The Relationship Between Patterns of Relating and Academic Self-Concept

Ji Woong Yang

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THE RELATIONSHIP BETWEEN PATTERNS OF RELATING AND

ACADEMIC-SELF CONCEPT

A Dissertation
presented in partial fulfillment of requirements
for the degree of Doctor of Philosophy
in the Department of Leadership and Counselor Education
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by

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ABSTRACT

The purpose of this study was to explore the relationship between patterns of relating to both parents and academic self-concept. Also, this study examined the differences between academically high-achieving college students and academically at-risk college students in patterns of relating and academic self-concept. One hundred sixty one college students participated in this study. Of the 161 participants, 90 were recruited from an academic support program and 71 were recruited from an honors college. Participants completed a research packet including the Adult Scale of Parental Attachment (Snow et al., 2007), Self Description Questionnaire III (Marsh, 1992), and the Demographic Questionnaire. Results showed that there are significant correlations between patterns of relating and academic self-concept. Specifically, fearful and distant patterns of relating to mother are negatively correlated with academic self-concept. A dependent pattern of relating to father was negatively correlated with academic self-concept. Also, the results of this study indicated that there are differences between academically high-achieving college students and academically at-risk college students in patterns of relating and academic self-concept. The implications of this study, limitations, and suggestions for future research are discussed.
DEDICATION

First of all, I thank God who guided, guides, and will guide me throughout my whole life. I thank my wife, Su Young, who loves and believes me. I also thank my parents who are always responsive to me and make me feel safe. I am grateful to both of you for providing me with unconditional support.
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In addition, I would like to thank my family for their love and support. Specially, my children, Meena and Meenu, they are my greatest treasures and pleasure.

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CHAPTER I

INTRODUCTION

Introduction

Attachment theory has received growing research attention because it has extensive implications for personality development and adjustment throughout the life span. Indeed, research indicates that the quality of early childhood experiences of parental attachment can be a predictor of adjustment (Belsky, 2002; Urban, Carlson, Egeland, & Sroufe, 1991).

Recent research has focused on the association between academic achievement and attachment (Jacobsen, Edelstein, & Hofmann, 1994; Larose, Bernier, & Tarabulsy, 2005; Moss & St. Laurent, 2001). Consistent results have been reported from such studies. In other words, secure attachment style is positively correlated with high academic performance. In particular, Jacobsen et al. (1994) suggested that securely attached children have higher grades in school due to their higher levels of confidence and self-worth in contrast to their insecurely attached peers. Larose et al. (2005) reported that students having secure attachment perform better in college because they have better learning dispositions. Moss and St. Laurent (2001) found that early attachment representations by age of 6 years predicted academic performance as early as age of 8 years. Securely attached children had higher scores on communication, cognitive engagement, and mastery motivation as compared with insecurely attached children. As shown above, researchers have been trying to identify a mediating variable that can explain the positive correlation between attachment and academic achievement. However, because the connection
between academic performance and attachment is a relatively recent topic, just a few mediating variables were identified such as self-confidence and learning disposition (Jacobsen et al., 1994; Larose et al., 2005). Because of the fact that insecurely attached students perform worse academically than their securely attached peers, finding the concepts or variables to link between academic achievement and attachment is important in understanding and supporting academically at-risk students.

Early attachment experiences with caregivers form an internal working model (IWM) that sets the patterns of relating and expectations in later relationships (Rothbard & Shaver, 1994). IWM incorporates a view of the self as loveable or unloveable and a perspective of others regarding whether others are likely to meet an individual’s needs or not. These internal working models function as templates, influencing individuals’ behaviors and thoughts (Rothbard & Shaver, 1994).

In attachment theory, the representational model of the attachment figure is highly interdependent with the representational model of the self (Bowlby, 1969/1988). Given that the child’s primary source of learning about the self is the attachment figure, interactions with the attachment figure are most important in forming a child’s self-concept. Internal working models of self and the attachment figure are interdependent (Bretherton, 1990). If the child experiences a supportive relationship with the attachment figure, the internal working model of the self as loveable could emerge. If the child experiences an unresponsive relationship with the attachment figure, then the internal working model of the self as not deserving of support could emerge. Therefore, it is hypothesized that parental attachment is highly connected with constructing self-concept.
Academic self-concept is a construct that represents an individual’s own beliefs concerning academic capabilities and aptitudes (Bong & Skaalvik, 2003; Cokley, Komarraju, King, Cunningham, & Muhammad, 2003). It is a cognitive and affective variable that has a direct connection with academic achievement (Cokley, 2000; Guay, Marsh, & Boivin, 2003; Marsh, Trautwein, Ludtke, Koller, & Baumert, 2005). It was generally believed that academic self-concept influences academic achievement (Shavelson & Bolus, 1982). However, recently, the direction of influence has been challenged as research results revealed a reciprocal relationship between academic self-concept and academic achievement (Guay et al., 2003; Marsh et al., 2005). Given this reciprocal relationship between academic self-concept and academic achievement, it follows that both concepts need to be better understood, including the variables affecting each one.

Although both patterns of relating and academic self-concept are related to academic achievement, there is little research on how these two can be connected to provide a clearer explanation of academic achievement of college students. Two instruments were utilized in this study. The Adult Scale of Parental Attachment (Snow et al., 2007) was used to identify patterns of relating. To measure academic self-concept, Self-Description Questionnaire III (Marsh, 1992) was used.

Research Questions

The first goal of this study was to explore the relationships between patterns of relating and academic self-concept in a college student population. The second goal of this study was to examine whether there are differences between academically high-achieving college students and academically at-risk college students in academic self-concept and patterns of relating. The
following research questions were made to address the goals.

1. Are there relationships between the subscales of the Adult Scale of Parental Attachment (ASPA) and the academic self-concept subscales of the Self-Description Questionnaire III (SDQ III)?

2. Are there differences between academically high-achieving college students and academically at-risk college students in patterns of relating?

3. Are there differences between academically high-achieving college students and academically at-risk college students in academic self-concept?

Definitions of Terms

Attachment: refers to an emotional bond between an infant and a primary caregiver. It can influence personality development and adjustment throughout the life span (Bowlby, 1988; Belsky, 2002). For the purpose of this study, the Adult Scale of Parental Attachment (Snow et al., 2007) was used to identify five patterns of relating with mother and father.

Safe pattern: refers to “the extent to which the child felt the relation provided comfort and security. A child with a safe pattern of relating may have experienced confidence in the parent’s availability and support” (Snow et al., 2007, p. 10).

Dependent pattern: refers to “the extent to which the child felt a need for the parent to be available. A child with a dependent pattern of relating may have experienced helplessness and uncertainty when the parent was not available” (p. 10).

Parentified pattern: refers to “the extent to which the child felt responsible for meeting the parent’s needs. A child with a parentified pattern of relating may have experienced feelings of importance and enjoyed being helpful” (p. 10).
**Distant pattern:** refers to “the extent to which the child experienced disappointment in the parent’s support and availability. A child with a distant pattern of relating may have experienced a need to distance from the parent and may have experienced anger toward the parent” (p. 10).

**Fearful pattern:** refers to “the extent to which the child experienced a fear of abandonment and a belief that the parent would not be available for support. A child with a fearful pattern of relating may have experienced anger toward the parent or frustration with the parent” (p. 10).

**Academic Self-Concept:** refers to the extent that students have confidence and pride in their academic work (Byer, 2002). Academic self-concept also refers to beliefs that students have in their own academic capabilities and aptitudes, especially when comparing themselves with others (Bloom, 1976; Bong & Skaalvik, 2003).

**Academically at-risk college students:** refers to the students who are faced with a risk to fail in graduating from a university due to their academic deficiency such as course failure (Tinto 1993). In this study, this is a label that indicates college students who are returning from academic dismissal or suspension and currently enrolled in an academic support course.

**Academically high-achieving college students:** are often described as bright, curious, intelligent, motivated, and driven to accomplishment (Davis & Rimm, 2004). Several studies define academically high-achieving college students as those who participate in honors program or maintain a high grade point average (Feagin, Vera, & Imani, 1996; Fries-Britt, 1998). In this study, this is a label that indicates college students who are current members of a university honors program.

**Conceptual Framework**

Attachment, which formed during infancy, continually influences later relationships and
development. An infant develops patterns of relating with a primary caregiver, and these patterns develop representational models. These representational models develop into an internal working model (IWM) that provides a framework for perceptions and expectations of self and others. Interestingly, research has shown there is a relationship between attachment and academic achievement (Jacobsen & Hofmann, 1997; Moss & St. Laurent, 2001).

Consistent with an IWM of self, literature suggests that self-concept is influenced by experiences with attachment figure (Marsh, Byrne, & Shavelson, 1992). Academic self-concept is a subconstruct of self-concept. It refers to the self-perception of academic capabilities and aptitudes (Bong & Skaalvik, 2003). Research suggests that there is a relationship between academic self-concept and academic achievement, and the relationship is reciprocal (Guay et al., 2003; Marsh et al., 2005).

Statement of Significance

Because academic achievement is an integral part of an adolescent development and adult adjustment, it is important to understand the relationship between patterns of relating and academic achievement. Also, it seems vital to explore the relationship between patterns of relating and self-concept because learning about the self in early childhood occurs mostly within the context of relationships (Feiring & Taska, 1996).

This study attempted to examine how patterns of relating and academic self-concept are correlated, and how these two constructs influence academic achievement by comparing academically high-achieving college students and academically at-risk college students. This study is unique because most studies on attachment or academic self-concept have been conducted with children or adolescents, and few studies examined the relationship between
patterns of relating and academic self-concept.

The findings of this study will be crucial to counselors and researchers by providing more extensive perspectives in understanding academically at-risk students. Also, this study can contribute to college academic support services by presenting the relationship between the two psychological constructs and academic achievement.

Statement of Limitations

First, data was collected in only one university in the midsouth United States, which limits the generalizability to other academic settings. Second, participants were voluntarily involved in this study so there could be certain characteristics to influence the results. Third, this study was restricted to only two instruments. Thus, it is possible that certain constructs have not been assessed.

In addition, Self-Description Questionnaire III (SDQ III) consists of eight non-academic self-concept subscales, four academic self-concept subscales, and one general self-concept. This study used only the academic subscales of SDQ III, thus partial use of the instrument may affect the validity and reliability of this instrument.

Overview

This study is presented in five chapters. In chapter II, the researcher provides a review of the literature regarding attachment theory, academic self-concept, and relationship between academic achievement and both constructs. Chapter III includes a review of the ASPA and the SDQ III, and describes research procedure and statistical analysis of data. Chapter IV demonstrates the results. Finally, findings, implications, and suggestion for further research are addressed in Chapter V.
CHAPTER II
REVIEW OF LITERATURE

Attachment experience with primary caregiver(s) during the infancy and self-concept are theoretically related. Attachment and self-concept have important implications in development and adjustment. In this chapter, attachment theory and academic self-concept, that is the subconstruct of self-concept, are reviewed. Specifically, literature on the relationship between these two constructs and academic achievement were reviewed.

Attachment Theory

Attachment theory was developed to explain the relationship between an infant and the primary caregiver (Bowlby, 1969/1982). The theory provides meaningful concepts that are potentially valuable to mental health professionals. It describes why infants’ experience of relationships with caregivers is very important, how such patterns of relationships develop from one’s first experiences of caregiving, and what kinds of basic patterns of relating to others are formed.

According to Bowlby (1969/1982), infants are born with a set of behaviors to assure proximity to supportive others who are likely to provide protection from dangerous situations, and help the infants regulate their feelings of distress, enabling them to experience a sense of felt security. The infant’s proximity-seeking behaviors are innate for survival and increase a sense of felt security (Sroufe & Waters, 1977). Thus, when a threat is perceived, infants will seek contact with their primary caregiver. If the caregiver is not available or is insufficiently responsive, then
the infant is likely to experience distress. If the caregiver is available and responsive, then contact should help to reduce distress and to restore a sense of felt security. Thus, infants develop patterns of relating with their caregivers, and these patterns develop into mental representations. These representational models develop into a cognitive model, termed the internal working model (IWM) that includes information about whether attachment figures will be available and responsive. The IWM develops a sense of self and self and others. Secure patterns of relating with attachment figures during infancy influence individual’s schemas about social interactions, a sense of self-worth, and regulation of distress (Bowlby, 1988; Sroufe, 1988; Verschueren, Marcoen, & Schoefs, 1996). In other words, the IWM serves as a guide for future relationships and a tool for interpreting the world. According to Bowlby (1988), internal representations are a principal means by which early experiences influence later development and outcome. A child who has experienced supportive parents is likely to develop an internal representation of others as helpful and responsive, as well as a model of the self as worthy of respect and care. A child with secure representations is thus more likely to approach new experiences with confidence and trust. In contrast, children who have insecure attachment representations might be more vulnerable in approaching new situations because they lack confidence in their sense of self and others.

Although Bowlby focused on the operation of the attachment during infancy and childhood, he viewed the attachment as enduring over the lifespan (Bowlby, 1988). Like infants, when adults become distressed in the face of danger, they may seek out an attachment figure in an attempt to regain a sense of felt security (Simpson & Rholes, 1994; Sroufe & Waters, 1977). In adulthood, close friends or romantic partners can be objects of proximity-seeking. Also,
teachers or advisors in academic settings can be sources of security or support (Mikulincer & Shaver, 2004). Through a sense of felt security, one can explore the environment, depend on others for support, and engage in social activities without distress (Mikulincer & Shaver, 2004).

