

# Parental attachment and mentoring: Readiness to be mentored

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# BOSTON COLLEGE

Lynch Graduate School of Education

Department of Counseling, Developmental, & Educational Psychology

Counseling Psychology Program

## PARENTAL ATTACHMENT AND MENTORING: READINESS TO BE MENTORED

Dissertation

By

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## Abstract

Parental attachment and mentoring: Readiness to be mentored

Dissertation Chair: Belle Liang, Ph.D.

Previous research on mentoring has primarily focused on outcomes associated with these relationships. This body of literature has shown that youths can reap academic, psychological, social, and vocational benefits from the support and guidance provided by these relationships. In addition to outcomes, there has been a slow, but steady, shift to understand the process, or experience, of mentoring from the perspectives of both the mentor and youth. Yet both of these lines of inquiry tend to presuppose that youths are ready, willing, and able to engage in a relationship with a mentor, as long as one is available. Indeed, other research shows that not all youths are ready to be mentored.

Therefore, in an attempt to address the conceptual gap regarding the understanding of how youths come to participate in mentoring relationships, the current study used developmental frameworks to investigate precursors to youths' readiness to be mentored. Specifically, this study considered the role of demographic characteristics and parental attachment with eighth grade youths' readiness to be mentored.

*Readiness to be mentored* was conceptualized as consisting of attitudinal and probable-action elements, based on help-seeking theory, and was assessed using adapted scales that were piloted in the current study.

Youths in eighth grade from four K-8 elementary schools in the Northeast (N=104) completed self-report questionnaires assessing parental attachment, attitude towards seeking a mentor, likelihood to engage a mentor, demographic characteristics, and mentor characteristics. The gender differences that were hypothesized were not

supported; rather, mentor presence was linked to positive attitudes towards seeking a mentor and increased likelihood to engage a mentor. Among the youths with mentors, aspects of parental attachment differentially predicted attitude towards seeking a mentor and likelihood to engage a mentor. Of particular interest was that those without mentors most frequently reported not needing a mentor. This finding draws attention to the understandings youths have of the role and potential utility of mentoring in their lives, and the factors that shape these understandings. Theoretical considerations, implications for future research, and practice implications are discussed.

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## *Chapter I: The Problem*

### *Introduction*

The *Handbook of Youth Mentoring* defines a mentoring relationship as consisting of three primary components: (a) a relationship with someone who has a greater body of experience, (b) guidance and/or instruction intended to facilitate development, and (c) an emotional bond between the mentor and the mentee (DuBois & Karcher, 2005). Mentoring has also been defined more casually as “a caring and supportive relationship between a youth and a non-parental adult” (Rhodes, Spencer, Keller, Liang, & Noam, 2006). Moving beyond the definition, Rhodes (2002, 2005) posited three conceptual pathways for the influence of mentoring relationships on youths. These pathways are: (a) the enhancement of the youth’s social relationships and emotional well-being, (b) the improvement of cognitive skills through instruction and conversation, and (c) the promotion of positive identity development through role-modeling and advocacy. These pathways represent domains of the youth’s development that may, at one time or another, need bolstering. Furthermore, Rhodes and colleagues (2006) claim that the efficacy mentoring relationships have in meeting youths’ needs in these domains is partially determined by the quality and longevity of the relationships established between youths and their mentors. Yet this logic

assumes that all youths are willing and prepared to assume their role in a genuine and lasting mentoring dyad.

Many adults hope that youths will seek guidance, instruction, or support when they perceive an issue to be important, adverse, or not likely to work itself out on its own (DuBois & Karcher, 2005; DuBois & Silverthorn, 2005a, 2005b; Srebnik, Cauce, & Baydar, 1996). For some youths, it may be easy to determine whether or not a need exists; for others, this task is not so simple (Cauce, Domenech-Rodriguez, Paradise, Cochran, Shea, Srebnik, & Baydar, 2002). Furthermore, assessing whether or not a need can be met without assistance from someone older and more knowledgeable may be even more daunting for youths who have difficulty identifying problems in the first place (Cauce et al., 2002). Thus, youths who are reluctant to turning to caring and supportive adults for assistance in some aspect of their lives may find it difficult to cope with internal and/or external stressors. In the face of such struggles, mentoring relationships have demonstrated their value as effective mechanisms for helping youths overcome obstacles, learn new skills, and explore their identities (DuBois & Silverthorn, 2005a, 2005b; Rhodes, 2002, 2005).

For instance, Rhodes, Grossman, and Resch (2000) found that middle school students involved in mentoring programs exhibited an increase in perceived scholastic competence and a decrease in

unexcused absences, as mediated through improved parental relationships. DuBois and Silverthorn (2005b) found that those youths with mentors were more likely to graduate from high school, attend college, work more than 10 hours a week, and were less likely to partake in gang membership, physical fights, and risk taking. Larose, Tarabulsy, and Cyrenne (2005) examined the impact of a teacher-student mentoring program on the academic adjustment of at-risk college students and determined that those students who experienced high relatedness with their mentors exhibited better social adjustment and institutional attachment.

Extending beyond the realm of education, Asetline, Dupre, and Lamlein (2000) found that substance abuse decreased in youths across age groups with participation in a mentoring program. Cavell, Meehan, Heffer, and Holladay (2002) found that family member substance use diminished with the aid of a mentoring model. Further, DuBois and Silverthorn (2005b) found that youths who reported having favorable mentoring relationships also reported having greater levels of self-esteem and life satisfaction, and lived healthier lives (i.e., were physically active and used birth control).

Although there is a growing body of outcome research on mentoring that has, undoubtedly, contributed to the recent boom of

funding for formal mentoring programs (i.e., Big Brothers/Big Sisters (BBBS), MENTOR, Mentors in Violence Prevention (MVP), and MassMentor) (DuBois, Holloway, Valentine, & Cooper, 2002; DuBois & Silverthorn, 2005a, 2005b), there are many youths who do not have access to formal mentors, for a variety of reasons (Putnam, 2000). Some contend that contextual and economic changes have led to a notable decline in the number of caring adults in the lives of youths (Eccles & Grootman, 2002). Others point to the shortage of middle-class residents, specifically adults who might have served as respected authority figures in urban communities, as another reason a significant number of today's youths have few, if any, reliable, caring adults to turn to in times of need (Anderson, 1999). Ultimately, there exists a subset of youths who are left to their own devices to find stimulation, guidance, and/or support from natural, or informal, mentors (i.e., school teachers, coaches, extended family, or available community members) (Zimmerman, Bingenheimer, & Behrendt, 2005).

### *Natural Mentoring*

There are, however, pockets across the nation where mentoring relationships with both non-parental, familial adults and non-familial adults have been reported by a growing proportion of youths (Beam, Chen, & Greenberger, 2002; Klaw & Rhodes, 1995; Munsch, Liang, & DeSecottier,



1996; Sanchez & Reyes, 1999; Zimmerman, Bingenheimer, & Notaro, 2002). Within this growing body, those mentors from outside of the extended family have been linked to impressive positive outcomes in the domains of education and physical health (DuBois & Silverthorn, 2005a, 2005b). These results are consistent with theory and research suggesting that supportive relationships with non-familial adults benefit youths in very specific ways, such as aiding to build social capital (Darling, Hamilton, & Niego, 1994) and promoting youths' competence in adults' areas of expertise (Rhodes, 2002).

DuBois and Silverthorn (2005a) argue that non-familial mentors are effective, in part, because they are removed from the shared attitudes and behaviors of family members, which may be detrimental to the youth's growth. Others believe that familial mentors are relatively less effective because of their shared vulnerability to biological, relational, and contextual risk factors also experienced by the youth (Heaney & Israel, 2002). Thus, non-familial adults seem to be in a good position to model and encourage alternative perspective-taking and behaviors, as well as competency in new domains. In fact, potential non-familial mentors with specialized bodies of knowledge are likely to be effective in linking youths to resources related to the adult's area(s) of interest (DuBois & Silverthorn, 2005a).

