteem: A theoretical and empirical review. *Social and Personality Compass, 10,* 14151439. doi:10.1111/j.1751-9004.2008.00089.x

Bowlby, J. (1979). *The making and breaking of affectional bonds*. London, UK: Tavistock.

Brennan, K., Clark, C., & Shaver, P. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships.* New York, NY: Guilford Press.

Britton, P., & Fuendeling, J. (2005). The relations among varieties of adult attachment and the components of empathy. The Journal of Social Psychology, 14, 519-530. doi: 0.3200/SOCP.145.5.519-530

Brown, R., Budzek, K., & Tamborski, M. (2009). On the meaning and measure of narcissism. *Personality and Social Psychology Bulletin, 35*, 951-964. doi:10.1177/0146167209335461

Brown, R., & Zeigler-Hill, V. (2004). Narcissism and the non-equivalence of self-esteem measures: A matter of dominance? *Journal of Research in Personality, 38*, 585-592. doi:10.1016/j.jrp.2003.11.002

Buchner, A., Erdfelder, E., Faul, F., & Lang, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*, 1149-1160.

Buttell, F., Muldoon, J., & Carney, M. (2005). An application of attachment theory to court-mandated batterers. *Journal of Family Violence, 20*(4), 211-217. doi:10.1007/s10896-005-5984-z

Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. *Personal Relationships, 15,* 141-154. doi:10.1111/j.1475-6811.2007.00189.x

Cain, N., Pincus, A., & Ansell, E. (2008). Narcissism at the crossroads: Phenotypic description of pathological narcissism across clinical theory, social/personality psychology, and psychiatric diagnosis. *Clinical Psychology Review, 28*, 638-656. doi:10.1016/j.cpr.2007.09.006

Campbell, L., Boldry, J., Simpson, J. & Kashy, D. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology, 88*, 510-531. doi:10.1037/0022-3514.88.3.510

Campbell, W., Bonacci, A., Shelton, J., Exline, J., & Bushman, B. (2004). Psychological entitlement: Interpersonal consequences and validation of a self-report measure. *Journal of Personality Assessment, 83,* 29–45. doi:10.1207/s15327752jpa8301_04

Campbell, K., Bosson, J., Goheen, T., Lakey, C., & Kernis, M. (2007). Do narcissists dislike themselves "Deep Down Inside"? *Psychological Science, 18*, 227-229. doi:10.1111/j.1467-9280.2007.01880.x

Campbell, K., Brunell, A., & Finkel, E. J. (2006). Narcissism, interpersonal self-regulation, and romantic relationships: An agency model approach. In K. D. Vohs & E. J. Finkel (Eds.), *Self and relationships: Connecting intrapersonal and interpersonal processes* (pp. 57-83). New York, NY: Guilford. Retrieved from http://faculty.wcas.northwestern.edu/eli-finkel/documents/14_CampbellBrunellFinkel2006_SelfAndRelationships.pdf

Campbell, K., Bush, C., Brunell, A., & Shelton, J. (2005). Understanding the social costs of narcissism: The case of the tragedy of the commons. *Personality and Social Psychology Bulletin, 31*, 1358-1368. doi:10.1177/0146167205274855

Campbell, K., & Campbell, M. (2009). On the self-regulatory dynamics created by the peculiar benefits and costs of narcissism: A Contextual Reinforcement Model and examination of leadership. *Self and Identity, 3,* 214-232. doi:10.1177/0146167209340904

Campbell, K., & Foster, J. (2007). The narcissistic self: Background, an extended agency model, and ongoing controversies. In C. Sedikides & S. Spencer (Eds.), *Frontiers in social psychology: The self* (pp. 115-138). Philadelphia, PA: Psychology Press.

Campbell, W., Hoffman, B., Campbell, S., & Marchisio, G. (2010). Narcissism in organizational contexts. *Human Resource Management Review (in press).* doi:10.1016/j.hrmr.2010.10.007

Campbell, K., Rudich, E., & Sedikides, C. (2002). Narcissism, self-esteem and the positivity of self-views: Two portraits of self-love. *Personality and Social Psychology Bulletin, 28*, 358-368. doi:10.1177/0146167202286007

Chambers, J., Power, K., Loucks, N., & Swanson, V. (2001). The interaction of perceived maternal and paternal parenting styles and their relation with the psychological distress and offending characteristics of incarcerated young offenders. *Journal of Adolescence, 24*, 209-227. doi:10.1006/jado.2001.0377

Chamorro-Premuzic, T., & Furnham, A. (2005). *Personality and intellectual competence.* Mahwah, NJ: Erlbaum. Retrieved from http://www.ebooks.com/ebooks/book_display.asp?IID=227518http://www.ebooks.com/ebooks/book_display.asp?IID=227518

Charania, M. & Ickes, W. (2007). Predicting marital satisfaction: Social absorption and individuation versus attachment anxiety and avoidance. *Persoanl Relationship, 14*, 187-208. doi: 10.1111/j.1475-6811.2007.00150.x

Chatterjee, A., & Hambrick, D. (2007). It's all about me: Narcissistic CEOs and their effects on company strategy and performance. *Administrative Science Quarterly, 53,* 351-386. doi:10.2189/asqu.52.3.351

Chen, G., Trevino, L., & Hambrick, D. (2009). CEO elitist association: Toward a new understanding of an executive behavioral pattern. *The Leadership Quarterly, 20*, 316-328. doi:10.1016/j.leaqua.2009.03.003

Cohen, J., Cohen, P., West, G., & Aiken, S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences, 3rd Ed. Mahwah, NJ: Lawrence Erlbaum Associates.

Collins, D., & Stukas, A. (2008). Narcissism and self-presentation: The moderating effects of accountability and contingencies of self-worth. *Journal of Research in Personality, 42,* 1629-1634. doi:10.1016/j.jrp.2008.06.011

Collins, N., Ford, M., Guichard, A. & Allard, L. (2006). Working models of attachment and attribution process in intimate relationships. *Personality and Social Psychology Bulletin, 32,* 201-219. doi:10.1177/0146167205280907

Collins, N., & Read, S. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*, 644-663. doi: 10.1037/0022-3514.58.4.644

Collins, N., Guichard, A., Ford, M., & Feeney, B. (2006). Responding to need in intimate relationships: Normative processes and individual differences. In M. Mikulincer & G. Goodman (Eds.), *Dynamics of romantic love: Attachment, caregiving, and sex*. New York, NY: Guilford Press.

Costa, P., Jr., & McCrae, R. (1992). *Revised NEO Personality Inventory (NEO-OU-R) and NEO Five-factor Inventory (NEO-FFI): Professional manual.* Odessa, FL: Psychological Assessment Resources.