Hazan and Shaver (1987) elaborated on Bowlby’s original theory by conceptualizing adult romantic relationships as attachment bonds governed by processes similar to those that occur in infant-caregiver relationships. Thus, romantic partners may seek out each other in times of distress, and they may help or hinder each other’s efforts to regulate distress. Adults also hold an IWM of their romantic attachment relationships, and these models may include experiences with earlier attachment relationships as well as attachment figures in adulthood (e.g., romantic partners). Hazan and Shaver classified individual differences in adult attachment styles, which are based on Ainsworth and her colleagues’ (Ainsworth, Blehar, Waters, & Wall, 1978) findings.

Ainsworth and her colleagues (1978) defined three different patterns of attachment in infancy using the Strange Situation experiment. According to Ainsworth et al., caregivers who respond positively, sensitively, and predictably to their infants’ needs will provide a secure environment in which infants learn that they are taken care of and they have control over their environment. Such individuals will develop a secure attachment pattern. Children identified as securely attached were generally positive in their interactions with the primary caregiver. Secure attachment patterns provide a base from which children can successfully explore the world and increase a sense of self-worth (Bowlby, 1988; Irons, Gilbert, Baldwin, Baccus, & Palmer, 2006; Krause & Haverkamp, 1996). In adulthood, such individuals can be characterized by comfort with close relationships and self-confidence (Hazan & Shaver, 1987).

When caregivers are constantly unresponsive to or reject their infants’ needs, their
infants have difficulty in trusting others. Such infants will learn to avoid depending on others. This pattern is known as an avoidant attachment pattern (Ainsworth et al., 1978). A child with avoidant attachment pattern is likely to stay away from the parent. This child has little tendency to seek out comfort or contact from parents. The avoidantly attached adults demonstrate discomfort with closeness and intimacy. These individuals are likely to be unable to share feelings with others. They tend not to pay attention to others’ feelings in relationships and fail to support partners during stressful times (Hazan & Shaver, 1987).

If caregivers are inconsistent, entangled, and preoccupied in how they respond to infants’ needs, then their infants will not learn how to modulate their emotional responses. This group of children can be characterized by a restraint of exploration and a delay in development (Lieberman & Pawl, 1993; Sroufe, 1988). In adulthood, such people show an excessive concern with closeness and worry that partners may leave. Such individuals feel they have little control over their lives and relationships. They tend to blame others for what happens to them. They tend to over-predict danger and are unable to explore their environment productively. This attachment pattern is known as anxious-ambivalent attachment (Ainsworth et al., 1978).

Attachment representations that start from infancy may continue into adulthood behaviorally and affectively. Bartholomew and Horowitz (1991) conceptualize attachment styles using anxious attachment and avoidant attachment dimensions. Anxious attachment relates to an internal working model (IWM) of the self in relationships. Those who have high levels of anxious attachment tend to worry about being unloved, to experience negative emotion, and to have a low self-concept. Avoidant attachment relates to an IWM of others in relationships. People with high levels of avoidant attachment tend to deny the need for close relationships, to
avoid intimacy, and to consider others as inaccessible.

Despite early work on these three attachment styles, further research has tried to identify attachment styles more clearly (Main & Solomon, 1990; West & Sheldon-Keller, 1994). In addition to two insecure attachment styles, Main and Solomon proposed disorganized attachment as a third insecure attachment style. A child who has disorganized attachment style may experience an abusive or neglectful parent and demonstrate both avoidant and ambivalent insecure attachment patterns.

West and Sheldon-Keller (1994) have conceptualized individual differences with five patterns of relating: Secure, Compulsive self-reliance, Compulsive care-giving, Compulsive care-seeking, and Angry withdrawal. While existing attachment styles developed by Ainsworth et al. (1978) and Main and Solomon (1990) are identified in early childhood, West and Sheldon-Keller identified patterns of relating beyond childhood. In order to more delineate these patterns of relating, Snow et al. (2007) developed the Adult Scale of Parental Attachment (ASPA). Snow et al. identified five patterns of relating with mother and father: Safe, Dependent, Parentified, Distant, and Fearful.

The Safe pattern is seen in individuals who had a consistently responsive caregiver in times of need. These individuals received consistent love and care, and they are comfortable with close relationships and able to rely on others at times of stress. Snow et al. (2007) explain that “a child with a safe pattern of relating may have experienced confidence in the parent’s availability and support” (p. 10). Individuals who have a safe pattern of relating may recall their parents as warm and caring and demonstrate self-confidence in times of distress (Irons et al., 2006). Therefore, patterns of relating may influence self-concept in times of distress. The Safe pattern is
typically similar to West and Sheldon-Keller’s Secure pattern. The individuals who have this pattern show low anxious attachment and low avoidant attachment in Bartholomew and Horowitz’s description on working models of self and others.

“A child with a Dependent pattern of relating may have experienced helplessness and uncertainty when the parent was not available” (Snow et al., 2007, p, 10). Overprotective parents can implicitly make their children feel that they are not able to take responsibilities for themselves. It suggests the children may have negative self-concept (Irons et al., 2006). The Dependent pattern of relating is similar to West and Sheldon-Keller’s Compulsive care-seeking pattern. It can be characterized by constant anxiety about losing an attachment figure. The individual with this pattern shows frequent care-seeking behaviors to confirm security with the attachment figure, and has high anxious attachment and low avoidant attachment in Bartholomew and Horowitz’s dimensions.

The individuals who show a Parentified pattern place a priority on the needs of others. Snow et al. explains that “a child with a parentified pattern of relating may have experienced feelings of importance and enjoyed being helpful” (p, 10). They always try to provide care whether or not requested in close relationships. Bowlby (1977) assumed that the individual having this pattern has been forced into caring for a parent or sibling during childhood, and as a result, losing themselves to others. Individuals who consistently and solely focused on others’ needs are likely to disregard their own needs (West & Sheldon-Keller, 1994). The Parentified pattern of relating corresponds to West and Sheldon-Keller’s Compulsive care-giving pattern. Also, the individual with this pattern of relating has high anxious attachment and low avoidant attachment in Bartholomew and Horowitz’s dimensions.
The individuals who have a Distant pattern of relating place self-sufficiency as a core in living their lives. They tend to avoid turning to attachment figures for help and avoid closeness to prevent the experience of rejection. Snow et al. (2007) explain that “a child with a distant pattern of relating may have experienced a need to distance from the parent and may have experienced anger toward the parent” (p, 10). Children who experienced constant unresponsiveness of the parent feel loneliness and rejection (West & Sheldon-Keller, 1994). Therefore, they develop negative views of others and rely on self in order not to seek care from others. This pattern of relating corresponds to West and Sheldon-Keller’s Compulsive self-reliance pattern. The individuals with this pattern tend to avoid seeking attachment figures for care. These individuals have low anxious attachment and high avoidant attachment in Bartholomew and Horowitz’s dimensions.

The children with a Fearful pattern of relating may experience a fear of abandonment and have anger toward the parent (Snow et al., 2007; West & Sheldon-Keller, 1994). The children with this pattern perceived their attachment figure as inaccessible in times of threat. Because of inaccessibility of the parent, the children fail to feel secure and regulate fear (Bowlby, 1988; Cassidy, 1999). As adults, these individuals demonstrate negative reactions to the attachment figure due to perceived lack of responsiveness. This pattern of relating corresponds to West and Sheldon-Keller’s angry withdrawal pattern. The individual with this pattern tends to have a poor view of others and also a poor view of self in Bartholomew and Horowitz’s dimensions. Clearly, attachment influences relationships and a view of self.

*Attachment and Self-Concept*

According to Shavelson, Hubner, and Stanton (1976), self-concept is a person’s
perception of self. Research has supported a link between an individual’s self-concept and expectations about the responsiveness and availability of attachment figures (Bartholomew & Horowitz, 1991; Collins & Read, 1990; Hazan & Shaver, 1987). Research reveals that securely attached individuals show higher self-esteem than insecurely attached individuals (Collins & Read, 1990). As shown above, Bartholomew and Horowitz identified four styles of attachment using a combination of positive versus negative with a model of self and a model of others. In this classification, individuals who have secure or dismissing attachment styles demonstrate higher self-esteem than individuals with preoccupied or fearful attachment styles (Griffin & Bartholomew, 1994). In terms of Bartholomew and Horowitz’s combinations of working models of self and others, the anxiety dimension is related to a negative model of self and the avoidance dimension is connected with a negative model of others. Consistent with attachment theory regarding IWM of self, Marsh, Byrne, and Shavelson (1992) suggested that self-perceptions are developed through experience with significant others and the environment. Marsh et al. pointed out that self-concept is an important and useful construct in explaining and predicting the behaviors (in both aspects of actions and thoughts) of individuals. However, only a few studies have been conducted using the self-concept construct and its influence on a college student population.

Academic Self-Concept and Academic Achievement

Academic self-concept refers to attitudes and beliefs that students possess with regard to their own academic and intellectual skills, capabilities, and aptitudes, especially when comparing themselves with others (Bloom, 1976; Bong & Skaalvik, 2003). Academic self-concept also refers to the extent to which an individual feels that success within an academic context is both
possible and personally meaningful (Byer, 2002). It is an important motivation-related variable that is influenced by students’ prior academic experiences and by students’ perceptions of classroom social climates. The construct, therefore, is a past-oriented variable that represents overall perceptions of the self within the academic domain (Bong & Skaalvik, 2003). The construct also clearly incorporates the affective domain and consequently provides a cognitive and affective appraisal of self. Positive academic self-concept lead students to set challenging yet attainable academic goals for themselves, feel less anxious in achievement settings, enjoy their academic work more, persist longer on difficult tasks, and, overall, feel better about themselves as a person and as a student (Bong & Skaalvik, 2003).

The connection between academic self-concept and academic achievement is well established. Calsyn and Kenny (1977) found that academic self-concept was an important determinant of academic achievement. Mboya (1986) found a significant relationship between self-concept of academic ability and academic achievement in a study of 211 African-American adolescents. The same findings resulted when the study was replicated three years later with 229 tenth-grade students in a United States Pacific Northwest school district (Mboya, 1989). Akey (2006) found that perceived academic competence strongly predicted improved reading and mathematics achievement utilizing longitudinal data from the respective subtests of the Stanford Achievement Test (SAT). House (2000) found that student’s self-beliefs, specifically related to attitudes toward science, were strongly related to science achievement for males and females in a large sample of 5,881 students (2,729 males and 2,852 females) from the Third International Mathematics and Science Study (TIMSS). House (1992) also demonstrated a significant relationship between academic self-concept and the withdrawal status of students at college.
students level. Clearly, there is a relationship between academic self-concept and academic achievement from a research perspective. Furthermore, recent studies indicate that the relationship between academic self-concept and academic achievement is reciprocal. For example, in several studies (Guay et al., 2003; Marsh, 1990; Marsh et al., 2005), it was determined through a reciprocal effects model that academic self-concept is both a cause and an effect of academic achievement. Specifically, the results in Marsh et al. (2005) indicated that academic self-concept predict academic achievement beyond what can be explained by grades, standardized test results, and even academic interest. In addition, Guay et al. (2003) found that as students grew older the relationships between academic self-concept and academic achievement grew more reliable, stable and more strongly correlated.

Attachment and Academic Achievement

Sroufe (1988) suggested that attachment could be related to a number of aspects of school adjustment. Similarly, some studies have shown that positive perceptions of self and others through attachment relationships with parents are related to some indicators of psychosocial adjustment, such as perceptions of social support (Larose & Boivin, 1998) and school adjustment (Papini & Roggman, 1992). According to Duchesne and Larose (2007), adolescents’ attachment to both parents was positively related to perceptions of teacher support and academic motivation. Also, Jacobsen and Hofmann (1997) argued that the quality of attachment was significantly related to academic achievement in adolescence, specifically secure attachment pattern was significantly associated with GPA. In contrast, poor relationships between parent and child have been identified as potential risk factor for low academic achievement (Finn, 1989).
Findings from several studies can help explain the mechanisms through which attachment may be related to academic achievement in childhood and beyond. Securely attached preschoolers engage in more spontaneous reading (Bus & van IJzendoorn, 1988), whereas insecurely attached toddlers are less enthusiastic, less effective, and show less endurance during a challenging task than their securely attached counterparts (Matas, Arend, & Sroufe, 1978). Grossmann, Grossman, and Zimmerman (1999) observed that 3-year-olds who had insecure attachment patterns became less efficient at problem solving when faced with a possible failure, whereas the former securely attached children were more efficient at problem solving. Further, Meins (1997) found that securely attached children showed superior search behavior at 1 year old, larger vocabularies at 19 months, and were more likely than their insecurely attached peers to pass a test assessing understanding of others’ minds at 4 years. According to Jacobsen, Edelstein, and Hofmann (1994), securely attached children consistently did better than their insecurely attached peers, even when controlling for IQ and attention problems.