Given the potential benefits of non-familial, natural mentoring relationships, though, why would some youths not partake in this phenomenon? Natural mentoring relationships have been shown to have important, far reaching implications for youths (i.e., intellectual, interpersonal, social, and vocational) (DuBois et al., 2002; Rhodes, 2002, 2005); so, why are some youths willing to have one or more mentors, while others choose not to bring themselves to this experience altogether (Zimmerman, Bingenheimer, & Berendt, 2005)? Are there differences between youths who do or do not seek out and invest in mentors? Some research has shown that mentees seek out mentors (Werner & Smith, 1992), whereas other research has shown that mentors actively seek out potential mentees (Turban & Dougherty, 1994). Ultimately, the relationship could be initiated by either party (Ragins & Cotton, 1991); but, there is a general consensus in mentoring literature that the relationship will not flourish unless both parties are interested in engaging and contributing to the dyad (Fagenson-Eland & Baugh, 2001; Rhodes, 2002, 2005; Rhodes et al., 2006; Spencer, 2002, 2004). What, then, might contribute to a youth's interest, or more importantly disinterest, in engaging a non-parental adult in a supportive, guiding, or stimulating relationship, particularly given its demonstrated positive outcomes? This is a question that has not been

asked and pursued in mentoring literature, and is a question that this study attempts to address.

### *Overarching Theoretical Framework*

Current theoretical perspectives in the field of developmental psychopathology emphasize the interaction between the individual and their contexts, and serve as the framework for this study. Lerner's (1986) developmental-contextual theory and Ford and Lerner's (1992) developmental-systems theory both highlight the complex interplay between an individual's characteristics and his or her contexts. As individuals evoke different reactions from their environments, due to their genotype, phenotype, and behavioral patterns, they, subsequently, react differently to various contextually-bound events based on their complex, multi-layered organization. Two layers of youth development that have received a substantial amount of theoretical and empirical attention are adolescence and gender. These two factors have the potential to shape the developmental trajectory of youths, particularly as they experience various developmental shifts. Therefore, they will be discussed, next, as areas of focus for this study.

### *Adolescence*

For early and middle adolescents, who are in the throws of biological, psychological, social, relational, and contextual changes, four developmental shifts become particularly salient and are quite relevant to understanding the fit between an adolescent's needs and a mentoring relationship (Darling, 2005). These shifts are: (a) changes in the parent-adolescent relationship, (b) changes in the peer context, (c) a potential entrance into the workforce, and (d) the ascent from elementary/middle school to high school. These transitions focus the adolescent's attention away from their relationships with parents and emphasize relationships with one's peers. For example, the shifts mentioned above, collectively, lead to increasingly demanding and complex schedules for adolescents, as well as equally demanding and complex relationships with family, peers, romantic interests, school, and extracurricular activities. These demands may make natural mentors particularly valuable insofar as they offer the potential for guiding, caring and supportive non-parental relationships with adults that possess specific knowledge bases and skill sets. Such relationships may foster adaptive coping during times of stress, while offering the privacy and room, from one's parents, to explore one's developing identity.

Youths have, therefore, been viewed as attempting to become less dependent on primary attachment figures as they grow older; indeed, founding theorists in psychology have argued that a key task of adolescence is the development of a greater capacity for autonomy (Erikson, 1968; Freud, 1961). However, the increasing dependence on one's peers, which has been hypothesized as accompanying this new found autonomy, may create a healthy pressure for adolescents to begin to utilize their peers, and perhaps non-parental adults, as attachment figures in the service of meeting attachment needs (Allen & Land, 1999; Collins & Read, 1990; Grotevant & Cooper, 1986; Hill & Holmbeck, 1986; Steinberg, 1990). Subsequently, some have posited that attachment needs and behaviors for youths are not fully relinquished, but, rather, gradually transferred to peers and other non-parental adults (Allen, Moore, & Kuperminc, 1997; Fraley & Davis, 1997; Friedlmeier & Granqvist, 2006; Kenny, Moilanen, Lomax, & Brabeck, 1993). This transfer of a youth's parental attachment organization to a peer parallels the transfer of one's attachment organization to a non-parental adult (i.e., a mentor); and, given the aim of this project as trying to elucidate the formation of a mentoring relationship, this normative developmental process serves as an ideal period of exploration.

## *Gender*

Another area of interest is the intersection of gender-related developmental processes and the formation of mentoring relationships. Initial findings from gender research on mentoring relationships have only revealed trends in referrals and prevalence, which have generated further questions about differential mentoring needs, efficacy, and matches between boys and girls (Bogat & Liang, 2005). In general, attitudes and behaviors regarding relationships have been thought to differ across gender as a result of socialization pressures (Bem, 1981; Galambos, Almeida, & Petersen, 1990). Specifically, girls have been viewed as striving for less autonomy than boys, in part, due to pressure to conform to particular roles; however, contemporary feminist relational-theory refines this idea by putting forth the idea that the core of girls' identities are founded in their orientation towards others and interpersonal relationships (Chodorow, 1987; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991). Maintaining meaningful connections has been shown to be quite important to many girls and worth the sacrifice of autonomy. Thus, girls are thought to have qualitatively different relationships than boys, characterized by more intimacy and attunement (Buhrmeister, 1990; Grazyk & Henry, 2001). Given these differences in approaches to and

quality of relationships, gender differences are anticipated to surface with respect to attitudes towards and engagement in mentoring relationships.

### *Mentoring and Attachment*

Natural mentoring relationships have been shown to have staying power in comparison to short lived formal mentoring relationships (DuBois & Silverthorn, 2005a, 2005b; Rhodes, 2002; Zimmerman et al., 2002). Zimmerman and colleagues (2005) contend that this is may be due to the genuine connection between the mentor and mentee, of which both parties reported greater satisfaction than their counterparts in formal mentoring relationships. However, these authors, and others, do note that those youths who are able to form such bonds are likely to have the necessary social skills and confidence to engage non-parental adults in a manner so as to initiate and sustain the relationship (Werner & Smith, 1982, 1992). On the other hand, those youths who do not form bonds with mentors in a natural fashion may not possess the skills and qualities necessary to engage, sustain, and benefit from such a relationship. In attempting to better understand the subset of youths who successfully engage natural mentoring relationships, versus those who do not, it is important to explore what youths bring to a potential mentoring

relationship, and how their histories and contexts may have shaped their relational lens.

Mentoring relationships have been compared to the parent-child relationship (i.e., a one-to-one relationship in which a more experienced adult guides the development of a younger person) (Rhodes, 2002, 2005; Rhodes et al., 2006). Subsequently, theory and research on parental attachment has been helpful in elucidating the formation of natural mentoring relationships. Indeed, Rhodes' (2002, 2005) paradigm of youth mentoring is based, in part, on common models of parental attachment (Bowlby, 1969; Crittenden & Ainsworth, 1989; George & Solomon, 1999; Grotevant & Cooper, 1986). According to attachment theory, children rely on a warm, intimate, and consistent relationship with an attachment figure in order to develop a sense of security and psychological well-being (Bowlby, 1969, 1988). More contemporary theory and research on parental attachment has been extended to adolescents and has demonstrated that the parent-child bond evolves during the adolescent years, remaining influential by serving as a secure base and as a safe haven (Kenny, 1987, 1994; Kenny & Donaldson, 1991; Kenny, Moilanen, Lomax, & Brabeck, 1993; Kenny & Rice, 1995; Kenny & Sirin, 2006) – features commonly thought to be offered by natural mentoring relationships (Rhodes, 2002, 2005). Subsequently, youths who have had



negative parental attachment experiences may hold distrustful, even unfavorable, views of natural mentoring relationships as viable options for personal support, making these adolescents less likely to engage mentors in times of distress. This relationship (viz., between parental attachment and mentoring relationship formation) has yet to be studied in mentoring literature; so, to address this extant gap this study aimed to explore the relationship between parental attachment and the formation of a mentoring relationship.

### *Mentoring and Help-Seeking*

Literature on youth help-seeking has also been of particular use in illuminating differences among youths' varying views of natural mentoring relationships, and, ultimately, their decision to engage those relationships. The act of seeking help, or support, has been studied in a variety of populations and is viewed as a process involving the recognition of an issue and behaviors aimed at alleviating stressors (Rogler & Cortes, 1993) – a sequence not unlike those seen in mentoring and attachment relationships. Veroff, Kulka, and Donovan (1981) defined the process of help-seeking as consisting of four stages: a) problem recognition, (b) the decision to seek help, (c) the selection of a help provider, and (d) the utilization of that provider. This model has since been extended to

emphasize the influence of the individuals' social support network, which plays a pivotal role in the identification of a problem and the concomitant steps to resolve that problem (Srebnik et al., 1996). Because help-seeking is a contextually-influenced process of decision-making that occurs within an individual's support network, many individuals have been found to seek assistance from several different sources throughout the course of the problem, including family, friends, teachers, religious workers, physicians, other service providers, including mental health professionals (Cauce et al., 2002; Srebnik et al., 1996).