Davis, M. (1983). Measuring individual differences in empathy: Evidence for a multi-dimensional approach. *Journal of Personality and Social Psychology, 44*, 113-126. doi:10.1037/0022-3514.44.1.113

DeOliviera, C., Moran, G., & Pederson, D. (2005). Understanding the link between maternal adult attachment classifications and thoughts and feelings about

emotions. *Attachment and Human Development, 7*(1), 153-170. doi:10.1080/14616730500135032

Dess, G., & Lumpkin, G. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive, 19*, 147-156.

Dickinson, K., & Pincus, A. (2003). Interpersonal analysis of grandiose and vulnerable narcissism. *Journal of Personality Disorders, 17*, 188-207. doi:10.1521/pedi.17.3.188.22146

Elliot, A., & Thrash, T. (2010). Approach and avoidance temperament as basic dimension of personality. *Journal of Personality, 78*, 865-906. doi:10.1111/j.1467-6494.2010.00636.x

Emmons, R. (1987). Narcissism: Theory and measurement. *Journal of Personality and Social Psychology, 52,* 11-17. doi:10.1037/0022-3514.52.1.11

Eslinger P., & Tranel, D. (2005). Integrative study of cognitive, social, and emotional processes in clinical neuroscience. *Cognitive Behavior Neurology, 18,* 1-4. doi:10.1097/01.wnn.0000152206.73195.1e

Fairchild, A., & Finney, S. (2006). Investigating validity evidence for the experiences in close relationships-revised questionnaire. *Educational and Psychological Measurement, 66*(1), 116-135. doi:10.1177/0013164405278564

Faith, C. (2009). Dependent personality disorder: A review of etiology and treatment. *Graduate Journal of Counseling Psychology, 1*. Retrieved from *http://epublications.marquette.edu/cgi/viewcontent.cgi?article=1023*

Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). G*Power: A flexible statistical power analysis program for the social, behavioral and biomedical science. *Behavior Research Methods, 39*, 175-191. Retrieved from: http://brm.psychonomic-journals.org/content/39/2/175.full.pdf

Feeney, B. (2007). The dependency paradox in close relationships: Accepting dependence promotes independence. *Journal of Personality and Social Psychology, 92*, 268-285. doi:10.1037/0022-3514.92.2.268

Fine, M. (2005) Dependency work. A critical exploration of Kittay's perspective on care as a relationship of power. *Health Sociology Review, 14*, 146-160. Retrieved from http://hsr.e-contentmanagement.com/archives/vol/14/issue/2/article/174/dependency-work

Fine, M., & Glendinning, C. (2005). Dependence, independence or interdependence? Revisiting the concepts of "care" and "dependency". *Ageing & Society, 25,* 601-621. doi:10.1017/S0144686X05003600

Finkel, J., Campbell, K., Buffardi, E., Kumashiro, M., & Rusbult, E. (2009). The Metamorphosis of Narcissus: Communal activation promotes relationship commitment among narcissists. *Personality and Social Psychology Bulletin, 35,* 1271-1284. doi:10.1177/0146167209340904

Finkel, E., Campbell, K., & Brunell, A. (2006). High-maintenance interaction and self-regulation. In K.D. Vohs & E.J. Finkel (Eds.), *Self and relationships: Connecting intrapersonal and interpersonal processes*. New York, NY: Guilford.

Finkelstein, S., Hambrick, D., & Cannella, A. (2009). Strategic leadership: Theory and research on executives, top management teams, and boards. *Oxford University Press, 20,* 316-328.

Fischer, R., Ferreira, C., Assmar, E., Redford, P., Harb, C., Glazer, S. (2009). "Individualism-collectivism as descriptive norms: Development of a subjective norm approach to culture measurement". *Journal of Cross-Cultural Psychology, 40*, 187-213. doi:10.1177/0022022109332738

Fonagy, P. (2001) *Attachment theory and psychoanalysis*. New York: Other Press. Retrieved from http://books.google.com/books?id=F3gD75Js6G0C&dq=Fonagy,+2001,+attachment+theory&printsec=frontcover&source=bn&hl=en&ei=tZhyTJunH4qfcd3y3cMN&sa=X&oi=book_result&ct=result&resnum=4&ved=0CCwQ6AEwAw#v=onepage&q&f=false

Foster, J. (2008). Incorporating personality into the investment model: Probing commitment processes across individual differences in narcissism. *Journal of Social and Personal Relationships, 25*, 211-223. doi:10.1177/0265407507087956

Foster, J., & Campbell, K. (2005). Narcissism and resistance to doubts about romantic partners. *Journal of Research in Personality, 39,* 550-557. doi:10.1016/jrp.2004.11.001

Foster, J., & Campbell, K. (2007). Are there such things as "narcissists" in social psychology? A taxometric analysis of the Narcissistic Personality Inventory. *Personality and Individual Differences, 43*, 1321-1332. doi:10.1016/j.paid.2007.04.003

Foster, J., Kernis, M., & Goldman, B. (2007). Linking adult attachment to self-esteem stability. *Self and Identity, 6*, 64-73. doi:10.1080/15298860600832139

Foster, J., Misra, T., & Reidy, D. (2009). Narcissists are approach-oriented toward their money and their friends. *Journal of Research in Personality, 43*, 764-769. doi:10.1016/j.jrp.2009.05.005

Foster, J., Misra, T., Westmoreland, L., Trimm, R., Syklawer, A., & Goff, J. (2008, February). *Narcissism and approach-avoidance motivation*. Poster presented at the annual meeting of the Society for Personality and Social Psychology, Albuquerque, NM.

Foster, J., Shrira, L., & Campbell, K. (2006). Theoretical models of narcissism, sexuality and relationship commitment. *Journal of Social and Personal Relationships, 23*, 367-386. doi:10.1177/0265407506064204

Foster, J., & Trimm, R. (2008). On being eager and uninhibited: Narcissism and approach-avoidance motivation. *Personality and Social Psychology Bulletin, 34*, 1004-1017. doi:10.1177/0146167208316688

Fraley, C. (2005). *Information on the Experiences in Close Relationships-Revised (ECR-R) Adult Attachment Questionnaire.* Retrieved May 1, 2009, from http://www.psych.uiuc.edu/~rcfraley/measures/ecrr.htm

Fraley, C., Waller, G., & Brennan, A. (2000). An item-response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, *78*, 350-365. doi:10.1037/0022-3514.78.2.350

Fraley, C., & Marks, M. (2011). Pushing mom away: Embodied cognition and attachment avoidance. *Journal of Research in Personality (in press).* doi: 10.1016/j.jrp.2011.01.003

Freud, S. (1986). On narcissism: An introduction. In A. P. Morrison (Ed.), *Essential Papers on Narcissism* (pp. 17-43). New York, NY and London, England: New York University Press.