Teo, Carlson, Mathieu, Egeland, and Sroufe (1996) found associations between attachment in infancy and academic performance during adolescence, whereas Moss and St. Laurent (2001) reported relations between 6-year-old attachment behaviors and school achievement at age of 8. Further, Jacobsen and Hofmann (1997) found that children who were securely attached at age of 7 got higher school grades than insecurely attached ones from ages 7 to 17, whereas Bernier, Larose, Boivin, and Soucy (2004) reported that an insecure-preoccupied attachment pattern is related to the rate of dropout school during the transition from high school to college. Moss and St. Laurent (2001) suggested that secure attachment pattern is associated with an ability to meet the academic demands of school. Positive internal working model of the
self, derived from a secure attachment relationship, may encourage the development of the child’s motivation and perceived competence. These results support the assumption that there is a positive association between secure attachment and academic achievement. Jacobsen and Hofmann (1997) further reported that securely attached children show greater attention and participation in class and that these positive behaviors in school partially account for the relation between attachment and achievement.

Secure attachment pattern is associated with an ability to meet the academic performance more than insecure attachment patterns, at least in the elementary school period (Jacobsen & Hofmann, 1997; Moss & St. Laurent, 2001). On the basis of those studies, it could be assumed that differences in academic achievement among college students occur because the representational models of attachment with primary caregivers are likely to be maintained over time (Andersson & Stevens, 1993; Bowlby, 1988; Main, Kaplan, & Cassidy, 1985; West, Sheldon, & Reiffer, 1989). However, there is little research on the relationships between attachment and academic achievement of college students. Research on academically at-risk college students and academically high-achieving college students in terms of attachment will produce useful information to understand and help at-risk college students.

*Academically At-risk Students*

Several researchers have focused on at-risk students; however, there is inconsistency with respect to how these studies have defined at-risk students. Noel and Levitz (1985) define academically at-risk students as those students with characteristics that place them at a disadvantage with the academic skills needed to be successful in college. The measurable characteristics associated with under-prepared students include poor academic performance, low
standardized test scores, low socioeconomic background, race, gender, and rate of
persistence/withdrawal from college. Less distinguishable characteristics include lack of
motivation, low self-esteem, poor self-concept, undefined goals, and being educationally
disadvantaged (Noel & Levitz, 1985).

Waterhouse (1978) defines the academically at-risk student as being

> Unsure of themselves; needing success - cognitive and/or affective; needing financial
  assistance; needing tutoring and basic skill development; possessing minimal knowledge
  of career and educational opportunities and skills related to taking advantage of both;
  and needing to feel comfortable within the learning environment (p. 39).

One should be careful not to be misled by these characteristics as not all academically at-risk
students fit these characteristics, nor are all of them lower socioeconomic class. Similarly, they
are not all poor achievers in high school, or culturally or educationally disadvantaged.

Because the college setting is a new and unfamiliar environment, many students have
little idea of what to expect from college, and they are not aware of what they are supposed to do
in college (Colton, Connor, Easter, & Shultz, 1999). If these students have a difficult time
identifying and connecting with the academic and social support systems within the university,
poor academic achievement and eventual withdrawal can be the results (Tinto, 1993).

Historically, researchers have tried to identify at-risk students using measures such as
high school GPA, ACT, or SAT scores (Witherspoon, Long, & Chubick, 1999). Several studies
(Abrams & Jernigan, 1984; Nisbet, Ruble, & Schurr, 1982; White & Sedlacek, 1986) have found
student’s educational aspirations, social integration skills, leadership potential, and positive self-
concept regarding academic aptitude predict an academically at-risk student’s potential to be
successful better than traditional predictors (e.g., high school GPA, ACT, SAT). With high-risk
students, Nisbet et al. (1982) found that their own perception of their ability contributed more to
their success than did past academic performance.

Other research (Abrams & Jernigan, 1984) has shown that the variables involved in the success of at-risk students are the willingness to seek assistance with their studies and to make contacts with their tutor. Research by Kennedy, Sheckley and Kehrhahn (2000) found that college persistence was not linked to pre-college variables (e.g., SAT and high school class rank), rather it is related to personal factors such as goal commitment and intentions.

This study aims to investigate, as personal factors, patterns of relating to both parents and academic self-concept in order to understand and support college students. This study also explored the differences between academically high-achieving college students and academically at-risk college students in patterns of relating to both parents and academic self-concept.

Summary

Patterns of relating form as a result from the early childhood experiences with primary caregivers and influence development and adjustment throughout the life. Academic self-concept represents perceptions of self within the academic domain. Although patterns of relating and academic self-concept were studied with children or adolescents, there is little research on both constructs for college students. Therefore, it is needed to explore on how these two are related among college students. In the next chapter, participants, the instruments, procedures, data analysis utilized in this study are discussed.
CHAPTER III
METHODOLOGY

This study investigated the relationship between patterns of relating and academic self-concept. The study also compared academically high-achieving college students and academically at-risk college students in terms of their patterns of relating and academic self-concept.

The previous chapters provide the introduction of this study and a review of relevant literature including patterns of relating and academic self-concept. This chapter includes information of the participants, instruments, procedures, and data analysis.

Participants

The participants consisted of full time undergraduate students from a mid-south public university. The participants included 74 male, 80 female college students, and 7 students did not identify their gender. Participants’ range of age was from 19 to 37, with a mean age of 21.85. The participants consisted of 83% Caucasians, 10% African Americans, 1% Hispanics, 2% Asians, 3% representatives of other ethnic group, and 1% unknown. With regard to their school year, 16% of participants were sophomore, 32% were junior, and 52% were senior. These participants were recruited from two academic-related programs. One group of participants attended an honors college program due to their academic success and the other group of participants was enrolled in an academic support program due to their academic problems.
Instrumentation

The participants was given the Adult Scale of Parental Attachment (ASPA) developed by Snow, Martin, Wolff, Stoltz, Helm, and Sullivan (2007) and the Self Description Questionnaire III (SDQ III) developed by Marsh (1992). Also, all participants were asked a demographic questionnaire to gather demographic information.

The Adult Scale of Parental Attachment (ASPA). The ASPA is an 84-item self-report instrument to assess adult’s perception of early experiences with both mother and father figures based on childhood memories (Snow et al., 2007). The ASPA is scored on a 5-point Likert scale with the following choices: never (1 point), seldom, sometimes, frequently, and constantly (5 points). The ASPA is divided into two parts. The first 42 items are about the respondent’s perception of relationship with mother figure in childhood (e.g., “My mother seemed to notice me only when I was angry,” “My mother was always disappointing me”). The next 42 items are about the respondent’s perception of relationship with father figure in childhood (e.g., “I was afraid I would lose my father’s love,” “I was helpless without my father”).

Most self-report instruments on attachment are mainly focused on mother-child relationships and measure adult attachment style based on current relationships (Snow et al., 2007). Therefore, the ASPA is meaningful in exploring patterns of relating to both mother and father figures based on childhood experiences.

Through a factor analysis, five patterns of relating were found as described in chapter II. Snow et al. (2007) reported acceptable levels of internal reliability and good discriminant validity. Cronbach’s alpha coefficients for the subscales of the mother are following: Safe = .92; Dependent = .72; Parentified = .75; Fearful = .81; and Distant = .83. Cronbach’s alpha
coefficients for the subscales of the father are following: Safe = .92; Dependent = .65; Parentified = .81; Fearful = .84; and Distant = .88. The results of the correlation between the ASPA and the Unwanted Sexual Experiences Questionnaire (USEQ) show discriminant validity by revealing several significant relationships.

Self Description Questionnaire III (SDQ III) The SDQ III is the third questionnaire in a series that is developed to measure multiple dimensions of self-concept in pre-adolescents (SDQ I), adolescents (SDQ II), and late adolescents and young adults (SDQ III). The SDQ III is a 136-item self-report instrument that consists of four academic self-concept subscales (math, verbal, general academic, and problem solving), eight non-academic self-concept subscales (physical ability, physical appearance, relations with same sex, relations with opposite sex, relations with parents, religion/spirituality, honesty, and emotional stability), and one general self-concept subscale (Marsh, 1992). The respondents respond on an 8-point Likert scale with the following choices: definitely false (1 point), false, mostly false, more false than true, more true than false, mostly true, true, and definitely true (8 points).

Reporting on the basis of the full set of responses comprising the normative sample (N=2,436), Marsh (1992) stated internal consistency reliability. Coefficient alphas for the 13 factors ranged from .76 to .95 (median=. 89). For the purpose of this study, four academic self-concept subscales will be used. Cronbach’s alpha coefficients for the academic self-concept subscales are following: Math = .94; Verbal = .86; General Academic = .92; Problem Solving = .84. Validity evidence is provided by factor analysis and correlations with external criteria. Factor analysis indicates factor loadings ranging from .47 to .81 on the academic self-concept subscales. In addition, Marsh and O’Neill (1984) reported that there is correlation between the plans to attend
college and the academic self-concept subscales.

Demographic Questionnaire. A general questionnaire was given to participants for obtaining demographic information regarding age, school year, gender, ethnicity, primary caregiver, and ACT scores. Specially, participants’ ACT scores were obtained from the University with participants’ consent.

Procedure

Approval from Institutional Review Board was obtained. After approval was obtained, the following procedure took place during the Fall semester 2010. The researcher contacted honors college program director and academic support program director to explain this study and got permission for the research with the students of each program. After the permission was received, time and place to distribute the instruments was arranged.

The researcher explained the study to participants when the instruments were disseminated. The instruments were given to participants as a packet including an informed consent form. The researcher explained how to appropriately answer the ASPA, SDQ III, and general questionnaire. Participants were informed that this study was conducted as a part of a Ph.D. dissertation. Also, participants were informed that they have a right to cease answering questions at any time.

To ensure confidentiality, a packet of instruments included a research packet number. This number was only used as a case number for data entry.

Research Hypotheses

The purpose of this study was to examine the relationships between patterns of relating and academic self-concept in a college student population using the Adult Scale of Parental
Attachment (ASPA) and the Self Description Questionnaire III (SDQ III). This study also examined whether there are differences between academically high-achieving college students and academically at-risk college students in academic self-concept and patterns of relating. For the purpose of this study, research hypotheses are:

**Research Hypothesis 1.**

H$_0$1 : There are no relationships between the subscales of the ASPA and the academic self-concept subscales of the SDQ III.

H$_a$1 : There are significant relationships between the subscales of the ASPA and the academic self-concept subscales of the SDQ III.

A Pearson product-moment correlation was used to explore whether there are relationships between the scores of the ASPA and the scores of the SDQ III.

**Research Hypothesis 2.**

H$_0$2 : There are no differences between academically high-achieving college students and academically at-risk college students in patterns of relating measured by the ASPA.

H$_a$2 : There are significant differences between academically high-achieving college students and academically at-risk college students in patterns of relating measured by the ASPA.

A MANOVA was used to examine whether there are differences between academically high-achieving college students and academically at-risk college students in the scores of the ASPA.

**Research Hypothesis 3.**

H$_0$3 : There are no differences between academically high-achieving college students and academically at-risk college students in academic self-concept measured by the SDQ III.

H$_a$3 : There are significant differences between academically high-achieving college students and
academically at-risk college students in academic self-concept measured by the SDQ III.

A MANOVA was used to examine whether there are differences between academically high-achieving college students and academically at-risk college students in the scores of the academic self-concept subscales on the SDQ III.

Statistical Analysis

The research hypotheses are listed in the order in which they were statistically analyzed. The Statistical Package for the Social Sciences for Windows (SPSS Inc., 2008) was used for statistical calculations. The research hypotheses were tested with specific statistical methods.

*Pearson Product-Moment Correlation Coefficient.* Pearson product-moment correlation coefficient is commonly used to determine whether there is a relationship between variables and also, examine the strength of the relationship between the variables (Hinkle, Wiersma, & Jurs, 2003). For the purpose of this study, correlation coefficient was calculated to examine the relationship between scores on patterns of relating measured by the ASPA and subscales of academic self-concept measured by the SDQ III. In other words, the extent to which patterns of relating (Safe, Dependent, Parentified, Fearful, and Distant) correlates with the subscales of academic self-concept (Math, Verbal, General Academic, and Problem Solving) was tested by Pearson product-moment correlation coefficient.

*Multivariate Analysis of Variance (MANOVA).* MANOVA is the extension of analysis of variance (ANOVA). MANOVA is commonly used to compare two or more than two dependent variables in two or more groups (Stevens, 2009). A series of MANOVAs were used in this study because there are two comparing groups and two or more dependent variables to be analyzed. Accordingly, the scores of each pattern on the ASPA were dependent variables in testing research
hypothesis two. In terms of research hypothesis 3, the scores of academic subscales on the SDQ III were dependent variables. Academically high-achieving college students group (Honors College students) and academically at-risk college students group (Academic support program students) were independent variables in both hypothesis two and three.

Summary

This chapter provides information regarding the participants who were examined and instruments that were used to assess the patterns of relating and the academic self-concept. Also, this chapter details the research procedure and the statistical analyses. The next chapter describes the results of this study.
CHAPTER IV

RESULTS

Introduction

This research was designed to examine the relationships between patterns of relating and academic self-concept among academically high-achieving college students and academically at-risk college students. Specifically, participants were administered the Adult Scale of Parental Attachment (ASPA) and the Self-Description Questionnaire III (SDQ III) along with a demographic questionnaire. The demographic questionnaire included the information on gender, age, school year, ethnicity, and primary caregiver of the participants. A series of Pearson product moment correlation coefficients and a series of MANOVA were conducted to analyze the data. Scores of the ASPA and SDQ III were utilized as the dependent variables and the groups of participants as the independent variables. Results of the three hypotheses are reported below.