Once a problem is identified, the next two stages of the help-seeking process (viz., decision to seek help and selection of support) then become relevant insofar as one's attitudes towards a source of support and the, subsequent, probability to engage that support are then employed. The search for help or support may represent an adolescent's active attempt to develop a sense of mastery or stability. Thus, a mentoring relationship may serve to promote a form of resilience within youths through cognitive stimulation, emotional support, vocational guidance, and identity development en route to self-actualization (Rhodes, 2002, 2005; Rhodes et al., 2006).

With help-seeking attitudes and behaviors potentially surfacing during early adolescence, depending on a number of factors, including

previous attachment experiences, this age was thought to be a crucial developmental period to explore. The normative changes that occur during this transitional period warrant the investigation of early adolescent youths' attitudes towards seeking mentors and their likelihood to engage mentors in order to better understand why some youths are more "ready for mentoring" than others.

### *Readiness to be Mentored*

The purpose of this study was to examine how youths' parental attachments relate to their readiness to be mentored, a conceptual construct thought to consist of two elements: a) attitude towards seeking a mentor and b) likelihood to engage a mentor. This construct, which was not empirically tested in this study, was conceptualized based on the help-seeking model described above. Based on help-seeking theory, two elements were hypothesized. One is a dispositional element, which relates to one's opinions (i.e., preconceived utility and efficacy) of a mentoring relationship. The other is an element that reflects of one's likelihood to take action and engage a mentoring relationship, were one made available. Furthermore, one's desire to act, or engage, was not necessarily thought to require alignment with one's attitudes. In other

words, a youth might hold certain attitudes about an experience, yet his or her likelihood to partake in that experience may not follow suit.

For example, a youth might hold negative views of mentoring, perhaps because of a lack of experiences or negative reviews by peers. However, when presented the opportunity to be mentored, that same youth might be likely to engage a mentor because of his or her need for a supportive relationship. In this vein, “readiness to be mentored,” was hypothesized to consist of two elements, which were then assessed by adapting existing measures of attitude towards seeking help from non-parental adults. More specifically, these measures were adapted to inquire about attitudes and probable-actions towards mentoring relationships.

Given the lack of clarity in the extant literature on mentoring about the impact of one’s attachment experiences on one’s tendency to seek out and engage mentoring relationships, more research is needed to better understand this phenomenon. This study focuses on particular precursors to the formation of mentoring relationships (viz., attitudes towards mentoring and likelihood to engage a mentor) that are hypothesized to impact the formation of a mentor-mentee bond. Rather than focusing on discrete characteristics of pre-existing, or recently-formed, mentoring relationships, such as relationship duration (Rhodes,

2002), or positive outcomes associated with successful mentoring relationships (DuBois & Silverthorn, 2005a, 2005b), precursors of the mentoring relationship, were studied. Acknowledging that not all youths have positive attitudes towards mentors, nor are all youths willing to invest time, energy, and emotion into forging such a relationship, it is important to move towards an understanding of reasons some youths tend not to seek out support, guidance, instruction, or help. Such youths may inadvertently be forfeiting a potentially important support resource, particularly during times of distress.

The implications for this specific line of inquiry are potentially significant insofar as findings may shape the way natural mentoring relationships are cultivated and maintained, as well as expand the contexts within which such relationships can be fostered. More specifically, this study could possibly lend insight into how aspects of the parental attachment relate to youths' attitude towards seeking a mentor and likelihood to engage a mentor. Subsequently, the following broad research questions were posed:

*Research Questions*

1. Are there differences in parental attachment and readiness to be mentored between boys and girls who are with and without mentors?
2. Does one's parental attachment predict one's readiness to be mentored? Do demographic variables play a role in this?

The specific hypotheses of this study were:

*Hypotheses*

1. After adjusting for "nuisance" variance, statistically significant differences in the parental attachment measure and readiness to be mentored dimension measures, respectively, will be between those boys and girls, both with and without mentors.
2. Each of the three subscales of the parental attachment questionnaire will: a) positively relate to and b) predict both attitude towards seeking a mentor and likelihood to engage a mentor, for both males and females, with and without mentors. Furthermore, demographic variables will account for statistically significant amounts of variance (i.e., nuisance variance) such that their variance will have to be partialled out of any predictive models.

## *Chapter II: Review of Related Literature*

The purpose of the present study was to explore, from a developmental framework, why some youths are more “ready to be mentored” than others. To lay the foundation for the exploration of this conceptual construct, which involves youths’ participation in natural mentoring relationships, this chapter first reviews theory useful in understanding mentoring as a dynamic system. So, to begin, the principles of two developmental theories are presented. Adolescence is the critical developmental period examined by this study, while the relationship between one’s experiences with primary caregivers and mentoring relationship formation is the phenomena of interest. Therefore, a review of related literature highlighting the intersections of adolescence, mentoring, and attachment is reviewed. Subsequently, existing literature on youths’ help-seeking is then presented; in particular, theory and research that informs the conceptualization of the readiness to be mentored construct will be discussed. Lastly, based on the importance of examining developmental factors related to help-seeking, literature on the intersection of adolescence and help-seeking is reviewed.

### *Theoretical Framework*

In trying to understand the formation of mentoring relationships, it is important to establish a theoretical framework that recognizes the interaction between individuals and their context. The exchange that takes place between these factors has been emphasized in recent theoretical perspectives of developmental psychopathology. In particular, developmental-contextual (Lerner, 1986) and developmental-systems (Ford & Lerner, 1992) theories consider the complex interplay between an individual's characteristics and his or her contexts as paramount. Given the numerous factors that potentially impact the developmental trajectory of youths entering high school, these theories successfully bridge theory and practice by providing a meaningful and hopeful understanding of parental attachment and the various ways it may interact with one's preconceptions of mentoring relationships to impact the formation of such relationships among youths.

Individuals evoke different reactions from their environment as a result of their physical characteristics and behavioral patterns, which have developed from complex interactions throughout their lifespan. Thus, different individuals react differently to various contexts based on their complex history. These interactions further shape the individual and impact development by influencing the fit between the individual and



the expectations, values, and preferences of the social environment (Thomas & Chess, 1977). Therefore, these developmental theories conceptualize the cognitive, social, and emotional changes that precede the formation of a mentoring relationship as: (a) occurring at multiple levels of organization (i.e., biological, psychological, environmental, socio-cultural, political, and historical levels), (b) occurring across the life-span, and (c) inclusive of relative strengths and weaknesses (Lerner, 1986), and emphasize that individual development is a continuously unfolding and dynamic process that occurs between the individual and various contexts (Ford & Lerner, 1992).

With these principles in mind, an important aspect of development to examine in trying to understand the formation of mentoring relationships is the individual's experience with their early caregivers and the impact this has on participating in future supportive and guiding relationships. The following sections review attachment theory and research, and their application in understanding youths' formation of caring and supportive relationships with non-parental adults during adolescence.

### *Attachment Theory*

The mentoring phenomenon has been linked to attachment theory because of its resemblance in structure and function to the dyadic relationship seen between infants and primary caregivers. Attachment theory (Bowlby, 1969) holds that early relationships with caregivers not only serve as a safe haven and a secure base from which one explores the world, but also as a prototype for one's engagement in subsequent close relationships (Hazan & Shaver, 1987, 1994). Thus, one's parental attachment is not only thought to influence the type of behaviors one exhibits in stressful situations, but also dictates the care and support one might look for in their relationships with others by shaping one's attitudes towards other potential sources of support and care. The following sections outline fundamental tenets of attachment theory and its evolution.