Giberson, T., Resick, C., Dickson, M., Mitchelson, J., Randall, K., & Clark, M. (2009). Leadership and organizational culture: Linking CEO characteristics to cultural values. *Journal of Business and Psychology, 24*, 123-137. doi:10.1007/s10869-009-9109-1

Gjerde, P., Onishi, M., & Carlson, K. (2004). Personality characteristics associated with romantic attachment: A comparison of interview and self-report methodologies. *Personality and Social Psychology Bulletin, 30*, 1402-1415. doi:10.1177/0146167204264291

Hambrick, D. (2007a). Upper echelon theory: An update. *Academy of Management Review, 32,* 334-343.

Hambrick, D. (2007b). The field of management's devotion to theory: Too much of a good thing?, *Academy of Management Journal*, *50*, 1346-1352.

Hambrick, D., Finkelstein, S. & Mooney, A. (2005). Executive job demands: New insights for explaining strategic decisions and leader behaviors. *Academy of Management Review, 30*, 472-491. Retrieved from http://www.jstor.org/pss/20159139

Hansen, M., Ibarra, H., & Peyer, U. (2010). *Harvard Business Review,* Jan, 2010. Retrieved from: http://hbr.org/2010/01/the-best-performing-ceos-in-the-world/ar/1

Harrison, J., & Clough, M. (2006). Characteristics of "state of the art" leaders: Productive narcissism versus emotional intelligence and Level 5 capabilities. *The Social Science Journal, 43*, 287-292. doi:10.1016/j.soscij.2006.02.007

Hatch, D. (2008). Factors that influence the association between adult attachment and marital satisfaction. (Doctoral dissertation). Retrieved from http://digitalcommons.usu.edu/etd/161

Hazan, C., & Shaver, P. (1990). Love and work: An attachment – theoretical perspective. *Journal of Personality and Social Psychology, 59*, 270-280. doi:10.1037/0022-3514.59.2.270

Heimpel, S., Eliot, A., & Wood, J. (2006). Basic personality dispositions, self-esteem, and personal goals: An approach-avoidance analysis. *Journal of Personality, 74*, 1293-1319. doi:10.1111/j.1467-6494.2006.00410.x

Hendin, H., & Cheek, J. (1997). Assessing hypersensitive narcissism: A reexamination of Murray's Narcissism Scale. *Journal of Research in Personality*, *3*, 588-599. doi:10.1006/jrpe.1997.2204

Hiller, N., & Hambrick, D. (2005). Conceptualizing executive hubris: The role of (hyper) core self-evaluations in strategic decision-making. *Strategic Management Journal, 26,* 297-319. doi:10.1002/smj.455

Hofstede, G. (1994). The business of international business is culture. *International Business Review,* 3, 1-14. doi:10.1016/0969-5931(94)90011-6

Hogan, R., & Kaiser, R. (2005). What we know about leadership. *Review of general Psychology, 9*, 169-180. doi:10.1037/1089-2680.9.2.169

Hollist, C.S., & Miller, R.B. (2005). Perceptions of attachment style and marital quality in midlife marriage. *Family Relations: Interdisciplinary Journal of Applied Family Studies, 54*, 46-57.

Hood, J. (2008, May). The organization as a reflection of its followership: Servant leadership as a model for leading in the upper echelons. *Servant Leadership Research Roundtable.* School of global leadership and entrepreneurship, Regent University.

Horne, S., & Biss, W. (2009). Equality discrepancy between women in same-sex relationship: The mediating role of attachment in relationship. *Sex Roles, 60*, 721-730. doi:10.1007/s11199-008-9571-7

Horton, R., Bleau, G., & Drwecki, B. (2006). Parenting narcissus: What are the links between parenting and narcissism? *Journal of Personality, 74*, 345-376. doi:10.1111/j.1467-6494.2005.00378.x

Humphreys, J., Zhao, D., Ingram, K., Gladstone, J., & Basham, L. (2010). Situational narcissism and charismatic leadership: A conceptual framework. *Institute of Behavioral and Applied Managemen*t, *11*, 118-136.

Johnson, R., Rosen, C., & Levy, P. (2008). Getting to the core of core self-evaluations: A review and recommendations. *Journal of Organizational Behavior, 29*, 391-413. doi:10.1002/job.514

Judge, T., Bono, J., Erez, A., & Locke, E. (2005). Core self-evaluations and job and life satisfaction: The role of self-concordance and goal attainment. *Journal of Applied Psychology, 90*, 257-268. doi:10.1037/0021-9010.90.2.257

Judge, T., LePine, J., & Rich, B. (2006). Loving yourself abundantly: Relationship of the narcissistic personality of self and other perceptions of workplace deviance, leadership and task and contextual performance. *Journal of Applied Psychology, 91*, 762-776. doi:10.1037/0021-9010.91.4.762

Kaiser, R. & Hogan, K., (2007). The dark side of discretion. In R. Hooijberg, J. Hunt, J. Antonakis, K. Boal, & N. Lane (Eds.), *Being there even when you are not: Leading through strategy, systems and structure. Monographs in leadership and management* (Vol. 4), (pp. 173-193). Greenwich, CT: JAI Press.

Kaiser, R. & Hogan, R., & Craig, B. (2008). Leadership and the fate of organizations. *American Psychologist, 63,* 96-110. doi:10.1037/0003-066X.63.2.96

Kaiser, R. & Kaplan, R. (2006). The deeper work of executive development: Outgrowing sensitivities. *Academy of Management Learning & Education, 5*,

463-483. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2007-07818-006&site=ehost-live&scope=site

Kane, H., Jaremka, L., Guichard, A., Ford, M., Collin, N., & Feeney, B. (2007). Feeling supported and feeling satisfied: How one partner's attachment style predicts the other partner's relationship experiences. *Journal of Social and Personal Relationships, 24*, 535-557. doi:10.1177/0265407507079245

Kellerman, B. (2005). *Bad leadership: What it is. How it Happens. Why it matters.* Cambridge, MA: Harvard Business School Press.

Kernberg, O. (1970). Factors in the psychoanalytic treatment of narcissistic personalities. *Journal of the American Psychoanalytic Association*, *18*, 51-85. doi:10.1177/000306517001800103

Kernberg, O. (2009). Narcissistic personality disorders: Part 1. *Psychiatry Annual, 39*, 105-67. doi:10.3928/00485713-20090301-04

Kernis, M. (2005). Measuring self-esteem in context: The importance of stability of self-esteem in psychological functioning. Journal of Personality, 73, 1-37. doi:10.1111/j.1467-6494.2005.00359.x

Kohut, H. (1972). Thoughts on narcissism and narcissistic rage. *Psychoanalytic Study of the Child, 27*, 360-400.