Data Examination

Participants in this study were composed of college students from a mid-size public university. Volunteer’s eligibility for participation in the study was dependent on current enrollment in the academic support program (EDHE) or the Honors College (HC). The total number of students participating in this study was 118 from the EDHE and 88 from the HC. After thorough examination of data, 28 participants from the EDHE and 17 participants from the HC were eliminated because of invalid responses or missing information. Therefore, data for 90 EDHE students and 71 Honors College students were included in this study.
Assumptions and Related Statistical Analysis

The statistical analyses and assumptions are briefly reviewed prior to the report of the results presented in this chapter. The Pearson Product Moment Correlation Coefficient (Pearson $r$) and the Multivariate Analysis of Variance (MANOVA) were used to analyze the data.

The Pearson Product Moment Correlation Coefficient (Pearson $r$) is utilized to determine the magnitude of relationship between scores of two or more measures and explore linear relationship between the quantitative variables (Gall, Gall, & Borg, 2003). For the purpose of this study, correlation coefficients were calculated to examine the relationship between scores on patterns of relating measured by the ASPA and subscales of academic self-concept measured by the SDQ III.

The second statistical analysis conducted in this study is the Multivariate Analysis of Variance (MANOVA). The purpose of the MANOVA is to determine whether groups differ on more than one dependent variable. For example, the one-way MANOVA contains a single factor (independent variables) distinguishing participants into groups and two or more quantitative dependent variables. Unlike ANOVA, MANOVA includes multiple dependent variables rather than a single dependent variable. If there are three dependent variables, one could do three separate one-way ANOVAs, but by using MANOVA, one could see how the combination of the three variables distinguishes the groups in one analysis. In addition, there are more advantages in conducting MANOVA rather than multiple ANOVAs. First, MANOVA can protect against the risk of making a Type 1 error, which is incorrectly rejecting a null hypothesis (Stevens, 2009). By performing multiple tests, risk of making a Type 1 error would be increased. This is the same reason why ANOVA is conducted rather than multiple $t$-tests. Second, ANOVAs may discard
information that is about the correlations among the variables. However, MANOVA incorporates
the correlations (Stevens, 2009). Third, MANOVA can get differences on a combined set of
variables when none of the differences on the individual variable ANOVA measures are
significant (Stevens, 2009).

MANOVA evaluates whether the population means on a set of dependent variables vary
across the groups or independent variables. That is, a one-way MANOVA tests the hypothesis
that the population means for the dependent variables are the same across all groups. The
dependent variables in MANOVA design should be related conceptually, and they should be
correlated with one another at a low to moderate level (Green & Salkind, 2003; Leech, Barrett, &
Morgan, 2005). For very high or very low correlations in dependent variables, MANOVA is not
suitable. If they are highly correlated, there is not enough variance left over after the first
dependent variable is fit, and if dependent variables are uncorrelated, there is usually no reason
to analyze them together. In this study, most of the dependent variables are correlated with one
another at a moderate level (.3 -.7 range).

There are three underlying assumptions associated with the MANOVA (Stevens, 2009).
The first assumption is that the score on a variable for any single participant should be
independent from the scores of this variable for all other participants. That is, each participant’s
scores should not be influenced by any other participants. This is commonly referred to as the
independence assumption (Stevens, 2009). A violation of the independence assumption is very
serious and MANOVA should not be conducted if this assumption is violated. In terms of the
independence assumption, Glass and Hopkins (1984) stated the following: “where treatments
involve interaction among persons, such as discussion method or group counseling, the
observations may influence each other” (p. 353). Because this study did not assess interaction among participants and also each group is totally separated, it can be stated that the independence assumption is not violated. The second assumption is that the dependent variables are multivariately normally distributed for each population with the different populations being defined by the levels of the factor. This is commonly referred to as the multivariate normality assumption (Stevens, 2009). Multivariate normality is too difficult to assess unless some special-purpose software is used (Stevens, 2009). However, Glass, Peckham, and Sanders (1972) found that skewness and kurtosis has only a slight effect on level of significance. Also, Bock (1975) noted “even for distributions which depart markedly from normality, sums of 50 or more observations approximate to normality” (p. 111). That is, the central limit theorem suggests normality for the sampling distributions of the means will be approximated with sufficiently large samples. Therefore, MANOVA is robust to violations of multivariate normality if group size is sufficiently large. The third assumption is that the population variances and covariances among the dependent variables are the same across all groups (Stevens, 2009). That is, variances for each dependent variable are approximately equal in all groups and covariances between pairs of dependent variables are approximately equal for all groups. If the group sizes are disparate and the variances and covariances are unequal, the results of MANOVA are questionable. SPSS provides a method to test the assumption of homogeneity of the variance-covariance matrices using Box’s M statistic. However, MANOVA results are robust to the violation if the group sizes nearly equal: $N$ of the largest group is no more than 1.5 times the $N$ of the smallest group (Stevens, 2009). Even if the group sizes are sharply unequal and the variances are significantly different, the $F$ statistic is conservative when the larger variance is associated with the larger
group. It means that significant results are valid at an even more stringent level (Stevens, 2009).

General Information and Descriptive Statistics

Demographic data acquired from the demographic questionnaire revealed a mean age for the EDHE participants to be 23.31 (SD= 3.01) and the HC participants to be 20.38 (SD= 1.11). Out of the 90 EDHE participants 28.9% were female (N=26), 63.3% were male (N=57), and 7.8% were unknown (N=7). Out of the 71 EDHE participants 76.1% were female (N=54) and 23.9% were male (N=17). The distribution of the respondents’ ethnicity in the EDHE sample is 76.9% Caucasian (N= 69), 16.7% African-American (N=15), 2.2% Asian (N=2), 1.1% Hispanic (N=1), 1.1 % unknown (N=1), and 2.2% other (N=2). Among HC participants 91.5% (N=65) were Caucasian, 1.4% (N=1) were African American, 2.8% (N=2) were Asian, and 4.2% (N=3) were other. Out of the 90 EDHE participant 91.1% (N=82) indentified their biological mother as their mother caregiver while 98.6% (N=70) of HC participants identified their biological mother as their mother care giver. According to the EDHE participants’ responses, the primary father caregiver was identified as 85.6% biological father (N=77), 4.4% maternal grandfather (N= 4), 1.1% foster father (N= 1), 2.2% adoptive father (N=2), 4.4% extended family member (N=4), and 2.2% other (N= 2) while 97.2% (N=69) identified their biological father as their father caregiver among HC participants. Out of the 161 participants 16.1% were sophomore (N= 26), 31.7% were junior (N= 51), and 52.2% were senior (N= 84). Detailed information is shown in Table 1 to 6.
### Table 1

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<th>Group</th>
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### Table 2

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Table 3

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Table 6

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</table>

Data Analysis

Three major hypotheses were the subject of the data analyses of this study. The following section presents the results of the analysis used in testing each of the hypotheses.

Hypothesis One. The first hypothesis predicted that there would be no correlation between the subscales of the Adult Scale of Parental Attachment (ASPA) and the academic self-concept subscales of the Self-Description Questionnaire III (SDQ III). A series of Pearson product moment correlation coefficients were used to determine whether relationships exist between the subscales of the ASPA and the SDQ III.

The first Pearson $r$ analysis was used to examine whether scores on the five subscales of the ASPA (mother figure) were related to scores on the four academic self-concept subscales of the SDQ III. The correlations of the Mother Fearful pattern of the ASPA with academic self-concept on Verbal and Problem Solving of the SDQ III showed negatively significant
relationships. Also, the results indicated that the Mother Distant pattern is negatively correlated with academic self-concepts on Math, Verbal, and Academic general. The results suggest that there are important relationships between Mother Fearful and Distant patterns and Academic Self-concepts. The results of the first Pearson $r$ analysis are presented in Table 7.

Table 7
**Pearson $r$ Correlations between the subscales of the Mother Figure on ASPA and the SDQ III**

<table>
<thead>
<tr>
<th>Academic Self-Concept</th>
<th>ASPA Subscales</th>
<th>Mother Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscales</td>
<td>Safe</td>
<td>Dependent</td>
</tr>
<tr>
<td>Math</td>
<td>.05</td>
<td>-.02</td>
</tr>
<tr>
<td>Verbal</td>
<td>.14</td>
<td>-.14</td>
</tr>
<tr>
<td>Academic general</td>
<td>.14</td>
<td>-.09</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>-.07</td>
<td>-.11</td>
</tr>
</tbody>
</table>

* Level of significance $p<.05$

The second Pearson $r$ was used to determine if scores on the five subscales of the ASPA (father figure) were related to scores on the four academic self-concept subscales of the SDQ III. The correlations between the Father Dependent pattern on the ASPA and all Academic Self-
Concepts on the SDQ III, except academic self-concepts on Math, showed negatively significant relationships. These results indicate that there are no significant relationships between the patterns of relating to father and Academic Self-Concepts, except the Father Dependent pattern. The results of the first Pearson $r$ analysis are presented in Table 8.

Table 8

<table>
<thead>
<tr>
<th>Academic Self-Concept Subscales</th>
<th>ASPA Subscales</th>
<th>Father Figure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Safe</td>
<td>Dependent</td>
</tr>
<tr>
<td>Math</td>
<td>-0.07</td>
<td>-0.13</td>
</tr>
<tr>
<td>Verbal</td>
<td>-0.02</td>
<td>-0.27**</td>
</tr>
<tr>
<td>Academic general</td>
<td>-0.00</td>
<td>-0.25**</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>-0.03</td>
<td>-0.16*</td>
</tr>
</tbody>
</table>

**. Level of significance $p<.01$

*. Level of significance $p<.05$

In summary, through analysis of the scores of the ASPA and the academic self-concept scores of the SDQ III using a series of Pearson product moment correlation coefficients, it was discovered that there are important relationships between patterns of relating and academic self-concepts.
Hypothesis two. The second hypothesis predicted that there would be no differences between academically high-achieving college students and academically at-risk college students in patterns of relating. A series of multivariate analysis of variance (MANOVA) were conducted to examine whether differences exist between the EDHE program students and the Honors College students in the subscales of the ASPA. There were five dependent variables on mother; safe pattern, dependent pattern, parentified pattern, fearful pattern, distant pattern. The independent variable was coded as two groups: group 1 for the EDHE program students, group 2 for the Honors College students.

The first MANOVA analysis was conducted to examine whether differences exist between the EDHE program students group and the HC students group in the scores of the ASPA (Mother figure). The Box’s Test of Equality of covariance matrices revealed no significance, Box’s M = 25.00, $F(15, 90462) = 1.61, p = .063$, indicating equal variances across the groups. MANOVA revealed significant differences between the EDHE program students group and the HC students group, with Wilks’ Lambda = .89, $F(5, 155) = 3.80, p = .003$. Analysis of each individual dependent variable showed that the two groups differed in terms of Mother parentified pattern, $F(1, 159) = 8.77, p = .004$, partial eta squared = .152. However, there were no significant differences in Mother safe, dependent, fearful, and distant pattern between the two groups. These results along with the means and standard deviation are shown in Table 9.
### Table 9

**Mean Scores and Standard Deviations on the ASPA (Mother)**

<table>
<thead>
<tr>
<th>Patterns of Relating to Mother</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother Safe</td>
<td>EDHE</td>
<td>34.06</td>
<td>6.22</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>35.66</td>
<td>5.94</td>
</tr>
<tr>
<td>Mother Dependent</td>
<td>EDHE</td>
<td>14.23</td>
<td>4.45</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>14.39</td>
<td>3.81</td>
</tr>
<tr>
<td>Mother Parentified</td>
<td>EDHE</td>
<td>19.97*</td>
<td>5.34</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>17.65*</td>
<td>4.35</td>
</tr>
<tr>
<td>Mother Fearful</td>
<td>EDHE</td>
<td>10.32</td>
<td>4.64</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>10.62</td>
<td>3.60</td>
</tr>
<tr>
<td>Mother Distant</td>
<td>EDHE</td>
<td>23.04</td>
<td>6.43</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>22.14</td>
<td>5.46</td>
</tr>
</tbody>
</table>

* Level of significance $p < .05$

The second MANOVA was conducted to examine whether differences exist between the EDHE program students group and the HC students group in the scores of the ASPA (Father figure). Results of the MANOVA revealed that Wilks’ Lambda = .96, $F(5, 159) = 1.31$, $p = .26$. The MANOVA indicated that no significant differences between the two groups in ASPA father figure scores were found.

In summary, through analysis of the subscales of the ASPA using a series of Multivariate
Analysis of Variance, it was discovered that there is significant difference between academically high-achieving college students and academically at-risk college students in only a Parentified pattern of relating to Mother.

**Hypothesis three.** The third hypothesis predicted that there would be no differences between academically high-achieving college students and academically at-risk college students in academic self-concept. A Multivariate analysis of variance (MANOVA) was used to examine whether differences exist between the EDHE program students and the Honors College students in the academic self-concept scores of the SDQ III. Because four dependent variables (math, verbal, academic general, problems solving) in this study were conceptually related to each other, the MANOVA procedure was suitable for this type of analysis (Green & Salkind, 2003; Leech, Barrett, & Morgan, 2005). The independent variable was coded as two groups: group 1 for the EDHE program students, group 2 for the Honors College students.