Bowlby (1969) originally borrowed from the field of ethology the concept of the "behavioral system," a species-universal, biologically-evolved, "hard-wired" program that organized behavior in a way that increased the organism's chances of survival and reproduction despite environmental dangers and demands (Shaver & Mikulincer, 2007). Bowlby conceptualized the attachment system as having evolved due to the helplessness and complete dependence of human infants. In order to

protect infants from danger, the attachment system assured that he or she would maintain proximity with caring and supportive others (i.e., attachment figures). Infants who maintained proximity to caregivers were more likely to survive and reproduce, passing on genes to subsequent generations that promoted proximity seeking in times of danger. Attachment behavior of the infant and parenting behavior of the caregiver are thought to interact reciprocally, leading to the development and maintenance of attachment patterns. The availability and sensitivity of the caregiver in responding to the infant's signals is believed to foster feelings of security; hence, the attachment figure is used as a "secure base" supporting exploration of the environment and as a "safe haven" to which the infant can return for reassurance when feeling threatened. Following Bowlby's lead, Ainsworth, Blehar, Waters, and Wall (1978) recognized that not only were universals of development involved, but also that patterns of attachment relationships differed in the degree of security provided and that these individual differences mattered for later development.

Secure attachments have been thought to contribute to a number of positive emotional, social, and cognitive developmental outcomes, such as enabling the child to tolerate anxiety-arousing situations, fostering environmental exploration, and promoting the development of

instrumental competency (Kobak & Sceery, 1988). More important to this study, however, is the hypothesis that characteristics of the infant-caregiver relationship are internalized over time to form “internal working models” of the self, others, and the world (Bowlby, 1973). According to this vein of attachment theory, stored knowledge of repeated attachment-related interactions result in the formation of increasingly stable mental representations of the self, the caregiver, and the relationship.

These representations, similar to “scripts” and “social schemas,” were viewed by Bowlby as cognitive-affective structures that are made up of valenced memories, which shape the expectations and appraisals thought to evoke emotion (Shaver, Collins, & Clark, 1996), and serve as templates for one’s understanding of subsequent relationships. Infants, for example, who experience caretakers as reliable and responsive are believed to develop internal working models of the self as worthy of consistent response, thus contributing to a generally positive view of self (Bowlby, 1969). Secure attachments are, therefore, hypothesized as contributing to one’s expectations of others and the environment as predictable and trustworthy, providing a foundation of basic trust. This trust enhances environmental exploration, and the willingness to turn to others as a source of help (Bowlby, 1973). Although this process was initially hypothesized as occurring during infancy and childhood, some

have extended this theory, and process, to the experience of adolescence.

### *Attachment during Adolescence*

Traditional theories of adolescent development (Blos, 1962; Erikson, 1968; Freud, 1961) have emphasized the importance of rebellion against primary caregivers in fostering psychological separation and growth; and, for quite some time, many held that a key task of adolescence was to no longer need to rely on parents' support when making one's way through the world (Grotevant & Cooper, 1985). However, normative studies of adolescent development challenged this notion and revealed that adolescence does not have to be conceived of as the result of impending turmoil (Douvan & Adelson, 1966). Subsequent research has consistently supported the notion that adaptive adolescent autonomy is established not at the expense of attachment relationships with parents, but in the presence of secure relationships that transform and endure well beyond adolescence (Allen, Moore, & Kuperminc, 1997; Fraley & Davis, 1997; Grotevant & Cooper, 1986; Hill & Holmbeck, 1986). Rather than working against the developmental shifts that adolescents experience, the attachment system appears to play an integral role in helping adolescents meet these challenges. Thus, attachments established earlier

in the life course may continue to be adaptive because of the positive internal working models they provide.

As secure internal working models are thought to provide a basis for maturation by allowing a positive developmental pathway to be followed (Bowlby, 1980; Sroufe, 1989), a positive view of the self, others, and the world is thought to contribute to psychological resilience by enabling the individual to adapt positively in the wake of stressful life circumstances (Griffin & Bartholomew, 1994). Therefore, internal working models are hypothesized as impacting subsequent development by providing cognitive templates that shape how new experiences are interpreted (Bretherton, 1985). For example, the individual who has a positive and trusting view of others, associated with a secure internal working model, may be able to adaptively, and successfully, engage available social supports, thereby buffering the negative impact of existing life stressors. Those with a more negative, less trusting view of others, associated with a less secure internal working model, may be less willing, or able, to successfully engage available social supports, thus, creating a susceptibility to contextual stressors.

*Mentoring, Adolescence, and Attachment*

Darling (2005) argues that the transitions occurring during adolescence make it an ideal time for mentoring. Research on natural and programmatic mentoring with this age group, however, has been mixed. Naturalistic studies of youths' relationships with unrelated adults show that, for some youths, mentoring relationships occur less frequently and are less emotionally satisfying than relationships with parents, peers, or extended family members (Darling, Hamilton, & Shaver, 2003). Further, matches between assigned mentors and mentees were shown to be less likely to last if the mentee was an adolescent, rather than a child; and, adolescent mentees and their mentors were found to be less satisfied with their relationships than younger protégés and their mentors (Grossman & Rhodes, 2002). Clearly, a need exists to continue studying the variance and complexity that exists among early, middle, and late adolescents' mentoring relationships.

Eighth graders, who are in their middle adolescence and on the verge of entering a new venue (i.e., high school), are in the throws of biological, psychological, social, relational, and contextual changes. During this time, four developmental shifts become particularly salient and relevant to understanding the fit between the needs of an adolescent and a mentoring relationship (Darling, 2005). These shifts are: (a) changes

in the parent-adolescent relationship, (b) changes in the peer context (including romantic relationships), (c) adolescents' entrance into the workforce, and (d) the move from elementary and/or middle school to high school. As a whole these shifts move adolescents toward social environments that are dominated by peers, less populated by adults, and more tightly controlled and scheduled. These developmental changes tend to make adolescents' schedules markedly fuller than those of younger children, and often involve commitments with family or peers, romantic relationships, work, or school-based extracurricular activities. Such changes are highly relevant in thinking about how a mentoring opportunity may best fit the needs of the early to middle adolescent age group. New role demands and the loss of some closeness and natural contact with unrelated adults may make mentors particularly valuable.

Kenny, Moilanen, Lomax, and Brabeck (1993) suggested that the secure parent-child attachment provides a protective base of security for the early adolescent who is coping with numerous biological, psychological, and social changes. For the adolescent transitioning to high school, a developmental shift that can be conceptualized as a naturally occurring "Strange Situation" (Ainsworth, Blehar, Waters, & Wall, 1978), the secure base offered by parental attachment can promote exploration and mastery of the high school environment (Kenny, 1987).



This assumes that although the structure of the caregiver-child relationship transforms during the adolescent years, the affective bonds remain and the caregiver continues to provide a secure base by supporting exploration and offering a safe haven of advice and comfort when needed. Thus, turning to a non-parental adult in a time of need for support and/or guidance can be viewed as a sign of a secure base, rather than a sign of dependency – an idea important to the exploration of youths' readiness to be mentored.

George and Solomon's (1996, 1999) attachment model posits that children's experiences with primary caregivers, particularly during times of stress, shape the individual's sense of self-worth and partially dictates what type of response they expect from future caregivers (e.g., trust in others is initiated and shaped). For example, when navigating life-stressors, youths who have had negative early caregiving experiences were found to be less likely to seek help from others due to a diminished sense of trust in subsequent relationships (Crittenden & Ainsworth, 1989; George & Solomon, 1999). Thus, the style and quality of care that individuals receive through early caregiving relationships may affect whether or not, and the degree to which, one seeks out and participates in help- and support-receiving roles with others later in life.

### *Mentoring, Gender, and Relationships*

Another aspect of development that has received a great deal of attention in mentoring and relationship formation literature is gender. Gender-linked differences in mentoring relationships have been found to manifest among mentors and mentees in the forms of referral rates and gender frequency, both of which impact the potential mentor match, and, ultimately, the quality and efficacy of the relationship (Bogat & Liang, 2005). Specifically, boys and girls have been documented as having been referred for mentoring for quite different reasons: males are usually referred for being in need of a role model, whereas females are referred for having difficulties with trust, communication, or intimacy (Rhodes, 2002). With respect to gender frequency, most mentors, tended to be female, while mentees tended to be male (Herrera, 1999, Herrera, Sipe, & McClanahan, 2000; Roaf, Tierney, & Hunte, 1994). These initial descriptive findings generate more questions about possible differential mentoring needs across gender among youths, differential effectiveness of female and male mentors, and differential impact of same-gender mentoring matches versus cross-gender mentoring matches. Theories of gender-specific beliefs and behaviors, and understandings of relationships, have proven useful in understanding the impact of gender on mentoring.