Lakey, C., Goodie, A., & Campbell, K. (2006, November). *The roles of individual differences and basic judgment and decision-making in gambling pathology.* Paper presented at the annual meeting of the Society for Judgment and Decision Making, Houston, TX.

Lee, J., & Park, H. (2006). Top team diversity, internationalization and the mediating effect of international alliances. *British Journal of Management*, *17*,195-213 doi:10.1111/j.1467-8551.2006.00501.x

Leung, K., Bhagat, R., Buchan, N., Erez, M., & Gibson, C. (2005). Culture and international business: Recent advances and their implications for future research. *Journal of International Business Studies, 36*, 357-378. doi:10.1057/palgrave.jibs.737300150

Long, L. (2009). Anger, empathy and romantic style of attachment in court ordered domestic violence offenders. Retrieved from http://digitalcommons.liberty.edu/doctoral/187/

Mahalik, J., Aldarondo, E., Gilbert-Gokhale, S., & Shore, E. (2005). The role of insecure attachment and gender role stress in predicting controlling behaviors in men who batter. *Journal of Interpersonal Violence, 20*, 617-631. doi:10.1177/0886260504269688

Maj, M., Akiskal, H., Mezzich, J., & Okasha, A., eds. (2005). *Evidence and Experience in Psychiatry. Volume 8: Personality Disorders.* New York, NY: Wiley.

Manning, T. (2003). Leadership across cultures: Attachment style influences. *Journal of Leadership and Organizational Studies, 9*, 20-30. doi: 10.1177/107179190300900304

Marchand-Reilly, J., & Reese-Weber, M. (2005) Husband's and wives' attachment orientations and depressive symptoms: Predictors of positive and negative conflict behaviors in marriage. *Journal of Adult Development, 12*, 85-89. doi: 10.1007/s10804-005-1324-z

Marino, D., Pincus A., & Ménard, K. (2009, March). *Pathological narcissism predicts stalking behavior*. Paper presented at Annual Meeting of the Society for Personality Assessment, Chicago, IL.

Martinez, M., Zeichner, A, Reidy, D., & Miller, J. (2008). Narcissism and displaced aggression: Effects of positive, negative and delayed feedback. *Personality and Individual Differences, 44,* 140-149. doi:10.1016/j.paid.2007.07.012

Mikulincer, M., & Shaver, P. (2005). Mental representations of attachment security: Theoretical foundation for a positive social psychology. In M.W. Baldwin (Ed.), *Interpersonal cognition* (pp. 233-266). New York, NY: Guilford.

Mikulincer, M., & Shaver, P. (2006). Attachment theory and emotions in close relationships: Exploring the attachment-related dynamics of emotional reactions to relational events. *Personal Relationships, 12*, 149-168. doi:10.1111/j.1350-4126.2005.00108.x

Mikulincer, M., & Shaver, P. (2007). *Attachment in adulthood: Structure, dynamics, and change.* New York, NY: The Guilford Press.

Mikulincer, M., & Shaver, P. R. (2008). A behavioral systems perspective on romantic love. *Neuro-Psychoanalysis, 10,* 154-165. Retrieved from http://www.pep-web.org/document.php?id=np.010.0154a

Mikulincer, M., & Shaver, P. (2010). An attachment perspective on interpersonal and intergroup conflict. Retrieved from http://www.sydneysymposium.unsw.edu.au/2010/chapters/MikulincerSSSP2010.pdf

Mikulincer, M., Shaver, P., & Slav, K. (2006). Attachment, mental representations of others, and gratitude and forgiveness in romantic relationships. In M. Mikulincer & G.S. Goodman (Eds.), *Dynamics of romantic love: Attachment, caregiving, and sex* (pp. 190-215). New York, NY: Guilford.

Miller, J., & Campbell, K. (2008). Comparing clinical and social-personality conceptualization of narcissism. *Journal of Personality, 76*, 449-476. doi:10.1111/j.1467-6494.2008.00492.x

Miller, J, Campbell, K., & Pilkonis, P. (2007). Narcissistic personality disorder: Relations with distress. *Comprehensive Psychology, 48*, 170-177. doi:10.1016/j.comppsych.2007.08.012

Miller, J., Hoffman, B., Campbell, K., & Pikonis, P. (2008). An examination of the factor structure of DSM-IV narcissistic personality disorder criteria: One or two factors? *Comprehensive Psychiatry, 49*, 141-145. doi:10.1016/j.comppsych.2007.08.012

Miller, J., Hoffman, B., Gaughan, E., Gentile, B., Maples, J. & Campbell, K. (2010). Grandiose and vulnerable narcissism: A nomological network analysis. *Journal of Personality, an "Accepted Article"*. doi: 10.1111/j.1467-6494.2010.00711.x

Moran, G. (2005). Attachment in early childhood: Comments on van Ijzendoorn, Grossmann and Grossmann. *Encyclopedia on Early Childhood Development, 6.* Retrieved from http://www.enfant-encyclopedie.com/Pages/PDF/MoranANGxp.pdf

Morf, C., & Rhodewalt, F. (2001). Unraveling the paradoxes of narcissism: A dynamic self-regulatory processing model. *Psychological Inquiry, 12*, 177-96. doi:10.1207/S15327965PLI1204_1

Mruk, C. (2008). The psychology of self-esteem: A potential common ground for humanistic positive psychology and positivistic positive psychology. *The Humanistic Psychologist, 36*, 143-158. doi:10.1080/08873260802111176

Nahavandi, A. (2006). *The art and science of leadership.* Upper Saddle River, NJ: Prentice Hall.

Neustadt, E., Chamorro-Premuzic, T., & Furnham, A. (2006). The relationship between personality traits, self-esteem, and attachment at work. *Journal of Individual Differences, 27*, 208-217. doi:10.1027/1614-0001.27.4.208

Neustadt, E., Chamorro-Premuzic, T., & Furnham, A. (2008). Attachment at work. In F. Columbus (Ed.), *Advances in psychology research.* New York, NY: Nova Science Publishers.