Box’s test is used to check whether the data violate the assumption of homogeneity of variance-covariance matrices. The result of the Box’s test indicated that unequal variances across the groups, with Box’s M = 30.50, $F(10, 106749) = 2.97, p = .001$. As stated earlier, when the group sizes are approximately equal (largest group/smallest < 1.5), MANOVA is robust to the violation of the assumption of homogeneity of variance-covariance matrices. Even if the group sizes are sharply unequal, the $F$ statistic is conservative when the larger variance is associated with the larger group. It means that significant results are valid at an even more stringent level (Stevens, 2009). In this study, the results of the MANOVA is valid because the two group sizes are approximately equal (N of the EDHE group/N of the HC group = 1.27) and, in addition, the larger variance is associated with the EDHE group, that is the larger group. The results of
MANOVA revealed significant differences between the EDHE program students group and the HC students group in their academic self-concept scores, with Wilks’ Lambda = .53, $F(4, 156) = 34.38, p < .0005$. Analysis of each individual dependent variable showed that significant differences were found between the EDHE program students group and the HC students group in academic self-concept on Math [$F(1, 159) = 20.81, p < .0005$, partial eta squared = .116], Verbal [$F(1, 159) = 26.77, p < .0005$, partial eta squared = .144], and Academic general [$F(1, 159) = 116.83, p < .0005$, partial eta squared = .424]. These results along with the means and standard deviation are presented in Table 10.

Table 10

<table>
<thead>
<tr>
<th>Academic Self-Concept</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>EDHE</td>
<td>4.34*</td>
<td>1.71</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>5.60*</td>
<td>1.77</td>
</tr>
<tr>
<td>Verbal</td>
<td>EDHE</td>
<td>5.62*</td>
<td>1.10</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>6.46*</td>
<td>.92</td>
</tr>
<tr>
<td>Academic general</td>
<td>EDHE</td>
<td>5.23*</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>6.88*</td>
<td>.69</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>EDHE</td>
<td>5.58</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>HC</td>
<td>5.61</td>
<td>.97</td>
</tr>
</tbody>
</table>

* Level of significance $p < .05$
In summary, through analysis of academic self-concepts scores of the SDQ III using a Multivariate Analysis of Variance, it was discovered that there are significant differences between academically high-achieving college students and academically at-risk college students in academic self-concepts on Math, Verbal, and Academic general. However, no significant differences were found in academic self-concept on Problem Solving.

Summary

Through analyses of the ASAP and SDQ III, it was discovered that there are significant relationships between patterns of relating and academic self-concept. Also, there are differences between academically high-achieving college students and academically at-risk college students in patterns of relating and academic self-concept. In the next chapter, the connections between hypotheses and the findings, the implications of this study, limitations, and suggestions for future research are discussed.
CHAPTER V
DISCUSSION

Overview

Through the attachment theory (Bowlby, 1969, 1977, 1988), it can be postulated that the attachment and self-concept constructs should be highly related, as the internal working models of self and others are formed by interactions with primary caregivers and the environment. In terms of human development, academic achievement is becoming one of the important clinical issues because academic achievement is integral parts of adolescent development and adult adjustment. This study was intended to explore the differences between academically high-achieving college students and academically at-risk college students in patterns of relating to both parents and academic self-concept. The study also explored the relationship between patterns of relating to both parents and academic self-concept. Much of literature has focused mainly on children or adolescents and few studies on attachment theory or academic self-concept have examined two constructs together. The results of the current research suggest that some patterns of relating are correlated with academic self-concept, and there are differences between academically high-achieving college students and academically at-risk college students in some patterns of relating and academic self-concept.

Connections between Hypotheses and Obtained Findings

The relationship between patterns of relating to mother and father on the ASPA and academic self-concept on the SDQ III was investigated in this study. The Pearson product
moment correlation coefficient and multivariate analysis of variance were used to examine the relationship between patterns of relating and academic self-concept.

The first hypothesis predicted that there would be no correlation between the subscales of the ASPA and the SDQ III. With regard to scores on ASPA and SDQ III, it was expected that a safe pattern of relating would be positively correlated with academic self-concept. Conversely, it was expected that insecure patterns (dependent, parentified, fearful, and distant) of relating would be negatively correlated with academic self-concept. This assumption received partial confirmation in this study.

Based upon the results, it was found that the Mother Fearful pattern is negatively correlated with academic self-concept on Verbal and Problem Solving. Also, the Mother Distant pattern is negatively correlated with academic self-concept on Math, Verbal, and Academic general. In terms of patterns of relating to father, the Father Dependent pattern is negatively correlated with academic self-concept on Verbal, Academic general, and Problem Solving.

Much of literature on the relationship between attachment and academic achievement suggested that safe (or secure) attachment pattern is positively associated with academic achievement. Jacobsen, Edelstein, and Hofmann (1994) stated that securely attached children consistently did better than their insecurely attached peers in academic tasks. Teo, Carlson, Mathieu, Egeland, and Sroufe (1996) reported that there are associations between attachment in infancy and academic performance during adolescence. Moss and St. Laurent (2001) suggested that secure attachment pattern is positively associated with an ability to meet the academic demands of school. Jacobsen and Hofmann (1997) further reported that securely attached children show greater attention and participation in class and that these positive behaviors in
school partially account for the relation between attachment and academic achievement. These studies supported the assumption that there is a positive association between secure attachment and academic achievement. However, no significant correlations were found between a safe pattern of relating to both parents and academic self-concept in this study. Instead, the results of the current study suggest that insecure attachment patterns are negatively related with formation of academic self-concept. This could support several studies that suggested insecure attachment patterns are linked with poor academic indices. Matas, Arend, and Sroufe (1978) assumed that insecurely attached toddlers are less enthusiastic, less effective, and show less endurance during a challenging task than their securely attached counterparts. According to Grossmann, Grossman, and Zimmerman (1999), children who had insecure attachment patterns became less efficient at problem solving when faced with a possible failure. Lastly, Bernier, Larose, Boivin, and Soucy (2004) reported that an insecure attachment pattern is related to the rate of dropout during the transition from high school to college. Overall, the results of this study support the findings in the studies by Collins and Read (1990), Dewitte, Houwer, and Buysse (2008), Griffin and Bartholomew (1994), Groze (1992), Learner and Kruger (1997), which found attachment and self-concept are related.

Bowlby (1969/1988) proposed that the internal working model of self grows out of early interactions with primary caregivers. The internal working model of self develops into a person’s perception of self and this perception consists of self-concept (Shavelson, Hubner, & Stanton, 1976). Consistent with internal working model of self, Marsh, Byrne, and Shavelson (1992) asserted that self-concepts are developed through experience with and interpretations of the environment and significant others. In the same manner, it was postulated that experiences with
primary caregivers are related with forming academic self-concept, which is a subconstruct of self-concept. Specifically, negative relationships between insecure patterns of relating to both parents and academic self-concept were found among college students in this study.

The second hypothesis predicted that there would be no differences between academically high-achieving college students and academically at-risk college students in patterns of relating. A multivariate analysis of variance indicated that there are differences between the two groups in only Mother Parentified pattern. A possible explanation for this result stems from the fact that participants of this study are college students. College students successfully went through the K-12 program and passed the admission process to enter college. It means that academically at-risk students would not be chronic low-achievers. In other words, effect of attachment on academic achievement could be reduced as individuals grow and become college students. This would be why just a few differences were found between these two groups in patterns of relating to mother and father while past research that sampled children has suggested there is a strong relationship between attachment and academic achievement.

Another possible explanation for this result may come from the characteristics of the parentified pattern. According to Snow et al. (2007), a parentified pattern refers to “the extent to which the child felt responsible for meeting the parent’s needs” (p. 10). The followings are examples of questions to measure parentified pattern in the ASPA.

*I put my mother’s (father’s) needs before my own.*

*It was hard for me to get on with my work if my mother (father) had a problem.*

*I sacrificed my own needs for the benefit of my mother (father).*
From the questions, it could be assumed that children’s academic needs are likely not to be met due to taking care of mother’s or father’s needs. Kellaghan (1993) proposed that the important factor for children’s academic success is what parents do. Similarly, Redding (1997) indicated that the potential limitations associated with poor economic circumstances can be overcome by parents who provide stimulating, supportive, and language-rich experiences for their children with regard to academic achievement. However, individuals who have a parentified pattern of relating to parents have tendency to take care of parents’ needs and sacrifice their own needs. Thus, they are less likely to get support from mother or father. Instead, they might have to spend more time taking care of family. As they grow, their parentified pattern could appear as family responsibility. According to Nora and Lang (1999), students who took on serious family responsibilities are likely to drop out at the end of their first year in college and also less likely to persist in college. It’s because they could not spend the needed time on their academic work.

An additional analysis examining the correlation between the participants’ ACT score and patterns of relating was conducted. Interestingly, the negative correlation was found only between ACT score and Mother Parentified pattern. This result supported that Mother Parentified pattern and academic achievement are correlated. It also suggested that Mother Parentified pattern of relating needs to be more explored in terms of college students’ academic achievement. The results are presented in Table 11.
Table 11

Correlations between the Patterns of relating to the Mother Figure and ACT score

<table>
<thead>
<tr>
<th></th>
<th>Mother Safe</th>
<th>Mother Dependent</th>
<th>Mother Parentified</th>
<th>Mother Fearful</th>
<th>Mother Distant</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT</td>
<td>.11</td>
<td>-.08</td>
<td>-.26**</td>
<td>-.04</td>
<td>-.15</td>
</tr>
</tbody>
</table>

**. Level of significance $p < .01$

However, the findings that the patterns of relating to father have no relationship with the differences between academically high-achieving college students and academically at-risk college students remain interesting.

The third hypothesis predicted that there would be no differences between academically high-achieving college students and academically at-risk college students in academic self-concept. A multivariate analysis of variance was conducted to examine this hypothesis. Results indicated that there are differences between the two groups in academic self-concept on Math, Verbal, and Academic general. The results of this study could be explained by the relationship between academic self-concept and academic achievement. Several constructs have been known as a predictor of academic achievement among college students, including institutional efforts (Robinson, 1997), motivation (Cote & Levine, 2000), and high school class rank (Baron & Frank, 1992). Academic self-concept has also been found to be related with academic achievement (House, 1992; Marsh & Yeung, 1997; Marsh, Trautwein, Ludtke, Koller, & Baumert, 2005). Although some researchers (e.g., Shavelson & Bolus, 1982) have found that academic self-concept influences academic achievement, which means a high academic self-concept is necessary before a student can do well, other researchers (e.g., Caslyn & Kenny, 1977; Garg, 1992) have suggested that students do well first in academic tasks and then a high academic self-
concept could be obtained. Strong arguments for both sides would suggest that the relationship between academic achievement and academic self-concept is probably reciprocal (Guay et al., 2003; House, 2000; Marsh et al., 2005). Through a meta-analysis of 128 studies, Hansford and Hattie (1982) confirmed this relationship between academic achievement and academic self-concept. They found the relationship in various self-measures and measures of achievement. In this meta-analysis, the correlation between academic achievement and academic self-concept was .33 ($p < .01$).

Even though academically high-achieving college students and academically at-risk college students are clearly differentiated in academic self-concept, no differences were found in Problem Solving in this study. A possible explanation for this result is that the items to measure Problem Solving would not be recognized as academic-related items to respondents. The followings are examples of each subscale items to measure academic self-concept in SDQ III.

*I am quite good at mathematics.*

*I have always done well in mathematics classes.*

- items on Math

*I can write effectively.*

*I have good reading comprehension.*

- items on Verbal
I like most academic subjects.

I enjoy doing work for most academic subjects.

- items on Academic general

I enjoy working out new ways of solving problems.

I am not much good at problem solving.

I can often see better way of doing routine tasks.

- items on Problem Solving

At a quick glance, items on Problem Solving appear not to be limited to academic focus in comparison with items on other academic self-concept subscales that are primarily academic focus. The participants could interpret the questions of Problem Solving as general problems instead of academic problems. An additional analysis examining the correlation between the participants’ ACT score and academic self-concept was performed. Interestingly, only problem solving was not correlated with ACT score while Math, Verbal, and Academic general have significant relationship with ACT score. This supports the explanation for no differences between two groups in Problem Solving. The results are shown in Table 12.
Overall, the findings on the third hypothesis support previous research that indicates there are positive relationships between academic self-concept and academic achievement.

**Implications of the Study**

Hypothetically, attachment and self-concept are related. Bowlby (1988) and Ainsworth et al. (1978) hypothesized that early attachment experiences with primary caregivers are formed in infancy but the experiences are influential to the later life of individuals. However, there have been few studies of academic self-concept under the attachment construct with adult population, and so this study extends research efforts in this area.