Gender-specific beliefs and behaviors are thought to increase during adolescence, as per the “gender-intensification hypothesis” (Hill & Lynch, 1983). This position holds that attitudes, psychological well-being, and behaviors differ across gender as a result of socialization pressures to conform to traditional masculine and feminine sex roles (Bem, 1981; Galambos, Almeida, & Petersen, 1990). Based on traditional gender norms, girls have been thought to strive for less autonomy than boys. Not surprisingly, girls and boys have long been shown to partake in different types of friendships and relationships; girls report more intimacy in friendships than boys (Buhrmeister, 1990), and are more attuned to differences in friendships (Grazyk & Henry, 2001). Thus, girls have expected more intimacy, self-disclosure, and empathy in their relationships than boys (Clark & Ayers, 1993), as the quality of a friendship appears to influence a girl’s adjustment (Berndt & Keefe, 1995).

Relational theory has emerged in reaction to traditional, separation-individuation models of development to purport that the core of girls’ and women’s identities are founded in their orientation towards others and interpersonal relationships (Chodorow, 1987; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991). Emphasizing authenticity, mutuality, and empowerment, relational theory proponents support the notion that some adolescents reach an impasse where, in order to preserve relationships, they must

silence their own voices, or risk losing relationships. As some adolescents have described the use of both true and false selves in their presentation of themselves to the world (Harter, Marold, Whitesell, & Cobbs, 1996), girls have reported being more upset than boys over conflicting self-attributions (Harter, Bresnick, Bouchev, & Whitsell, 1997). This sacrifice (viz., a girl's lost voice) has been linked to higher levels of depression for girls later in life (Jack, 1991). Yet, the retention of meaningful connections has been shown to be of great importance to many girls, and is worth relinquishing some autonomy and expressivity. In this vein, it is a hypothesis of this study that girls, particularly those currently engaged in mentoring relationships, would exhibit the highest levels of parental attachment and readiness to be mentored.

### *Help-Seeking, Adolescence, and Mentoring*

Adolescence is a crucial developmental period for examining youths' help-seeking patterns. Various changes take place throughout adolescence, one of the most salient and important being the shift in relationships. Within their family, adolescents are struggling to negotiate the needs for autonomy and dependence (Steinberg, 1990), which may impact their willingness to seek help or support from adults. Also, adolescents are thought to have a greater capacity, than younger

children, to self-identify problems and engage in making decisions about help-seeking behaviors (Srebnik, Cauce, & Baydar, 1996). So, while many adolescents make it through this developmental period without major problems, other adolescents face difficult challenges; some are at-risk for engaging in risky behaviors, including unplanned pregnancy (Brooks-Gunn & Paikoff, 1993), violence, and delinquency (Moffitt, 1993; Ollendick & Vasey, 1999), and depression and suicide (Garland & Zigler, 1993).

How youths negotiate the demands of adolescence sets the stage for future well-being, competence, and success. Therefore, just as the literature on parental attachment has aided in understanding the formation of new mentoring relationships, so, too, has the body of literature on help-seeking. Not unlike mentoring relationship formation, the process of help-seeking entails a process of establishing a caring and supportive relationship with another individual. So, in beginning to formulate an understanding of the conceptual construct called "readiness to be mentored," a model of help-seeking behavior was reviewed in relation to the process of the formation of mentoring relationships. However, theory and research on the process of help-seeking, for both adults and youths, has primarily been situated within the context of mental health; therefore, the model of help-seeking described,

which is based on seeking mental health support, will be applied to the phenomenon of mentoring relationship formation.

Veroff, Kulka, and Donovan (1981) formulated a model of help-seeking that consisted of four discrete stages: (a) problem recognition, (b) the decision to seek help, (c) the selection of a help provider, and (d) the utilization of that provider. This model was extended by Srebnik, Cauce, and Baydar (1996) to include social networks of youths. These authors posited that social networks facilitate movement towards well-being when members of the network influence the youth to seek and utilize help, and constitute a barrier when they influence the youth to not seek or utilize help. This cognitive, or contemplative, model was used in this study to understand how youths come to form attitudes and opinions of mentoring relationship as a source of help or support, and, subsequently, whether or not they choose to engage such relationships. Indeed, the contemplative process that precedes engaging a mentoring relationship has been described in the mentoring literature.

Specifically, Keller's (2005) proposed that a contemplation phase is the first stage in the development of a youth mentoring relationship. Keller noted that, depending on the type of mentoring available, a period of anticipation and preparation prior to the commencement of the relationship may occur. Contrary to voluntary friendships and romantic

relationships that begin spontaneously, some natural relationships involve an obligation or commitment, such as a teacher expecting new students or a coach expecting new team members. But, while some natural mentoring relationships may be established with intentionality or forethought, as in the case of the teacher who identifies a student to formally track and groom, other relationships may establish significance without much attention to the goal of mentoring, such as in the case of the team member and coach who come to develop a close, caring, and supportive mentoring relationship that extends beyond their player-coach roles. For Keller, the salient processes that occur during the contemplation phase are the gathering of information about the mentoring experience, the planning for future activities, and the formation of expectations about the relationship. Furthermore, Keller believed that these processes shape and are shaped by attitudes, values, goals, and needs that lead youths to participate in a mentoring relationship. Indeed, utilizing a mentoring relationship appears closely tied to the perceived problem and the perceived utility of a mentor.

Problem recognition and identification constitute the first step in the help-seeking model by Srebnik and colleagues, which has been shown to have close ties to service utilization (Leaf, Bruce, & Tischler, 1986). An important assumption of this model is that prior to pursuing a supportive

relationship, the youth must first identify a motive for seeking support. As noted in Chapter I, research regarding the motivations of youths who enter mentoring relationships is sparse. One study by Spencer, (2002) found that some youths sought mentoring relationships for fun, while others looked for individualized attention. Not surprisingly, youths want different things from mentors.

Regarding the need for a mentor, Keller (2005) distinguishes between developmental and prescriptive mentoring relationships. Developmental mentoring is characterized by more of a “friend to the youth” role; these mentors are flexible and supportive, incorporating the youth’s preferences in the service of building a stronger relationship. Prescriptive mentoring is characterized by either an authoritative stance assumed by the mentor, whereby the mentor takes responsibility for regulating the youth’s behavior, or an egalitarian stance, whereby the mentor takes equal responsibility, along side the youth, for maintaining the relationship.

Even after a problem is recognized and there is a genuine desire on the part of the adolescent to address it, the decision about whether or not to seek help, where to seek it, and, finally, whether or not to actually engage it, remains. Research on help-seeking behavior has shown that recognizing a need for help does not guarantee that one will decide to



seek help. Some cultures believe that the best way to deal with some types of problems is to avoid thinking about them. For example, some Asian- American groups believe it is best not to dwell on upsetting thoughts or events (Cheng, Leong, & Geist, 1993), while some African American groups are encouraged to simply use willpower to overcome adversity and to “tough out” difficult situations (Broman, 1996). However, attitudes about mental health services, namely openness to receiving care, anticipated and real consequences, self-consciousness, and stigma related to receiving care, have been linked to the valence of mental health help-seeking attitudes and the utilization of services (Barker & Adelman, 1994; Fischer & Turner, 1970; Leaf et al., 1986).

For adolescents, who are neither children nor adults, it is often unclear what options are available to them. The potential network of help that exists for adolescents outside of the family becomes more confusing when one recognizes that many attempts to get help for particular problems or needs happen within the informal spheres of family and friends. For ethnic minorities, this process takes place within the context of the family’s social network, which often includes a range of informal consultants, extended family members, friends, and ethnic-traditional and religious individuals (Cauce & Srebnik, 1989). As noted earlier, social networks are thought to shape attitudes towards sources of support and

facilitate, or inhibit, help-seeking behaviors as a function of socio-cultural norms. In tight networks, when norms are not congruent with those of other, more formal settings, the individual is discouraged or prevented from seeking that type of help. In cultures where strong and interlocking community and familial networks are the norm, individuals and families may not seek out formal mental health services because their needs are met within the network (Horwitz, 1987; McKinlay, 1973; Tata & Leong, 1994). Such may also be the case with mentoring; some youths may not seek out mentors because their needs are being met within their networks. The next section will discuss how attachment theory provides a frame for conceptualizing help-seeking patterns in youths, particularly regarding mentors.