Nishii, L., Gotte, A., & Raver, J. (2007, January). *Upper echelon theory revisited: Implications for diversity*. Paper presented at the Society for Industrial and Organizational Psychology annual conference, New York, NY. Retrieved from http://digitalcommons.ilr.cornell.edu/cahrswp/461

Onwuegbuzie, A., & Leech, N. (2004). Post-Hoc Power: A Concept Whose Time Has Come. *Understanding Statistics,* 3(4), 201–230. doi: 10.1207/s15328031us0304_1

Ornstein, P. (2009). Chronic rage from underground: The treatment of a patient with a severe narcissistic personality disorder. *Psychiatry Annual, 39*, 137-43. doi:10.3928/00485713-20090301-07

Otway, L., & Vignoles, V. (2006). Narcissism and childhood recollections: A quantitative test of psychoanalytic predictions. *Personality and Social Psychology Bulletin, 32*, 104-116. doi:10.1177/0146167205279907

Panayiotou, G. (2005). Love, commitment and conflict among Cypriot dating couples: Two models, one relationship. *International Journal of Psychology, 40*, 108-117. doi:10.1080/00207590444000230

Parayitam, S., & Kalra, N. (2008). From work-family conflicts to psychological stress, job satisfaction to life satisfaction: A proposed integrative model. *Journal of Organizational Culture, Communications and Conflict, 6*, 1-12.

Paulhus, D. (1998). Interpersonal and intrapsychic adaptiveness of trait self-enhancement: A mixed blessing. *Journal of Research in Personality, 36*, 556-63. doi:10.1016/S0092-6566(02)00505-6

Pauli-Pott, U., Haverkock, A., Pott, W., & Beckmann, D. (2007). Negative emotionality attachment quality, and behavior problems in early childhood. *Infant Mental Health Journal, 28*, 39-53. doi:10.1002/imhj.20121

Pearce, C. (2007). The future of leadership development. *Human Resource Management Review, 17*, 355−359.

Pearce, C., Manz, C., & Sims, H. (2009). The roles of vertical and shared leadership in the enactment of executive corruption: Implications for research and practice. *The Leadership Quarterly, 19*, 353–359. doi:10.1016/j.leaqua.2008.03.007

Pierce, G. R. (1994). The quality of relationships inventory: Assessing the interpersonal context of social support. In B. R. Burleson, T. L. Albrecht & I. G. Sarason (Eds.), *Communication of social support: Messages, interactions, relationships, and community* (pp. 247-264). Thousand Oaks, CA: Sage.

Pierce, R., Sarason, G., & Sarason, R. (1991). General and relationship-based perceptions of social support: Are two constructs better than one? *Journal of Personality and Social Psychology, 61*, 1028-1039. doi:10.1037/0022-3514.61.6.1028

Pietromonaco, P., & Barrett, L. (2006). What can you do for me? Attachment style and motives underlying esteem for partners. *Journal of Research Personality, 40* 313-338. doi: 10:1016/j.jrp2005.01.003.

Pimentel, C. (2007). The impact of interpersonal rejection on self-esteem and mood in vulnerable narcissistic personalities, grandiose narcissistic personality and avoidant personality: Experimental validation of vulnerable narcissism and vulnerable narcissistic scale (Doctoral dissertation). Retrieved from ProQuest Information and Learning Company. (UMI 3284982).

Pimentel, C., Ansell, E., Pincus, A., & Cain, N. (2008). Initial construction and validation of the vulnerable narcissism scale. *Psychological Assessment, 21*, 365-379.

Pimentel, C., Pincus, A., Ansell, E., White, C., Uliaszek, A., Wright, A., Reid, J., & Cain, N. (2004, May). *Initial derivation and validation of the Vulnerable Narcissism Scale.* Paper presented at the annual meeting of the American Psychological Association, Honolulu, HI.

Pincus, A., & Lukowitsky, M. (2010). Pathological narcissism and narcissistic personality disorder. *Annual Review Clinical Psychology, 6*, 421-446. doi:10.1146/annurev.clinpsy.121208.131215

Pincus, A., Ansell, E., Pimentel, C., Cain, N., Wright, A., & Levy, K. (2009). The initial construction and validation of the Pathological Narcissism Inventory. *Psychological Assessment, 21*, 365-379. doi: 10.1037/a0016530

Pistole, C. (1995). Adult attachment style and narcissistic vulnerability. *Psychoanalytic Psychology, 12*, 115-126. doi:10.1037/h0079603

Pistole, C. (2010). Long-distance romantic couples: An attachment theoretical perspective. *Journal of Marital and Family Therapy, 36*, 115-125. doi:10.1111/j.1752-0606.2009.00169.x

Potter-Efron, R. (2005). *Handbook of anger management: Individual, couple, family, and group approaches.* New York, NY: Haworth Clinical Practice.

Preacher, K., & Hayes, A. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers, 36*, 717-731.

Reidy, D., Zeichner, A., Foster, J., & Martinez, M. (2008). Effects of narcissistic entitlement and exploitativeness on human physical aggression. *Personality and Individual Differences, 44*, 865-875. doi:10.1016/j.paid.2007.10.015

Resick, C., Whitman, D., Weingarden, S., & Hiller, N. (2009). The bright-side and the dark-side of CEO personality: Examining core self-evaluations, narcissism, transformational leadership, and strategic influence. *Journal of Applied Psychology, 94*, 1365-1381. doi:10.1037/a0016238

Rini, C, Dunkel-Schetter, C., Hobel, C., Glynn, L., & Sandman, C. (2006). Effective social support: Antecedents and consequences of partner support during pregnancy. *Personal Relationships, 13,* 207-229. doi: 10.1111/j.1475-6811.2006.00114.x

Roberts, A., & Pistole, C. (2009). Long distance and proximal romantic relationships: Attachment and closeness. *Journal of College Counseling, 12*, 5-17. Retrieved from: http://www.edst.purdue.edu/faculty_profiles/pistole/index.html

Ronningstam, E. (2005a). *Identifying and Understanding the Narcissistic Personality.* New York, NY: Oxford Univ. Press.

Ronningstam, E. (2005b). Narcissistic personality disorder: A review. See Maj, M., Akiskal, H., Mezzich, J. & Okasha, A., pp. 277-327.