This study suggests that there is a relationship between patterns of relating and academic self-concept among college students. Also, it shows that there are differences between academically high-achieving college students and academically at-risk college students in mother parentified pattern of relating and academic self-concept. The findings, that the two groups are differentiated in mother parentified pattern, implies the need for further research. That is, the relationship between a parentified pattern of relating and family responsibility needs to be explored. As stated earlier, a parentified pattern of relating could appear as family responsibility. Thus, if the relationship could be confirmed, family responsibilities should be one of the issues...
In addition, this study shows that there are differences between academically high-achieving college students and academically at-risk college students in academic self-concept. It suggests that academic self-concept is an important psychological construct in supporting and understanding college students. There are many college students who require academic support programs. Usually, the program provides these college students with learning strategies, time management, goal setting, and supplementary instruction (Dembo & Seli, 2004). Academic support programs focus mainly on the cognitive domain. However, academic self-concept provides a cognitive and affective appraisal of self. Positive academic self-concept lead students to set challenging yet attainable academic goals for themselves, feel less anxious in achievement settings, enjoy their academic work more, persist longer on difficult tasks, and, overall, feel better about themselves as a person and as a student (Bong & Skaalvik, 2003). Despite the clear relationship between academic self-concept and academic achievement and its cognitive and affective characteristics, academic self-concept has been largely ignored in supporting academically at-risk college students. From a practical standpoint, the current study confidently endorses academic self-concept as a measurable, desirable, and dynamic variable that can be utilized to address concerns with supporting students as they relate to academic achievement. The current study also demonstrates that academic self-concept can be appropriately assessed and thus this construct can be practically used.

Limitations

The interpretation and utilization of the results of the study should be carefully activated within the limitations. There are several limitations to this study. First, data was collected in only
one university in the mid-south United States, which limits the generalizability to other academic settings. Second, participants were voluntarily involved in this study so there could be certain characteristics which participants share. Their characteristics could influence the results. Third, this study was restricted to only two instruments. Thus, it is possible that certain constructs have not been assessed. Finally, the ASPA is a relatively new instrument, and it needs more empirical supports.

Suggestions for Future Research

This study sampled academically high-achieving college students and academically at-risk college students. It is possible that their differences as a group in academic performance compromise the correlations between patterns of relating and academic self-concept. An additional analysis examining the correlation between patterns of relating and academic self-concept was conducted with the data segregated by EDHE group and HC group. Interesting results were found after this additional analysis. First of all, the correlations between patterns of relating and academic self-concept were different by group. Specifically, the significant correlations showed up in different places by group. A dependent pattern of relating has significantly negative relationships with academic self-concept in the EDHE group (academically at-risk college students), while no significant relationships were found between a dependent pattern of relating and academic self-concept in the HC group (academically high-achieving college students). According to Snow et al. (2007), “a child with a dependent pattern of relating may have experienced helplessness and uncertainty when the parent was not available” (p. 10). Based on the characteristics of a dependent pattern of relating, it could be assumed that college students with a dependent pattern of relating may feel a need for the parent
(or parent figure) to be available when they face academic challenges. However, it is difficult for college students who are not children anymore to depend upon the parent academically. Second, fearful and distant patterns of relating were negatively related with academic self-concept. Although significant correlations were found between these two psychological constructs when the data was combined, negative correlations were stronger when the data were segregated. For EDHE group, fearful and distant patterns of relating have negative relationship with academic self-concept on Verbal. For HC group, fearful and distant patterns of relating are negatively associated with academic self-concept on Math.

The reason why fearful and distant patterns of relating have relationships with different academic self-concept subconstruct needs to be explored in future research but it is clear that fearful and distant patterns of relating are negatively related with academic self-concept among college students. Finally, although no significant correlations were found between a safe pattern of relating and any academic self-concept subconstructs when the data was combined, significant correlations were found between a safe pattern of relating and academic self-concept when the data was segregated by group. The results showed that there are significantly positive correlations between a safe pattern of relating to mother and academic self-concept on Math and Academic general in the HC group. A person who has a safe pattern of relating may have experienced confidence in parent’s support (Snow et al., 2007). Thus it can be assumed that a safe pattern of relating and academic self-concept are positively interacted with each other, and then it could positively influence academic achievement. The detailed results are presented in Table 13.
Table 13
Correlations between patterns of relating and academic self-concept when segregated by group

<table>
<thead>
<tr>
<th></th>
<th>Safe mother/father</th>
<th>Dependent mother/father</th>
<th>Parentified mother/father</th>
<th>Fearful mother/father</th>
<th>Distant mother/father</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Math</strong></td>
<td>-.20 / -.18</td>
<td>-.12 / -.22*</td>
<td>.07 / -.13</td>
<td>.09 / -.02</td>
<td>.14 / .11</td>
</tr>
<tr>
<td></td>
<td>(.27* / .07)</td>
<td>(.12 / .11)</td>
<td>(-.01 / -.02)</td>
<td>(-.36** / -.30**)</td>
<td>(-.45** / -.30**)</td>
</tr>
<tr>
<td><strong>Verbal</strong></td>
<td>.10 / .02</td>
<td>-.30** / -.26*</td>
<td>-.12 / .06</td>
<td>-.42** / -.22*</td>
<td>-.28** / -.11</td>
</tr>
<tr>
<td></td>
<td>(.09 / -.07)</td>
<td>(.09 / -.18)</td>
<td>(.08 / .01)</td>
<td>(.22 / .16)</td>
<td>(-.02 / .12)</td>
</tr>
<tr>
<td><strong>Academic</strong></td>
<td>-.00 / -.05</td>
<td>-.22* / -.28**</td>
<td>-.04 / -.07</td>
<td>-.18 / -.13</td>
<td>-.07 / .02</td>
</tr>
<tr>
<td></td>
<td>(.23* / .12)</td>
<td>(-.05 / -.04)</td>
<td>(.22 / .17)</td>
<td>(.02 / .13)</td>
<td>(-.22 / .00)</td>
</tr>
<tr>
<td><strong>Problem Solving</strong></td>
<td>-.12 / -.01</td>
<td>-.17 / -.18</td>
<td>.04 / -.14</td>
<td>-.10 / -.20</td>
<td>.01 / -.04</td>
</tr>
<tr>
<td></td>
<td>(-.02 / -.06)</td>
<td>(-.05 / -.14)</td>
<td>(.07 / .00)</td>
<td>(-.10 / -.08)</td>
<td>(-.04 / -.06)</td>
</tr>
</tbody>
</table>

**. Level of significance p< .01
*. Level of significance p< .05
results of EDHE not parenthesized
results of HC parenthesized

However, college students who do not belong to either group need to be included in future research to find clearer relationships between patterns of relating and academic self-concept.

Gender differences should be also explored in future research. The academically at-risk college students group in this study consists mainly of male students (63.3%), while most of participants from academically high-achieving college students group are female students (76.1%). This different gender distribution ratio could influence the results of this study. In order
to separate the impact from gender and academic achievement, gender distribution and size of sample need to be considered in future study.

Finally, more ethnic diversity needs to be considered in future research. Even considering the ethnic distribution of the target population, the distribution of ethnicity leaned toward Caucasian in this study.

Conclusion

Attachment experiences have a great impact upon individual’s life with regard to the view of self and others. Also, academic self-concept is related with academic achievement. However, these two psychological constructs are not considered when academically supporting and understanding students, in comparison with other quantitative data such as GPA or ACT score. This study indicates that patterns of relating and academic self-concept are worthy of attention in supporting and understanding college students. As the needs of academic support programs and honors students programs in college increase, further studies on the attachment and self-concept would expand perspective on them academically and practically.
REFERENCES


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House, J. D. (2000). Academic background and self-beliefs as predictors of student grade


University of Western Sydney.


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APPENDIX
CONSENT FORM

Consent to participate in Research

Title: The Relationship between Patterns of Relating and Academic Self-Concept

Investigator
Ji Woong Yang
Department of Leadership & Counselor Education
120 Guyton Hall
The University of Mississippi
(662) 915-7069

Advisor
Marilyn Snow, Ph.D.
Department of Leadership and Counselor Education
108 Guyton Hall
The University of Mississippi
(662) 915-1363

Description
This research is designed to learn about the relationship between attachment style and academic self-concept.
If you participate in this research, you will be asked to complete three questionnaires. The demographic questionnaire will ask basic information, such as your gender, age, and ethnicity. The attachment questionnaire will ask you questions about your primary caregiver(s) during your childhood and how you relate with others presently. The academic self-concept questionnaire will ask you questions about your perception of your academic ability and skills. It will take you about 40 minutes to finish all three questionnaires. We will explain the research to you and you can ask any questions you have about the research.

Risks and Benefits
You may feel uncomfortable because some questions may bring up feelings from childhood or be temporarily upsetting. If this should occur, the name and numbers of places where you can get counseling service (local mental health facilities that are either free of charge for students or on a sliding scale) are provided on the attached contact form (last page of the packet). You also may contact the investigator listed on the attached contact form if you are interested in the results of your questionnaires.
We do not think that there are any other risks. These assessments may not benefit you directly. We hope that the information obtained in this study will improve our overall understanding of human experiences and behavior. Also, we will talk with you about our research so you may gain understanding about how researchers conduct investigations in the social sciences.
Cost and Payments
The assessments will take about 40 minutes to complete. There are no costs for completing the assessments, and there are no costs for your results if you wish to receive them.

Confidentiality
Data will be recorded and analyzed by case number. This study will need your ACT score for statistical analysis. In order to protect the your confidentiality when acquiring your ACT score, the researcher will have the following procedures. First, the top left corner on the cover page of the packet will have a detachable sticker where you can write your name and student ID. Once you write your name and ID, and complete the assessments, only the cover page will be sent to the assistant director of the Center for Excellence in Teaching and Learning who is able to access your ACT score. The CETL director will write down your ACT score on the cover page and remove the name and ID sticker from the cover page. This cover page then will be sent to the researcher and matched to the packet only by the case number for statistical input. The case number of the packet will be located on the top right corner of the cover page and all pages of the packet. Therefore, we believe that you won’t be identified from any of your tests or ACT score. Also, the data and results of this study can be used in further research only through the case number.

Right to Withdraw
You do not have to take part in this study. If you start the study and decide that you do not want to finish, all you have to do is to tell Ji Woong Yang or Dr. Marilyn Snow in person, by letter, or by telephone at the Department of Leadership and Counselor Education, 108 Guyton Hall, The University of Mississippi, University MS 38677, or (662) 915-1363. Whether or not you choose to participate or to withdraw will not affect your standing with the Department of Leadership and Counselor Education, or with the University, and it will not cause you to lose any benefits to which you are entitled.

IRB Approval
This study has been reviewed by The University of Mississippi’s Institutional Review Board (IRB Protocol #: 11-014). The IRB has determined that this study fulfills the human research subject protections obligations required by state and federal law and University policies. If you have any questions, concerns, or reports regarding your rights as a participant of research, please contact the IRB at (662) 915-7482.
NOTE:
If you want information on the results of these instruments, simply detach the contact form (the last page of this packet) and please contact the persons listed on that page. There will be no way to link you to your results without having the case number that is on the top right corner of the contact form. This number matches the number on the instruments in this packet and will be known to no one except you.

If you do not want to participate, simply return the entire packet to the individual administering the instruments.

Statement of consent
I have read the above information. I have been given a copy of this form. I have had an opportunity to ask questions, and I have received answers. I consent to participate in the study.

__________________________  __________________________
Signature of Participant      Date

__________________________  __________________________
Signature of Investigator     Date
Research Packet
Name:

Student ID#:

ACT Score__________________ (Do not write your score)
Demographic Questionnaire

Gender: □ Male □ Female

Age: ________

School Year: □ Freshman
□ Sophomore
□ Junior
□ Senior

Ethnicity: □ Caucasian
□ African American
□ Hispanic
□ Native American
□ Asian
□ Other ____________________________

Primary Caregiver: (Check the person that you think of as being “mom” to you and/or the person that you think of as being “dad” to you during your childhood).