### *Attachment and Help-Seeking*

Several authors have argued that attachment theory is relevant in understanding help-seeking because attachment behaviors are aimed towards maintaining homeostasis by seeking proximity to supportive attachment figures (Ainsworth, Blehar, Waters, & Wall, 1978). Secure attachments have, subsequently, been linked to self-confidence, healthy adjustment, and positive life transitions (Allen, Moore, Kuperminc, & Bell, 1998). In a study relating coping and attachment, Howard and Medway

(2004) found that securely attached adolescents experiencing stress were more apt to turn to communication with their family and less likely to cope by avoidance, which was consistent with previous research that found securely attached individuals sought and accepted interpersonal support (Armsden & Greenberg, 1987; Simpson, Rholes, & Nelligan, 1992).

Furthermore, insecurely attached individuals tended to avoid positive coping strategies, possibly because they lacked trust in others, felt unworthy of support, did not recognize the need for support, or were conflicted about seeking support (Simpson et al., 1992). Ultimately, this literature is important in that it underscores the important role of attachment histories in help-seeking behavior, and in assisting youths in dealing with crises that may affect them later in life. This literature also highlights the central role that parents and caregivers play in possibly inoculating adolescents from stress and crises during times when youths are likely to turn to adults for guidance and support. And, possibly of more importance, this understanding of the relationship between attachment and help-seeking emphasizes the role caring adults have in determining future help-seeking behavior (Allen & Land, 1999; Kenny, Moilanen, Lomax, & Brabeck; 1993). Having linked attachment to the process of help-seeking, the following section will address help-seeking from the perspective of developmental and contextual aspects that have the

potential for shaping one's pursuit of a supportive source, such as a mentor.

### *Help-Seeking, Development, and Context*

A developmental hurdle faced by youths that has received some attention is the conflict between independence and autonomy. Garland and Zigler (1994) found, in a study of predominantly White middle class children and adolescents, that younger children held more positive views of help-seeking for psychological problems than adolescents.

Psychological problems aside, given the potential stigma associated with receiving help, some have proposed that adolescents are more attuned to the social costs and consequences of receiving help than younger children (Nelson-LeGall, 1981), and are, thus, more averse to seeking help. Indeed, help-seeking may either be viewed as a dependent behavior, or as an attempt to deal with problems in order to develop competence or mastery.

Youths' views of supportive options may depend upon their exposure or contact with helping sources. Kazdin and colleagues' (1985) found that inpatient children identified a number of different helping sources, including parents, doctors, the church, friends, teachers, and school, and viewed these helping sources as positive. The most frequently

endorsed interventions were spending more time with the family, talking about feelings, and engaging in better ways of thinking. However, children's perceptions of treatment varied depending upon the type of problem. For example, talking about feelings was viewed as less likely to be helpful for the acting out child than for the anxious, withdrawn, or normal child; punishment was viewed as more likely to help the acting out and normal child. Also, time in the hospital and taking medications were also viewed as likely to help the acting out child. Although Kazdin and colleagues' study focused on help-seeking attitudes and behaviors in a clinical sample, their findings may have implications for a healthier population. It could be that early and frequent exposure to and familiarity with various sources of support may make youths more likely to think positively of them (*viz.*, the sources of support), and increase their likelihood to engage them when needed.

Regarding the influence of another developmental factor, namely gender, on help-seeking attitudes and behavior, research on child and adolescent help-seeking has identified differential trends between boys and girls. Specifically, adolescent girls were found to report more positive attitudes towards help-seeking (Garland & Zigler, 1994), but most often turned to friends for help, whereas adolescent boys were more likely to seek help from their parents (Offer et al, 1991). Also, regarding mental

health related issues, adolescent girls were found to be more likely than boys to report the need for professional psychological help and engage that source of support (Saunders, Resnick, Hoberman, & Blum, 1994; Schonert-Reichl & Muller, 1996). These gender differences in help-seeking attitudes and behaviors may be related to girls' willingness, and ability, to identify internal states and problems, such as mental health concerns (Kessler, McGonagle, Zhao, Nelson, Hughes, Eshelman, Wittchen, & Kendler, 1994; Saunders et al., 1994). These findings are consistent with the literature, cited earlier, that posits girls as being more oriented towards others, whereas boys may be more oriented toward autonomy.

The influence of socioeconomic status (SES) on the help seeking views of children is another area that has received some attention. Roberts and colleagues (1984) found that children of high SES were more likely to attribute external causes to psychological disturbance (i.e., something happened to the child), and had more sophisticated causal descriptions of disturbances than youths of low SES. The low SES group was more likely to attribute internal causes (i.e., the child as being born that way) to descriptions of psychological disturbance. Roberts and colleagues also found differences with respect to treatment preferences: high SES students recommended psychiatrists and psychologists, whereas lower SES students recommended non-mental health professionals for

psychological disorders. In a study of urban versus rural adolescents' preferences for mental illness treatment options, Chimonides and Frank (1998) found that urban students preferred behavior cessation and increasing insight, whereas rural students preferred immediate, concrete interventions. These findings, when applied to mentoring as help-seeking may forecast that lower SES youths, and those who live in rural areas, may prefer more relational, informal, and immediate means of support and guidance, whereas youths of higher SES, or those who live in urban settings, may prefer more instrumental, specialized, and long term forms of support and guidance.

### *The Current Study*

Given the aforementioned overarching research question (viz., "Why are some youths more 'ready to be mentored' than others?"), and the, concomitant, hypotheses posed in Chapter I, the current study sought to be the first study to contribute to the body of literature that explored precursors to the complex formation of mentoring relationships. The following chapter describes the methods used to pursue this line of inquiry. In particular, Chapter III reviews the participants, procedure, design, measures, and analyses for this study.

### *Chapter III: Method*

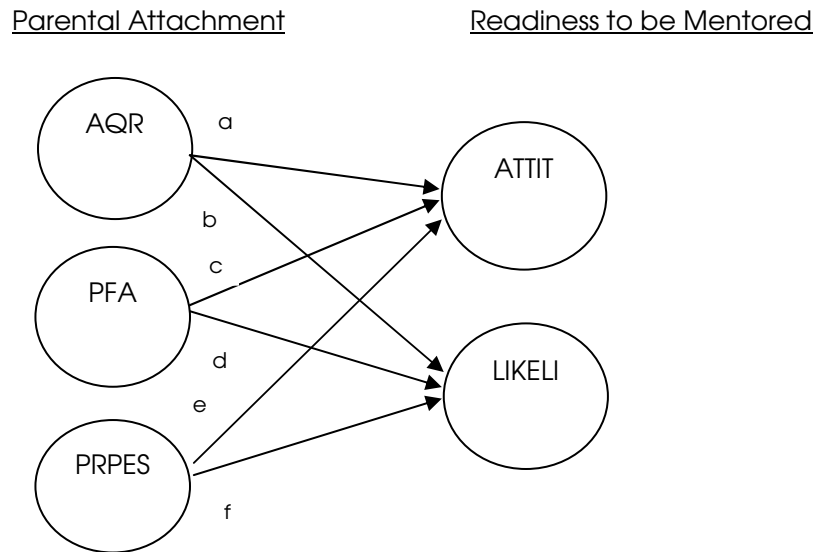
This chapter describes the research design, including the characteristics of the participants and sample obtained, the instruments used to operationalize and measure the constructs of interest, the procedures for the data collection, and the hypotheses and analyses.

#### *Research Design*

This study used a cross-sectional, research design to assess the relationship between adolescents' parental attachment and their readiness to be mentored. A 121-item questionnaire was administered to eighth graders in a public school district west of Boston.