Rosenthal, S., & Pittinsky, T. (2006). Narcissistic leadership. *The Leadership Quarterly, 17*, 617-633. doi: 10.1016/j.leaqua.2006.10.005

Ross, L., McKim, M., & DiTommaso, E. (2006). How do underlying "self" and "other" dimensions define adult attachment styles? *Canadian Journal of Behavioral Sciences, 38*, 294-310. doi:10.1037/cjbs2006016

Rusbult, C. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology, 16*, 172-186. doi:10.1016/0022-1031(80)90007-4

Rusbult, C., Kumashiro, M., Stocker, S., Kirchner, J., Finkel, E., & Coolsen, M. (2005). Self processes in interdependent relationships: Partner affirmation and the

Michelangelo phenomenon. *Interaction Studies, 6*, 375-391. Retrieved from http://carylrusbult.com/documents/87_RusbultKumashiroStockerKirchnerFinkelCoolsen2005_InteractionStudies.pdf

Sakellaropoulo, M., & Baldwin, M. (2007). The hidden sides of self-esteem: Two dimensions of implicit self-esteem and their relation to narcissistic reactions. *Journal of Experimental Social Psychology, 43*, 995-1001. doi:10.1016/j.jesp.2006.10.009

Samuel, D., & Widger, T. (2008). Convergence of narcissism measures from the perspective of general personality functioning. *Assessment, 15*, 364-374. doi:10.1177/1073191108314278

Schindler, A., Rainer, T., Sack, P., Gemeinhardt, B., Kustner, U., & Eckert, J. (2005). Attachment and substance use disorders: A review of the literature and a study in drug-dependent adolescents. *Attachment and Human Development, 7,* 207–228. doi:10.1080/14616730500173918

Shokef, E., & Erez, M. (2006). In B. Mamix, Neale, M., and Chen, Ya-Ru (Eds). *National Culture and Groups: Research on managing groups and team, 9*, 325-352. San Diego: Elsevia, Jai Press.

Simon, M., & Houghton, S. (2003). The relationship between overconfidence and the introduction of risky products: Evidence from a field study. *Academy of Management Journal, 46*, 139-149. doi:10.2307/30040610

Simpson, J., Collins, A., Tran, S., & Haydon, K. (2007). Attachment and the experience and expression of emotions in romantic relationships: A developmental perspective. *Journal of Personality and Social Psychology, 92*, 355-367. doi:10.1037/0022-3514.92.2.355

Simpson, J., Winterheld, H., Rholes, W., & Oriña, M (2007). Working models of attachment and reactions to different forms of caregiving from romantic partners. *Journal of Personality and Social Psychology, 93*, 466-477. doi:10.1037/0022-3514.93.3.466

Simsek, Z. (2007). CEO tenure and organizational performance: An intervening model. *Strategic Management Journal, 28*, 653-662. doi:10.1002/smj.599

Simsek, Z., Heavey, C., & Veiga, J. (2010). The impact of CEO core self-evaluation on the firm's entrepreneurial orientation. *Strategic Management Journal, 31*, 110-119. doi:10.1002/smj.800

Smillie, L., & Jackson, C. (2006). Functional impulsivity and reinforcement sensitivity theory. *Journal of Personality, 74*, 1-37. doi:10.1111/j.1467-6494.2005.00369.x

Smolewska, K., & Dion, K. (2005). Narcissism and adult attachment: A multivariate approach. *Self and Identity, 4*, 59-68. doi:10.1080/13576500444000218

Spreier, S., Fontaine, M., & Malloy, R. (2006). Leadership run amok: The destructive potential of overachievers. *Harvard Business Review, 6*, 72-82.

Stoessel, B. (2007). "Facets of the self in grandiose and vulnerable narcissism: Implicit self-esteem, explicit self-esteem, and shame". *Electronic Doctoral Dissertations for UMass Amherst.* Paper AAI3275751. Retrieved from: http://scholarworks.umass.edu/dissertations/AAI3275751

Thomaes, S., Bushman, B., de Castro, B., & Stegge, H. (2009). What makes narcissists bloom? A framework for research on the etiology and development of narcissism. *Development and Psychopathology, 21*, 1233-1247. doi:10.1017/S0954579409990137

Thomas, D. (2006). Domain and development of cultural intelligence: The importance of mindfulness. *Group and Organization Management, 31*, 78-99. doi: 10.1177/1059601105275266

Triandis, H. (2006). Cultural intelligence in organization. *Group and Organization Management*, *31,* 20-26. doi:10.1177/1059601105275253

Tracy, J., & Robins, R. (2006). Death of a narcissistic salesman: An integrative model of fragile self-esteem. *Psychological Inquiry, 14*, 57-62. Retrieved from http://ubc-emotionlab.ca/wp-content/images/2006/10/pi-2003.pdf

Tritt, S., Ryder, A., Ring, A., & Pincus, A. (2010). Pathological narcissism and depressive temperament. *Journal of Affective Disorders, 122*, 280-284. doi:10.1016/j.jad.2009.09.006

Trochim, W. & Donnelly, J. (2007). *The research methods knowledge base* (3rd ed.). New York, NY: Thomson.

Trumpeter, N., Watson, P., O'Leary, B., & Weathington, B. (2008). Self-functioning and perceiving parenting: Relations of parental empathy and love inconsistency with narcissism, depression and self-esteem. *Journal of Genetic Psychology, 169*, 51-71. doi:10.3200/GNTP.169.1.51-71

Twenge, J. (2006). *Generation me: Why today's young Americans are more confident assertive, entitled and more miserable than ever before.* New York, NY: Free Press.

Umberson, D., Williams, K., Powers, D., Liu, H., & Needham, B. (2006). You make me sick: Marital quality and health over the life course. *Journal of Health and Social Behavior, 47,* 1-16. doi: 10.1177/002214650604700101

Van Ecke, Y. (2007). Attachment style and dysfunctional career thoughts: How attachment style can affect the career. *Career Development Quarterly, 55*, 339-350. Retrieved from http://www.drvanecke.com/publications

Vazire, S., & Founder, D. (2006). Impulsivity and the self-defeating behavior of narcissists. *Personality and Social Psychology Review, 10*, 154-165. doi:10.1207/s15327957pspr1002_4

Verhofstadt, L., Buysse, A., & De Corte, K. (2007). The influence of personal characteristics and personal properties on social support in marriage. *Psychologica Belgica*, *47*, 195-217. Retrieved from: http://www.uclouvain.be/lesley.verhofstadt

Verhofstadt, L., Buysse, A., Rosseel, Y., & Peene, O. (2006). Confirming the three-factor structure of the Quality of Relationships Inventory within couples. *Psychological Assessment, 18*, 14-21. doi: 10.1016/j.encep.2006.09.001

Verhofstadt, L., Buysse, A., Ickes, W., Davis, M., & Devoldre, I. (2008). Support provision in marriage: The role of emotional linkage and empathic accuracy. *Emotion, 8*, 792-802. doi:10.1037/a0013976

Wall Street Journal Survey of CEO Compensation. (2009, October 12). *Wall Street Journal*. Retrieved from http://graphicsweb.wsj.com/php/CEOPAY09.html

Wanasika, I. (2009). In search of global leadership. *Journal of International Business and Cultural Studies, 1.* Retrieved from http://www.aabri.com/manuscripts/08011.pdf