Mother Figure:
□ Biological Mother
□ Maternal Grandmother
□ Paternal Grandmother
□ Foster Mother
□ Adoptive Mother
□ Extended Family Member (aunt, cousin, etc.)
□ Other (no name, just their relation to you) _____________

Father Figure:
□ Biological Father
□ Maternal Grandfather
□ Paternal Grandfather
□ Foster Father
□ Adoptive Father
□ Extended Family Member (uncle, cousin, etc.)
□ Other (no name, just their relation to you) _____________
**Directions (please read)**

Please answer all of the following questions on the behavior of the person who you most identified as a mother figure while you were a child. This person may have been a step-parent, a grandmother, an aunt or a woman who was unrelated but a primary caregiver. Choose the person you spent the most time with before age fourteen. Should you feel there was not a person in your life who you considered a mother figure, do not complete this section, but move on to the next section. Answer each question individually and as accurately as possible. Do not worry about consistency across answers; we expect contradictions will exist in some cases.

|   |   |   |   |   |   
|---|---|---|---|---|---
<p>| 1. I had my mother with me when I was upset. | 1 | 2 | 3 | 4 | 5 |
| 2. I felt lost when I was upset and my mother was not around. | 1 | 2 | 3 | 4 | 5 |
| 3. When I was anxious I desperately needed to be close to my mother. | 1 | 2 | 3 | 4 | 5 |
| 4. I felt relieved when my mother went away for a few days. | 1 | 2 | 3 | 4 | 5 |
| 5. I resented my mother spending time away from me. | 1 | 2 | 3 | 4 | 5 |
| 6. I felt abandoned when my mother was away for a few days. | 1 | 2 | 3 | 4 | 5 |
| 7. I had a terrible fear that my relationship with my mother would end. | 1 | 2 | 3 | 4 | 5 |
| 8. I was afraid I would lose my mother’s love. | 1 | 2 | 3 | 4 | 5 |
| 9. I was confident my mother would always love me. | 1 | 2 | 3 | 4 | 5 |
| 10. I was confident my mother would try to understand my feelings. | 1 | 2 | 3 | 4 | 5 |
| 11. I worried that my mother would let me down. | 1 | 2 | 3 | 4 | 5 |
| 12. When I was upset, I was confident my mother would be there to listen to me. | 1 | 2 | 3 | 4 | 5 |
| 13. I turned to my mother for many things including comfort and reassurance. | 1 | 2 | 3 | 4 | 5 |
| 14. I talked things over with my mother. | 1 | 2 | 3 | 4 | 5 |
| 15. Things had to be really bad for me to ask my mother for help. | 1 | 2 | 3 | 4 | 5 |
| 16. I wish there was less anger in my relationship with my mother. | 1 | 2 | 3 | 4 | 5 |
| 17. I got frustrated when my mother left me alone. | 1 | 2 | 3 | 4 | 5 |
| 18. My mother seemed to notice me only when I was angry. | 1 | 2 | 3 | 4 | 5 |
| 19. I got furious when I did not get any comfort from my mother. | 1 | 2 | 3 | 4 | 5 |
| 20. I got really angry at my mother because I thought she could have made more time for me. | 1 | 2 | 3 | 4 | 5 |
| 21. I often felt angry with my mother without knowing why. | 1 | 2 | 3 | 4 | 5 |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>22. My mother was always disappointing me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23. I put my mother’s needs before my own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24. It was hard for me to get on with my work if my mother had a problem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>25. I enjoyed taking care of my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>26. I expected my mother to take care of her problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>27. I made a fuss over my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>28. I sacrificed my own needs for the benefit of my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29. It made me feel important to be able to do things for my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>30. I felt it was best to depend on my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31. I wanted to get close to my mother, but I kept pulling back.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32. I wanted my mother to rely on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33. I usually discussed my problems and concerns with my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34. It was easy for me to be affectionate with my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35. I was so used to doing things on my own that I did not ask my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36. I felt there was something wrong with me because I was distant from my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>37. I often felt too dependent on my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>38. I wish I could be a child again and be taken care of by my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>39. I relied on myself and not my mother to take care of me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>40. I needed my mother to take care of me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>41. I was never certain about what I should do until I talked to my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>42. I was helpless without my mother.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Directions (please read)

Please answer all of the following questions on the behavior of the person who you most identified as a father figure while you were a child. This person may have been a step-parent, a grandfather, an uncle or a man who was unrelated but a primary caregiver. Choose the person you spent the most time with before age fourteen. Should you feel there was not a person in your life who you considered a father figure, do not complete this section, but move on to the next section. Answer each question individually and as accurately as possible. Do not worry about consistency across answers; we expect contradictions will exist in some cases.

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Constantly</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>I had my father with me when I was upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>44</td>
<td>I felt lost when I was upset and my father was not around.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>45</td>
<td>When I was anxious I desperately needed to be close to my father.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>46</td>
<td>I felt relieved when my father went away for a few days.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>47</td>
<td>I resented my father spending time away from me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>48</td>
<td>I felt abandoned when my father was away for a few days.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>49</td>
<td>I had a terrible fear that my relationship with my father would end.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>50</td>
<td>I was afraid I would lose my father’s love.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>51</td>
<td>I was confident my father would always love me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>52</td>
<td>I was confident my father would try to understand my feelings.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>53</td>
<td>I worried my father would let me down.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>54</td>
<td>When I was upset, I was confident my father would be there to listen to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>55</td>
<td>I turned to my father for many things including comfort and reassurance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>56</td>
<td>I talked things over with my father.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>57</td>
<td>Things had to be really bad for me to ask my father for help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>58</td>
<td>I wish there was less anger in my relationship with my father.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>59</td>
<td>I got frustrated when my father left me alone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>60</td>
<td>My father seemed to notice me only when I was angry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>61</td>
<td>I got furious when I did not get any comfort from my father.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>62</td>
<td>I got really angry at my father because I thought he could have made more time for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>63</td>
<td>I often felt angry with my father without knowing why.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
64. My father was always disappointing me. 1 2 3 4 5
65. I put my father’s needs before my own. 1 2 3 4 5
66. It was hard for me to get on with my work if my father had a problem. 1 2 3 4 5
67. I enjoyed taking care of my father. 1 2 3 4 5
68. I expected my father to take care of his problems 1 2 3 4 5
69. I made a fuss over my father. 1 2 3 4 5
70. I sacrificed my own needs for the benefit of my father. 1 2 3 4 5
71. It made me feel important to be able to do things for my father. 1 2 3 4 5
72. I felt it was best to depend on my father. 1 2 3 4 5
73. I wanted to get close to my father, but I kept pulling back. 1 2 3 4 5
74. I wanted my father to rely on me. 1 2 3 4 5
75. I usually discussed my problems and concerns with my father. 1 2 3 4 5
76. It was easy for me to be affectionate with my father. 1 2 3 4 5
77. I was so used to doing things on my own that I did not ask my father. 1 2 3 4 5
78. I felt there was something wrong with me because I was distant from my father. 1 2 3 4 5
79. I often felt too dependent on my father. 1 2 3 4 5
80. I wish I could be a child again and be taken care of by my father. 1 2 3 4 5
81. I relied on myself and not my father to take care of me. 1 2 3 4 5
82. I needed my father to take care of me. 1 2 3 4 5
83. I was never certain about what I should do until I talked to my father. 1 2 3 4 5
84. I was helpless without my father. 1 2 3 4 5
Please answer the following questions about yourself.

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Frequently</th>
<th>Constantly</th>
</tr>
</thead>
<tbody>
<tr>
<td>85. I felt the hardest thing to do was to stand on my own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>86. Closeness to others frightens me because they may reject me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>87. I let people get close to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>88. I’m afraid of getting close to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>89. I have a hard time giving affection to someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>90. I’ve built a wall around myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>91. Whenever I feel myself getting close to someone, I push them away.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>92. I look to others for support.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>93. I only feel secure when I’m by myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>94. I take great pride in being independent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>95. My strength comes only from myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>96. I get my sense of security from myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>97. Caring for someone would make me feel weak and exhausted.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>98. Being close to someone makes me think of suffocation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>99. I would lose my feeling of security if I had to share my life with someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>100. I’m afraid to care for someone because I would lose myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>101. Needing someone would make me feel weak.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>102. I feel I can share my whole life with someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>103. I wish I had a single lasting relationship.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>104. I have close ties to someone.</td>
<td>1</td>
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<tr>
<td>105. I long for someone to share my feelings with.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>106. I wish there was someone close who needed me.</td>
<td>1</td>
<td>2</td>
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<td>5</td>
</tr>
</tbody>
</table>

This instrument was developed from questions in *Patterns of Relating: An Adult Attachment Perspective* (1994) The Guilford Press with permission from the authors, Malcolm L. West and Adrienne E. Sheldon-Keller.
PLEASE READ THESE INSTRUCTIONS FIRST

This is not a test - there are no right or wrong answers.

This is a chance for you to consider how you think and feel about yourself. This is not a test – there are no right or wrong answers, and everyone will have different responses. The purpose of this study is to determine how people describe themselves and what characteristics are most important to how people feel about themselves.

On the following pages are a series of statements that are more or less true (or more or less false) descriptions of you. Please use the following eight-point response scale to indicate how true (or false) each item is as a description of you. Respond to the items as you now feel even if you felt differently at some other time in your life. In a few instances, an item may no longer be appropriate to you, though it was at an earlier period of your life (e.g., an item about your present relationship with your parents if they are no longer alive). In such cases, respond to the item as you would have when it was appropriate. Try to avoid leaving any items blank.

After completing all the items, you will be asked to select those that best describe important aspects – either positive or negative – of how you feel about yourself. Consider this as you are completing the survey.

<table>
<thead>
<tr>
<th>1</th>
<th>Definitely False</th>
<th>2</th>
<th>False</th>
<th>3</th>
<th>Mostly False</th>
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<th>More False Than True</th>
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<th>6</th>
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<th>7</th>
<th>True</th>
<th>8</th>
<th>Definitely True</th>
</tr>
</thead>
</table>