Figure 1 is a representation of the relationships that were tested in this study. In particular, each of the circles represents a scale, or subscale, and each arrow represents the correlation, and subsequent regression, between the respective predictors and outcomes. The circles on the left of the figure represent the predictors, which are the three subscales of the Parental Attachment Questionnaire (i.e., AQR: Affective Quality of the Relationship; PFA: Parental Facilitation of Autonomy; and PRPES: Parental Role in Providing Emotional Support) (PAQ; Kenny, 1987). For example, I considered the relationship, vis a vis correlation and multiple regression analyses, between AQR and ATTIT, as labeled "a" in Figure 1 below.





**Figure 1.** Relationships tested: Parental Attachment (AQR, PFA, & PRPES) and Readiness to be Mentored (ATTIT & LIKELI)

### *Description of Recruitment Sites*

Participants for this study were accessed through public K-8 elementary schools in a town west of Boston. This particular town was considered to be both urban and suburban, given its location; it is situated between a major Northeastern capital city, Boston, and one of its affluent suburbs.

To recruit participants, this study was presented to principals at four elementary schools; their permission was obtained, as well as the approval of the town's review committee, prior to data collection. Also, Boston College's Institutional Review Board approval was obtained prior to the

engagement of students about their participation. Student recruitment took place during four days in mid-June 2008; data collection took place on four separate days soon thereafter.

### *Participants*

Eighth grade students comprised the population of interest. As these individuals were working to complete their final year in junior high, they were preparing for the transition to high school, a new setting where they are likely to be exposed to new and expanded opportunities to be mentored, via school staff, extracurricular activities, peer relations, and community connections. Given this shift, it seemed timely to explore their “readiness to be mentored.” Findings from this study were intended to generalize to a diverse population of eighth graders in public school systems west of Boston. The sample’s diversity was expected to reflect that of the town’s population, varying by race and ethnicity, country of birth, length of time living in the U.S., and socio-economic status.

To this end, eighth grade adolescents from a diverse school systems and community, just west of Boston, were sampled. As noted above, this school community is situated between a major New England capital city and a wealthy suburb. Its residents are, on the whole, White and affluent. However, the students in this community’s middle schools are reported to

be somewhat diverse and representative of the state-wide schools' demographics (See Table 1) (US Census, 2000).

Of note is the fact that some of the heterogeneity in the school system is, in part, due to a state-wide race- and class-based integration program that transports a percentage of urban youths – primarily students of color – to suburban schools. This program was implemented over forty years ago with the intention of providing better educational opportunities to youths of color and those from low income neighborhoods.

Interestingly, about 35% of the students in the community do not speak English as their first language, are of limited English proficiency, or are from a family of low-income (US Census, 2000). This statistic is double that of the state, indicating that this particular community may be considered diverse. Furthermore, this trend appears to be consistent across the schools that were sampled. Thus, eighth graders from this specific community appear representative the population of interest, such that findings from this study may be generalizable to eighth graders in public schools west of Boston. Sample limitations, among other constraints, will be addressed later in chapter V.

Table 1.

*Demographics of the schools sampled versus district and state.*

"School"	"C"	"E"	"M"	"Q"	District	State
Total (n)	664	408	457	587	6,142	968,661
GENDER (%)						
Male	44.6	49.0	48.6	49.1	48.9	48.6
Female	55.4	51.0	51.4	50.9	51.1	51.4
RACE (%)						
Black	4.5	7.4	10.5	9.7	8.3	8.2
Asian	27.7	11.8	16.2	22.3	17.8	4.8
Multi-race, Non-Hispanic	2.7	6.1	4.2	7.0	3.6	1.7
Native American	0.2	0.0	0.0	0.0	0.1	0.3
Native Hawaiian, Pacific Isl.	0.0	0.0	0.0	0.0	0.0	0.2
White	58.4	68.4	58.9	53.5	62.0	71.5
ETHNICITY (%)						
Hispanic/Latino	6.5	6.4	10.3	7.5	8.1	13.3
Non-Hispanic/Latino	93.5	93.6	89.7	92.5	91.9	86.7
SELECTED POPULATIONS (%)						
Limited English Proficiency	12.3	5.4	7.7	8.5	7.2	5.6
Low-income	8.3	12.2	21.4	14.7	12.2	28.9
Special Education	13.9	17.2	19.7	16.2	18.0	16.9
First Language Not English	37.8	24.8	22.3	24.7	28.3	14.9

*Procedure*

Full IRB approval was obtained from Boston College and the respective school systems, once the instruments and data collection protocol were finalized in mid-May 2008. Then, arrangements were made with contacts at the various schools to introduce the study, and to distribute consent forms. Active consent was obtained via permission forms that were sent home with the youths during these initial recruitment

meetings. Finally, active assent from the youths for their participation in the study was obtained prior to survey administration. Both consent and assent were promoted by way of incentives, which consisted of \$2.00 ice cream gift cards for returning signed consent forms, which either did or did not grant permission, and two \$15.00 gift cards, per school, for which students were eligible to win via raffle, provided they assented to their participation in the survey.

One hundred and forty permission forms were disseminated during the recruitment sessions among the four schools. Overall 110 students returned signed consent forms. Of that, 104 students returned signed parental consent forms that granted them permission to participate in this study. Six students returned signed forms indicating that their parent(s) *did not* grant them permission to participate in this study. Specific reasons for why these parents did not want their children to participate were not given, nor were they solicited.

After obtaining parental consent from 104 students, surveys were disseminated during non-academic periods of the school day to prevent interference with classroom learning. Participant assent forms were read aloud and distributed at the time of survey administration. At the time of survey administration, students granted parental consent were informed that they did not have to participate, and that students would in no way

be penalized for not participating in the study. The primary researcher of this study was available to students during and after survey administration to answer questions or provide resources to students who wished to further explore issues raised in the survey; however, no students approached the primary researcher for further discussion or consultation.

### *Measures*

The questionnaire included self-report items asking the participants about their demographics, experiences of parental attachment, attitudes about seeking a mentor, likelihood to engage a mentor, and mentor characteristics – all of which are described in the following sections.

### *Demographics*

The demographic data collected consisted of age, race/ethnicity, gender/sex, birth in the U.S. (for the participants and parents), length of time lived in the U.S (for participants and parents), and parent(s) level of education. This information was gathered so that “nuisance” variance (i.e., non-controllable characteristics) among the participants could be partialled out.

### *Parental Attachment*

The Parental Attachment Questionnaire (PAQ; Kenny, 1987) was designed to assess security of attachment by adapting Ainsworth, Blehar, Waters, and Wall's (1978) conceptualization of attachment for use in a self-report format with adolescents and young adults. More specifically, it assesses perceived parental availability, understanding, acceptance, respect for autonomy, facilitation of autonomy, interest in interaction with parents and affect towards parents during visits, student help-seeking behavior in situations of stress, and satisfaction with help obtained from parents; higher scores indicate greater attachment security. The PAQ contains three scales derived from factor analysis: (a) Affective Quality of the Relationship (AQR), (b) Parental Fostering of Autonomy (PFA), and (c) Parental Role in Providing Emotional Support (PRPES).

Participants were asked to respond to each of the 54-items by choosing the number on a 5-point, Likert-type scale 1 (*not at all*), 2 (*somewhat*), 3 (*a moderate amount*), 4 (*quite a bit*), and 5 (*very much*) that best described their parents, their relationship with their parents, and their feelings or experiences. In all, 25 items on the PAQ were reverse coded. A single rating was provided for both parents, in accordance with research suggesting that overall family environment is more important in

determining late adolescents' feelings of social competence than is the specific relationship with either parent (Bell, Avery, Jenkins, Feld, & Schoenrock, 1985). Additionally, Kenny (1987) reported that results of piloting with the PAQ revealed no significant differences between ratings assigned to mothers and fathers. If parents were separated, divorced, widowed or remarried, or if students did not have parents, students were instructed to "respond with reference to the living parent, the parent toward whom you feel closer, or the caregiving adult towards whom you feel closest." For the purpose of this study, the overall rating for both parents was used, and participants' scores for each of the three PAQ scales were calculated. The three subscales were preferred so that the unique contributions of the various aspects of one's parental attachment on their "readiness to be mentored" dimensions could be analyzed.