Ward, M., & Carlson, E. (2008). Associations among adult attachment representations, maternal sensitivity, and infant-mother attachment in a sample of adolescent mothers. *Child Development, 6*, 69-79. doi:10.1111/j.1467-8624.1995.tb00856.x

Wasylyshyn, K. M. (2005). The reluctant president. *Consulting Psychology Journal: Practice and Research, 57*, 57-70. doi:10.1037/1065-9293.57.1.57

Watt, D. (2005). Social bonds and the nature of empathy. *Journal of Consciousness Studies, 12,* 185-209. doi:10.1109/IROS.2010.5650886

Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The Experiences in Close Relationship Scale (ECR)-Short Form: Reliability, validity and factor

structure. *Journal of Personality Assessment*, *88*, 187-204. Retrieved from http://www.psychology.iastate.edu/~wei/manuscript/short%20form.pdf

Wink, P., & Gough, H. (1990). New narcissism scales for the California Psychological Inventory and MMPI. *Journal of Personality Assessment, 54*, 446-463. doi:10.1207/s15327752jpa5403&4_2

Winter, D. (2005). Things I've learned about personality from studying political leaders at a distance. *Journal of Personality, 73*, 557-584. doi:10.1111/j.1467-6494.2005.00321.x

Wright, A., Lukowitsky, M., Pincus, A., & Conroy, D. (2010). The higher order factor structure and gender invariance of the Pathological Narcissism Inventory. *Assessment OnlineFirst, 7.* doi: 10.1177/1073191110373227

Yang, L. (2009). *Narcissistic leadership on organization. (*Master's thesis). Retrieved from ProQuest (Order No. MR56797)

Zeigler-Hill, V. (2006). Discrepancies between implicit and explicit self-esteem: Implications for narcissism and self-esteem instability. *Journal of Personality, 74*, 199-143. doi: 0.1111/j.1467-6494.2005.00371.x

Zeigler-Hill, V., Clark, B., & Pickard, J. (2008). Narcissistic subtypes and contingent self-esteem: Do all narcissists base their self-esteem on the same domains? *Journal of Personality, 76*, 753-775. doi:10.1111/j.1467-6494.2008.00503.x

Appendices

Appendix A: Experiences in Close Relationships-Revised Questionnaire

Experiences in Close Relationships-Revised Questionnaire

Scoring Information: The first 18 items listed below comprise the attachment-related anxiety scale. Items 19-36 comprise the attachment-related avoidance scale. When carrying out the study the order in which these items are presented will be randomized. Each item is rated on a 7-point scale where 1 = strongly disagree and 7 = strongly agree. To obtain a score for attachment-related *anxiety*, please average a person's responses to items 1-18. However, because items 9 and 11 are "reverse keyed" (i.e., high numbers represent low anxiety rather than high anxiety), you'll need to reverse the answers to those questions before averaging the responses. (If someone answers with a "6" to item 9, you will need to re-key it as a 2 before averaging). To obtain a score for attachment-related *avoidance*, please average a person's responses to items 19-36. Items 20, 22, 26, 27, 28, 29, 30, 31, 33, 34, 35, and 36 will need to be reverse keyed before you compute this average.

Generic Instructions: The statements below concern how you feel in emotionally intimate relationships. We are interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement by clicking a circle to indicate how much you agree or disagree with the statement.

Special notes: You may wish to randomize the order of the items when presenting them to research participants. The ordering below is simply a convenient one for illustrating which items belong to which scale. Also, some people have modified the items to refer to "others" rather than "romantic partners." This seems sensible to us, and in our own research we commonly alter the wording to refer to different individuals. For example, sometimes we reword the items to refer to "others" or "this person" and alter the instructions to say something like "The statements below concern how you generally feel in your relationship with your mother" or "The statements below concern how you generally feel in your relationship with your romantic partner (i.e., a girlfriend, boyfriend, or spouse)."

1. I'm afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me.
3. I often worry that my partner doesn't really love me.
4. I worry that romantic partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
6. I worry a lot about my relationships.

7. When my partner is out of sight, I worry that he or she might become interested in someone else.
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
9. I rarely worry about my partner leaving me.
10. My romantic partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes romantic partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my partner.
17. I worry that I won't measure up to other people.
18. My partner only seems to notice me when I'm angry.
19. I prefer not to show a partner how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my partner.
21. I find it difficult to allow myself to depend on romantic partners.
22. I am very comfortable being close to romantic partners.
23. I don't feel comfortable opening up to romantic partners.
24. I prefer not to be too close to romantic partners.
25. I get uncomfortable when a romantic partner wants to be very close.
26. I find it relatively easy to get close to my partner.
27. It's not difficult for me to get close to my partner.
28. I usually discuss my problems and concerns with my partner.
29. It helps to turn to my romantic partner in times of need.
30. I tell my partner just about everything.
31. I talk things over with my partner.
32. I am nervous when partners get too close to me.
33. I feel comfortable depending on romantic partners.
34. I find it easy to depend on romantic partners.
35. It's easy for me to be affectionate with my partner.
36. My partner really understands me and my needs.

From "An item-response theory analysis of self-report measures of adult attachment" by R. C. Fraley, N. G. Waller, & K. A. Brennan, 2000, *Journal of Personality and Social Psychology, 78*(2), 350-365. Public domain.

Appendix B: Pathological Narcissism Inventory

Pathological Narcissism Inventory

Instructions: Below you will find 52 descriptive statements. Please consider each one and indicate how well that statement describes you. There are no right or wrong answers. On the line beside the question, fill in only one answer. Simply indicate how well each statement describes you as a person on the following 6-point scale:

0	1	2	3	4	5
Not at all like me	Moderately unlike me	A little unlike me	A little like me	Moderately like me	Very much like me

___ 1. I often fantasize about being admired and respected.
___ 2. My self-esteem fluctuates a lot.
___ 3. I sometimes feel ashamed about my expectations of others when they disappoint me.
___ 4. I can usually talk my way out of anything.
___ 5. It's hard for me to feel good about myself when I'm alone.
___ 6. I can make myself feel good by caring for others.
___ 7. I hate asking for help.
___ 8. When people don't notice me, I start to feel bad about myself.
___ 9. I often hide my needs for fear that others will see me as needy and dependent.
___ 10. I can make anyone believe anything I want them to.
___ 11. I get mad when people don't notice all that I do for them.
___ 12. I get annoyed by people who are not interested in what I say or do.
___ 13. I wouldn't disclose all my intimate thoughts and feelings to someone I didn't admire.
___ 14. I often fantasize about having a huge impact on the world around me.
___ 15. I find it easy to manipulate people.
___ 16. When others don't notice me, I start to feel worthless.
___ 17. Sometimes I avoid people because I'm concerned that they'll disappoint me.
___ 18. I typically get very angry when I'm unable to get what I want from others.
___ 19. I sometimes need important others in my life to reassure me of my self-worth.
___ 20. When I do things for other people, I expect them to do things for me.
___ 21. When others don't meet my expectations, I often feel ashamed about what I wanted.
___ 22. I feel important when others rely on me.
___ 23. I can read people like a book.
___ 24. When others disappoint me, I often get angry at myself.
___ 25. Sacrificing for others makes me the better person.
___ 26. I often fantasize about accomplishing things that are probably beyond my means.