83
<table>
<thead>
<tr>
<th>1</th>
<th>Definitely False</th>
<th>2</th>
<th>False</th>
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<th>Mostly False</th>
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<th>More False Than True</th>
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<th>6</th>
<th>Mostly True</th>
<th>7</th>
<th>True</th>
<th>8</th>
<th>Definitely True</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I find many mathematical problems interesting and challenging.</td>
<td>2</td>
<td>Overall, I am pretty accepting of myself.</td>
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<tr>
<td>2</td>
<td>My parents are not very spiritual/religious people.</td>
<td>3</td>
<td>Being honest is not particularly important to me.</td>
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<td>3</td>
<td>Overall, I have a lot of respect for myself.</td>
<td>4</td>
<td>I have lots of friends of the opposite sex.</td>
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<td>4</td>
<td>I often tell small lies to avoid embarrassing situations.</td>
<td>5</td>
<td>I have a poor vocabulary.</td>
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<td>5</td>
<td>I get a lot of attention from members of the opposite sex.</td>
<td>6</td>
<td>I am happy most of the time.</td>
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<td>6</td>
<td>I have trouble expressing myself when trying to write something.</td>
<td>7</td>
<td>I still have many unresolved conflicts with my parents.</td>
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<td>7</td>
<td>I am usually pretty calm and relaxed.</td>
<td>8</td>
<td>I like most academic subjects.</td>
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<td>8</td>
<td>I hardly ever saw things the same way as my parents when I was growing up.</td>
<td>9</td>
<td>I wish I had more imagination and originality.</td>
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<td>9</td>
<td>I enjoy doing work for most academic subjects.</td>
<td>10</td>
<td>I have a good body build.</td>
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<td>10</td>
<td>I am never able to think up answers to problems that haven’t already been figured out.</td>
<td>11</td>
<td>I don’t get along very well with other members of the same sex.</td>
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<td>11</td>
<td>I have a physically attractive body.</td>
<td>12</td>
<td>I have good endurance and stamina in sports and physical activities.</td>
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<td>12</td>
<td>I have few friends of the same sex that I can really count on.</td>
<td>13</td>
<td>Mathematics makes me feel inadequate.</td>
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<td>13</td>
<td>I am a good athlete.</td>
<td>14</td>
<td>Spiritual/religious beliefs make my life better and make me a happier person.</td>
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<td>14</td>
<td>I have hesitated to take courses that involve mathematics.</td>
<td>15</td>
<td>Overall, I don’t have much respect for myself.</td>
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<td>15</td>
<td>I am a spiritual/religious person.</td>
<td>16</td>
<td>I nearly always tell the truth.</td>
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<td>16</td>
<td>Overall, I lack self-confidence.</td>
<td>17</td>
<td>Most of my friends are more comfortable with members of the opposite sex than I am.</td>
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<td>17</td>
<td>People can always rely on me.</td>
<td>18</td>
<td>I am an avid reader.</td>
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<td>18</td>
<td>I find it difficult to meet members of the opposite sex whom I like.</td>
<td>19</td>
<td>I am anxious much of the time.</td>
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<td>19</td>
<td>I can write effectively.</td>
<td>20</td>
<td>My parents have usually been unhappy or disappointed with what I do and have done.</td>
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<td>20</td>
<td>I worry a lot.</td>
<td>21</td>
<td>I have trouble with most academic subjects.</td>
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<td>21</td>
<td>I would like to bring up children of my own (if I have any) like my parents raised me.</td>
<td>22</td>
<td>I enjoy working out new ways of solving problems.</td>
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<td>22</td>
<td>I hate studying for many academic subjects.</td>
<td>23</td>
<td>There are lots of things about the way I look that I would like to change.</td>
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<td>23</td>
<td>I am good at combining ideas in ways that others have not tried.</td>
<td>24</td>
<td>I make friends easily with members of the same sex.</td>
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<td>24</td>
<td>I am ugly.</td>
<td>25</td>
<td>I hate sports and physical activities.</td>
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<td>25</td>
<td>I am comfortable talking to members of the same sex.</td>
<td>26</td>
<td>I am quite good at mathematics.</td>
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<td>26</td>
<td>I am awkward and poorly coordinated at many sports and physical activities.</td>
<td>27</td>
<td>My spiritual/religious beliefs provide the guidelines by which I conduct my life.</td>
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<td>27</td>
<td>I have generally done better in mathematics courses than other courses.</td>
<td>28</td>
<td>Overall, I have a lot of self-confidence.</td>
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<td>28</td>
<td>Spiritual/religious beliefs have little to do with my life philosophy.</td>
<td>29</td>
<td>I sometimes take things that do not belong to me.</td>
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<td></td>
<td>1 Definitely False</td>
<td>2 False</td>
<td>3 Mostly False</td>
<td>4 More False Than True</td>
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<td>57</td>
<td>I am comfortable talking to members of the opposite sex.</td>
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<td></td>
<td>I do not spend a lot of time worrying about things.</td>
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<td>58</td>
<td>I do not do well on tests that require a lot of verbal reasoning ability.</td>
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<td></td>
<td>My parents treated me fairly when I was young.</td>
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<td>59</td>
<td>I hardly ever feel depressed.</td>
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<td>I learn quickly in most academic subjects.</td>
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<td>60</td>
<td>My values are similar to those of my parents.</td>
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<td></td>
<td>I am not very original in my ideas, thoughts, and actions.</td>
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<td>61</td>
<td>I am good at most academic subjects.</td>
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<td>I have nice facial features.</td>
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<td>62</td>
<td>I am not much good at problem solving.</td>
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<td></td>
<td>Not many people of the same sex like me.</td>
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<td>63</td>
<td>My body weight is about right (neither too fat nor too skinny).</td>
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<td>I like to exercise vigorously at sports and/or physical activities.</td>
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<td>64</td>
<td>Other members of the same sex find me boring.</td>
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<td></td>
<td>I never do well on tests that require mathematical reasoning.</td>
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<td>65</td>
<td>I have a high energy level in sports and physical activities.</td>
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<td></td>
<td>I am a better person as a consequence of my spiritual/religious beliefs.</td>
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<td>66</td>
<td>I have trouble understanding anything that is based upon mathematics.</td>
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<td></td>
<td>Overall, I have pretty positive feelings about myself.</td>
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<td>67</td>
<td>Continuous spiritual/religious growth is important to me.</td>
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<td>I have had lots of feelings of inadequacy about relating to members of the opposite sex.</td>
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<td>68</td>
<td>Overall, I have a very good self-concept.</td>
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<td>I am good at expressing myself.</td>
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<td>69</td>
<td>I never cheat.</td>
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<td>I am often depressed.</td>
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<td>70</td>
<td>I am quite shy with members of the opposite sex.</td>
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<td>It has often been difficult for me to talk to my parents.</td>
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<td>71</td>
<td>Relative to most people, my verbal skills are quite good.</td>
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<td>I hate most academic subjects.</td>
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<td>72</td>
<td>I tend to be highly – strung, tense, and restless.</td>
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<td>I am an imaginative person.</td>
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<td>73</td>
<td>My parents have never had much respect for me.</td>
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<td></td>
<td>I wish that I were physically more attractive.</td>
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<td>74</td>
<td>I am not particularly interested in most academic subjects.</td>
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<td></td>
<td>I am popular with other members of the same sex.</td>
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<td>75</td>
<td>I have a lot of intellectual curiosity.</td>
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<td>I am poor at most sports and physical activities.</td>
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<td>76</td>
<td>I dislike the way I look.</td>
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<td>At school, my friends always came to me for help in mathematics.</td>
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<td>77</td>
<td>I share lots of activities with members of the same sex.</td>
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<td>I am basically an atheist, and believe that there is no being higher than man.</td>
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<td>78</td>
<td>I am not very good at any activities that require physical ability and coordination.</td>
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<td></td>
<td>Overall, I have a very poor self-concept.</td>
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<td>79</td>
<td>I have always done well in mathematics classes.</td>
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<td>I would feel OK about cheating on a test as long as I did not get caught.</td>
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<td>80</td>
<td>I rarely if ever spend time in spiritual meditation or religious prayer.</td>
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<td>I am comfortable being affectionate with members of the opposite sex.</td>
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<td>81</td>
<td>Overall, nothing that I do is very important.</td>
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<td></td>
<td>In school I had more trouble learning to read than most other students.</td>
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<td>82</td>
<td>Being dishonest is often the lesser of two evils.</td>
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<td>I am inclined towards being an optimist.</td>
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<td>83</td>
<td>I make friends easily with members of the opposite sex.</td>
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<td></td>
<td>My parents understand me.</td>
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<td>84</td>
<td>I often have to read things several times before I understand them.</td>
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<td></td>
<td>1 Definitely False</td>
<td>2 False</td>
<td>3 Mostly False</td>
<td>4 More False Than True</td>
<td>5 More True Than False</td>
<td>6 Mostly True</td>
<td>7 True</td>
<td>8 Definitely True</td>
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<td>____</td>
<td>113</td>
<td>I get good marks in most academic subjects.</td>
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<td>125</td>
<td>I like my parents.</td>
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<td>____</td>
<td>114</td>
<td>I would have no interest in being an inventor.</td>
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<td>126</td>
<td>I could never achieve academic honours, even if I worked harder.</td>
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<td>____</td>
<td>115</td>
<td>Most of my friends are better looking than I am.</td>
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<td>127</td>
<td>I can often see better ways of doing routine tasks.</td>
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<td>____</td>
<td>116</td>
<td>Most people have more friends of the same sex than I do.</td>
<td>____</td>
<td>128</td>
<td>I am good looking.</td>
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<td>____</td>
<td>117</td>
<td>I enjoy sports and physical activities.</td>
<td>____</td>
<td>129</td>
<td>I have lots of friends of the same sex.</td>
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<td>____</td>
<td>118</td>
<td>I have never been very excited about mathematics.</td>
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<td>130</td>
<td>I am a sedentary type who avoids strenuous activity.</td>
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<td>____</td>
<td>119</td>
<td>I believe that there will be some form of continuation of my spirit or soul after my death.</td>
<td>____</td>
<td>131</td>
<td>Overall, I do lots of things that are important.</td>
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<td>____</td>
<td>120</td>
<td>Overall, I have pretty negative feelings about myself.</td>
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<td>132</td>
<td>I am not a very reliable person.</td>
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<td>____</td>
<td>121</td>
<td>I value integrity above all other virtues.</td>
<td>____</td>
<td>133</td>
<td>Spiritual/religious beliefs have little to do with the type of person I want to be.</td>
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<td>____</td>
<td>122</td>
<td>I never seem to have much in common with members of the opposite sex.</td>
<td>____</td>
<td>134</td>
<td>I have never stolen anything of consequence.</td>
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<td>____</td>
<td>123</td>
<td>I have good interactions/relationships with members of the same sex</td>
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<td>135</td>
<td>Overall, I am not very accepting of myself.</td>
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<td>____</td>
<td>124</td>
<td>I tend to be a very nervous person.</td>
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<td>136</td>
<td>Few, if any of my friends are very spiritual or religious.</td>
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</tbody>
</table>

Different characteristics, both positive and negative, vary in their importance in determining how you feel about yourself. For example, the statement “I am musically talented” may be very inaccurate as a description of you, but it may also be very unimportant about how you feel about yourself. Below are statements about different characteristics. For each statement please judge: 1) how ACCURATE the statement is as a description of you; and 2) how IMPORTANT the characteristic is in determining how you feel (either positive or negative) about yourself. Please use the following response scale:

<table>
<thead>
<tr>
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<th>1</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Inaccurate</td>
<td>Inaccurate</td>
<td>Moderate</td>
<td>Accurate</td>
<td>Very Accurate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very Unimportant</td>
<td>Unimportant</td>
<td>or Average</td>
<td>Important</td>
<td>Very Important</td>
<td></td>
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</tbody>
</table>

**ACCURACY:** How accurate is this statement about you?

**IMPORTANT:** How important is the characteristic to you?

I am good at sports and physical activities
I am physically attractive/good looking
I have good interactions/relationships with members of the opposite sex
I have good interactions/relationships with members of the same sex
I have good interactions/relationships with my parents
I am an emotionally stable person
I am a spiritual/religious person
I am an honest/reliable/trustworthy person
I have good verbal skills/reasoning ability
I have good mathematical skills/reasoning ability
I am a good student in most academic subjects
I am good at problem solving/creative thinking

---

SDQIII May 2003 KJ
CONTACT FORM

Detach this page from your packet if you want information on the results of the questionnaire or need to talk to someone about the feelings that some questions bring up. If you want to talk to someone about the feelings, you may contact the person and/or facilities below. There will be no way to link you to your results without having the case number that is on the top right corner of this page. This number matches the number on your questionnaires and will be known to no one except you.

If you would like to talk about how taking these questionnaires made you feel, you may contact:

University Counseling Center
Phone: 662-915-3784
e-mail: counslg@olemiss.edu
Web page: http://www.olemiss.edu/depts/stu_counseling/

or

Psychological Services Center
Phone: 662-915-7385
Web page: http://www.olemiss.edu/depts/psc/

If you are interested in your results, you may contact:
Ji Woong Yang
jyang4@olemiss.edu
VITA

JI WOONG YANG
The University of Mississippi
Department of Leadership and Counselor Education
School of Education
120 Guyton Hall
P.O.Box 1848
University, MS 38677

EDUCATION

Master of Arts in Education, 2005, Yonsei University, Seoul, South Korea
~ Concentration, Counseling Psychology
~ Thesis title: Adolescent Ego-Identity Status by Their Gender and School Year
~ Recipient, Scholarship, 2002 - 2004

Bachelor of Arts in Education, 2002, Yonsei University, Seoul, South Korea
~ Minor, Psychology
~ Recipient, Scholarship, 1996 – 2002

PROFESSIONAL EXPERIENCE

Counselor
University of Mississippi, Oxford, Mississippi, 2007-2008
~ Provided individual counseling for international students attending University of Mississippi

Staff
Korean Counseling Psychological Association, Seoul, South Korea, 2005 - 2006
~ Managed administrative services, proceedings for academic events
~ Managed counselor certification test
~ Teamed with colleagues to propose national certification procedure for counseling professional
~ Planned and managed workshop for continuing professional education

Counselor
Suwon City Youth Counseling Institution, Suwon, South Korea, 2004 - 2005
~ Provided counseling to adolescents and parents
~ Conducted psychological assessments

Dormitory Superintendent, Student Dormitories
Yonsei University, Seoul, South Korea, 2003 - 2005
~ Provided advice and counsel to students on dormitory life; handled night duty once a week.
~ Performed crisis intervention when appropriate.

Student Counselor
Yonsei University, Counseling Center, Seoul, South Korea, 2003-2004
~ Conducted psychological assessment; provided one-on-one counseling.
~ Received professional supervision once a week

Research Assistant
Yonsei University, The Institute for Educational Research, Seoul, South Korea, 2002-2004
~ Managed Three International Research Projects:
  “Students’ Affective Domain Among Korea, China, and Japan”
  “The Research on Counseling from Viewpoint of Buddhism and School Counseling in Korea and Japan”
  “The Study on Educational Issues in Korea and Japan”
~ Collected data; performed coding and statistical analyses; reported findings; handled paperwork.
~ Managed international seminar to explore student issues regarding Korea and Japan.

CERTIFICATIONS

Certified Counselor #963, Korean Psychological Association & Korean Counseling Psychological Association, 2005
Certificate, Lifelong Education Consultant, Yonsei University, 2003
Teacher’s License, South Korea, 2003

TEACHING EXPERIENCES

Organization, Administration, and Consultation:
Community Counseling
  COUN 685     Spring 2009
Developed and used grading rubric, provided lectures, and evaluated students’ presentations & papers.

Multicultural Counseling
  COUN 570     Fall 2008
Designed and infused various culture into assignments for the purpose of raising students’ multicultural competency awareness; developed a rubric, lectured and graded students’ papers and presentations

Practicum in Counseling
  COUN 693     Fall 2008
Explored and exercised counseling skills for community track practicum students.

Diagnostics Systems in Counseling (DSM –IV TR)
  COUN 674     Summer 2008
Moderated on-line chats, graded written work, developed online presentation, communicated electronically with students regarding course material, and exercised on-line technologies.
Research in Counseling  
COUN 605  
Summer 2008
Lectured students on SPSS, computer applications in statistical analysis.

Counseling Skills  
COUN 690  
Summer 2007
Developed syllabus and course structure, graded, provided lectures, assessed students’ skills on videotaped sessions, supervised students outside class, and developed an assessment tool.

SUPERVISION EXPERIENCE
Provided triadic and individual supervision; gave constructive feedback on students’ counseling tapes; explored the dynamics among supervisees and clients for Practicum Masters’ level school counseling students  
Fall 2008
Provided group supervision for a Masters’ counseling Internship students  
Spring 2007

PUBLICATIONS

CONFERENCE PRESENTATIONS

VOLUNTEER SERVICE
Co-leader
ILSAN PAIK HOSPITAL, Ilsan, South Korea, 2004
Group Counseling Program
~ Co-led Counseling Program for Inner-City youth.
~ Received supervisions

Teacher
SEOUL FIRST BAPTIST CHURCH, Seoul, South Korea, 2001 - 2004
Sunday School
~ Teach Bible study to adolescents.
~ Teach school subject to adolescents on a weekday.

ADDITIONAL TRAINING

Yonsei University, Seoul, South Korea
_A Seminar Group of Graduate Students for Counseling Psychology_, 2002 - 2004
~ Couple Therapy, Counselor Empathy Training, Analytical Psychology, Group Dynamics,
   Emotional Patterns in Childhood, Statistics
_Peer Counselor Training_, 2001
_Training as a counselor-in-training_, 2003-2004
~ Training on Administration, Assessment, Individual counseling, Supervision

Korean Counseling Psychological Association
_International Symposium for Problem Solving Inventory / Paul Heppner_, 2004
_Workshop for Choice Theory and Reality Theory / William Glasser_, 2004
_International Seminar for Group Counseling / Gerald Corey_, 2004
_Counselors Camp for Counseling Training_, 2003

MAUMSARANG CO. LTD., Seoul, South Korea
_MMPI Training_, 2003
_Cognitive Therapy Training_, 2003

MBTI INSTITUTE, Seoul, South Korea
_MBTI Training_, 2003

PROFESSIONAL ORGANIZATIONS

American Counseling Association
Association for Multicultural Counseling and Development
Korean Counseling Psychological Association
Korean Psychological Association