___ 27. Sometimes I avoid people because I'm afraid they won't do what I want them to do.
___ 28. It's hard to show others the weaknesses I feel inside.
___ 29. I get angry when criticized.
___ 30. It's hard to feel good about myself unless I know other people admire me.
___ 31. I often fantasize about being rewarded for my efforts.
___ 32. I am preoccupied with thoughts and concerns that most people are not interested in me.
___ 33. I like to have friends who rely on me because it makes me feel important.
___ 34. Sometimes I avoid people because I'm concerned they won't acknowledge what I do for them.
___ 35. Everybody likes to hear my stories.
___ 36. It's hard for me to feel good about myself unless I know other people like me.
___ 37. It irritates me when people don't notice how good a person I am.
___ 38. I will never be satisfied until I get all that I deserve.
___ 39. I try to show what a good person I am through my sacrifices.
___ 40. I am disappointed when people don't notice me.
___ 41. I often find myself envying others' accomplishments.
___ 42. I often fantasize about performing heroic deeds.
___ 43. I help others in order to prove I'm a good person.
___ 44. It's important to show people I can do it on my own even if I have some doubts inside.
___ 45. I often fantasize about being recognized for my accomplishments.
___ 46. I can't stand relying on other people because it makes me feel weak.
___ 47. When others don't respond to me the way that I would like them to, it is hard for me to still feel ok with myself.
___ 48. I need others to acknowledge me.
___ 49. I want to amount to something in the eyes of the world.
___ 50. When others get a glimpse of my needs, I feel anxious and ashamed.
___ 51. Sometimes it's easier to be alone than to face not getting everything I want from other people.
___ 52. I can get pretty angry when others disagree with me.

Appendix C: Quality of Relationships Inventory

Quality of Relationships Inventory

Instructions: Please use the scale below to describe your relationship with your spouse:

A – Not at all
B – A little
C – Quite a bit
D – Very much

1. To what extent could you turn to this person for advice about problems?
2. How often do you have to work hard to avoid conflict with this person? .
3. To what extent could you count on this person for help with a problem?
4. How upset does this person sometimes make you feel? .
5. To what extent can you count on this person to give you honest feedback, even if you might not want to hear it?
6. How much does this person make you feel guilty?
7. How much do you have to "give in" in this relationship?
8. To what extent can you count on this person to help you if a family member very close to you died?
9. How much does this person want you to change?
10. How positive a role does this person play in your life?
11. How significant is this relationship in your life?
12. How close will your relationship be with this person in 10 years?
13. How much would you miss this person if the two of you could not see or talk with each other for a month?
14. How critical of you is this person?
15. If you wanted to go out and do something this evening, how confident are you that this person would be willing to do something with you?
16. How responsible do you feel for this person's well-being?
17. How much do you depend on this person?
18. To what extent can you count on this person to listen to you when you are very angry at someone else?
19. How much would you like this person to change?
20. How angry does this person make you feel?
21. How much do you argue with this person?
22. To what extent can you really count on this person to distract you from your worries when you feel under stress?
23. How often does this person make you feel angry?
24. How often does this person try to control or influence your life?
25. How much more do you give than you get from this relationship?

Appendix D: Informed Consent

Consent Form

The Relationship among Vulnerable Narcissism, Adult Attachment Style, and Marital Satisfaction in Upper Echelon Businessmen

This study is being conducted by Cathy Tsang-Feign, a doctoral psychology student at Northcentral University to better understand personality characteristics and relationship satisfaction in upper echelon businessmen.

By identifying yourself as an upper echelon businessman you qualify for participation in the study. Please read this form carefully and ask any questions you have before agreeing to be in the study.

Procedure

You will be asked to complete three questionnaires to understand more about your personality and relationship style. The questionnaires will be available for completion using secure online survey software. Completion time is approximately 30-45 minutes. After questions are completed and submitted, you will be finished participating in the study.

Risks and Benefits of Being in the Study

It is anticipated that this study offers no significant risk to participants. Should you feel uncomfortable at any time or simply wish to leave the study, you may do so at any time without consequence.

If you find that, for any reason, by participating in this study you would like to consult a counselor or mental health professional please contact Dr. Desmond Fung, psychiatrist. Phone number: (852) 2868-9393.

Your participating in this study is a contribution to the mental health profession. The findings will hopefully enable mental health practitioners to provide better support, treatment or preventive measure to businessmen and their families. At the same time, your contribution will also help business organizations to be more informed and to support their executives at large.

Confidentiality

You will answer all questions in this study through SurveyMonkey, a secure website that ensures confidentiality for study participants. You will be provided with an identification number and password, and your real name and other identifying data will not be reported on the website or in the researcher's dissertation.

Information from this study will be used for educational purposes only, primarily for the researcher to complete her doctoral dissertation. Your information will remain anonymous. Your answers, in anonymous form, will be shared only with this researcher, this researcher's dissertation committee.

After all information is gathered and analyzed from participants, questionnaire data will be deleted from SurveyMonkey.

Voluntary Nature of the Study

Participation in this study is entirely voluntary, and you may elect to discontinue at any time without consequences.

At the end of the study, you will be told when study results may be available and how you can find out about them.

Contacts and Questions

If you have questions before or after completing the survey, you may contact Cathy Tsang-Feign at e-mail address: cathy@cathyfeign.com, or Faculty Mentor Kathleen Barclay, PhD at email address: kbarclay@ncu.edu

You may want to print a copy of this form to keep for your records.

Statement of Consent

I have read the above information.

Please select the appropriate response and click Continue.

( ) I consent to participate in the study.

( ) I do not consent to participate in the study

Note: This form appears on the first page of the online survey web site.

Appendix E: Job Titles Qualifying as Upper Echelon Businessmen

Job Titles Qualifying as Upper Echelon Businessmen

Chief executive officer (CEO), Chief Financial Officer (CFO), Managing Director (MD), Partner of an organization, Corporate Lawyer, Senior Executive, Senior Lawyer, President of an organization, Senior Banker, Senior Investment Banker, Human Resources Director, Senior Sales Director, Fund Manager, Regional Manager.