Kenny (1987) assessed the reliability of the attachment measure through test-retest and internal consistency methods. Test-retest reliability over a 2-week interval was .92 for the measure as a whole and ranged from .82 to .91 for the three scales derived from factor analysis. Cronbach's coefficient alpha was calculated for each of the three scales (i.e., AQR, PFA, & PRPES), yielding coefficients of .96, .88 and .88, respectively. Internal consistency for the entire measure is Cronbach's alpha of .93 for male college students and .95 for female college students.



Kenny and colleagues (1993) utilized the PAQ on a sample of 207 eighth grade students (boys: 115, girls: 92) that attended a public middle school in a suburban community 30 miles south of Boston. The student body was primarily White and middle class. The internal consistency for their sample was .95 for combined maternal and parental AQR, .88 for combined maternal and parental PFA, and .83 for combined PRPES.

Kenny and colleagues (1995) used the PAQ subscales AQR and PFA with 253 students (boys: 121, girls: 132) that attended a public school in a suburban community 30 miles south of Boston. In their sample, students participated in these authors' longitudinal study as both eighth graders and as ninth graders. The internal consistencies for the scales on the eighth grade data collection were as follows: maternal AQR: .93 for girls, .92 for boys; paternal AQR: .93 for girls, .92 for boys; maternal PFA: .78 for girls, .72 for boys; and paternal PFA: .83 for girls, .78 for boys. Regarding the ninth grade data collection, the internal consistency reliabilities were: maternal AQR: .93 for girls, .88 for boys; paternal AQR: .92 for girls, .93 for boys; maternal PFA: .78 for girls, .83 for boys; and paternal PFA: .79 girls and .84 boys.

Regarding validity, Kenny (1987), as well as Kenny and Donaldson (1991), found significant correlations between the PAQ subscales and relevant subscales of the Family Environment Scale (FES) (Moos & Moos,

1986). Specifically, Affective Quality of the Relationship was correlated with Cohesion ( $r = .51, p < .001$ ) and Moral-Religious Orientation ( $r = .36, p < .01$ ) on the FES; Parental Fostering of Autonomy was correlated with Expressiveness ( $r = .33, p < .01$ ), Independence ( $r = .35, p < .01$ ) and Control ( $r = -.40, p < .01$ ) on the FES; and Parental Role in Providing Emotional Support was correlated with Cohesion ( $r = .45, p < .001$ ) and Expressiveness ( $r = .33, p < .01$ ) on the FES. Further evidence of construct validity is derived from the factor structure of the PAQ (Kenny, 1990). The three factor scales are theoretically consistent with Ainsworth and colleagues' (1978) conceptualization of attachment as an enduring affective bond, which serves as a secure base in providing emotional support and in fostering autonomy and mastery of the environment.

The relationship of the PAQ to social desirability was also evaluated by Kenny (1990) for a group of college students to account for the possibility that participants may be providing biased responses.

Correlations were not significant between scores for the Marlow-Crowne Social Desirability Scale (MCSDS; Marlow & Crowne, 1961) and two of the PAQ subscales scales: Affective Quality of the Relationship and Parental Role in Providing Emotional Support. A small, but statistically significant correlation, ( $r = .22, p < .04$ ) was found between social desirability and the PFA subscale.

*Readiness to be Mentored*

The Merriam-Webster Online Dictionary ([www.m-w.com](http://www.m-w.com)) defines “readiness” as “1. a) Prepared mentally or physically for some experience or action; b) Prepared for immediate use (i.e., dinner is ready); 2. a) Willingly disposed, inclined (i.e., ready to agree to his proposal); b) Likely to do something indicated.” As per this definition, the notion of “readiness” includes both a dispositional element (i.e., one’s state of preparedness, mentally or physically) and a probable-action component (i.e., likelihood to partake/participate). Thus, in translating this definition to the operationalization of the conceptual construct, “readiness to be mentored,” it was decided that measures that assess these two, respective, elements should be used. No previous studies have explored the construct “readiness to be mentored;” so, for the purpose of this study, “readiness to be mentored” was conceived primarily in terms of the help-seeking model described in Chapter II.

As previously reviewed, the process of help-seeking was defined by Veroff and colleagues (1981) as consisting of four distinct stages, which are: (a) problem recognition, (b) decision to seek help, (c) service selection, and (d) service utilization. Also, as noted in Chapter II, Keller (2005) proposed the occurrence of a contemplation phase before the

formation of a mentoring relationship. During this phase, information about mentoring is gathered, future activities are thought of, and expectations of the relationship begin to form. Keller further posited that these processes, which contribute to the formation of a mentoring relationship, are influenced by the attitudes, values, goals, and needs for mentoring held by the youth. Thus, once a problem, or need, is identified, the decision to seek help ultimately rests on the youth's attitudes towards the source of support considered, while the probability of the youth actually utilizing that support source depends on the youth's likelihood to engage that source.

As noted earlier, for the purpose of this study, readiness to be mentored was conceived as a conceptual construct that consisted of two elements. Based on the definition of "readiness" and in accord with the literature on help-seeking, "readiness to be mentored" was conceptualized to consist of a dispositional element (viz., attitude towards seeking a mentor) and a probable-action element (viz., likelihood to engage a mentor). Specifically, based on the nature of the second step in Veroff and colleagues' (1981) help-seeking model, the decision to seek help, one's attitude towards a mentoring relationship as a viable source of help or support was considered as the dispositional dimension of the "readiness" construct. Similarly, the fourth help-seeking stage

conceptualized by Veroff and colleagues (1981), namely service utilization, was considered to be analogous to the probable-action component of “readiness to be mentored.” Given this study did not aim to create an entirely new scale, existing scales that measured attitudes and probable actions were used to assess these dimensions. Specifically, the Attitude Toward Seeking Professional Psychological Help Scale (Fischer & Turner, 1970) was reworded to inquire about attitudes towards mentoring as a source of support, while the Social Support and Rejection Scale (Roffman, Pagano, & Hirsch, 2000) was reworded to inquire about the likelihood one would have in “investing time and effort in a non-parental mentoring relationship” under certain conditions, such as “...if this person looked out for me.” The following sections describe these original scales, including their psychometric properties, and the adaptation of these scales to assess the respective dimensions of “readiness to be mentored.”

#### *Attitude Toward Seeking a Mentor*

The 29 self-report item Attitude Toward Seeking Professional Psychological Help scale (ATSPPH; Fischer & Turner, 1970) was initially chosen and adapted to assess the youths’ attitudes regarding a supportive and caring relationship with non-parental adult. The original

version of this measure, which was designed to assess an "attitude and personality domain which applies to one's tendency to seek or resist professional aid during a personal crisis or following prolonged psychological discomfort" (Fischer & Turner, 1970, p. 79), consists of four help-seeking domains: Need, Stigma Tolerance, Interpersonal Openness, and Confidence.

The internal reliability of the scale for the standardization sample ( $n = 212$ ) was .86; the reliability estimate was .83 for a later sample ( $n = 406$ ). Both estimates suggested good consistency of response within the whole scale. Five groups of students were given the scale twice, at varying intervals, to establish test-retest reliabilities. For testing intervals of five days, two weeks, four weeks, six weeks, and two months the test-retest reliabilities were  $r = .86, .89, .82, .73,$  and  $.84$ , respectively. Excluding the six week assessment, the attitude scores remained quite stable over time (Fischer & Turner, 1970).

None of the attitude scores correlated greater than .25 with social desirability scores (Marlowe-Crowne Social Desirability Scale (MCSDS; Marlow & Crowne, 1961)). Correlations between total attitude scores and social desirability, for the anonymous condition questionnaire (i.e., participants did not provided identifying information), were  $-.11$  for females ( $n = 101$ ) and  $+.04$  for males ( $n=111$ ). Under identifiable conditions

(i.e., participants were asked to provide their names), the resulting correlations between help-seeking attitude and social desirability were  $-.08$  for females and  $-.12$  for males, suggesting that a participant's tendency to respond in a socially desirable manner did not seem to be a problem in interpreting attitude score in either the anonymous or identifiable circumstances (Fischer & Turner, 1970).

The ATSPPH has been utilized in its original format, and in its shortened form (ATSPPH-SF; Fischer & Farina, 1995) on a variety of samples. Kim (2007) examined the associations between the retention of (Asian and European) cultural values and attitudes towards seeking professional help on a sample of 146 Asian American college students (49 men, 97 women) ranging in age from 18 to 36 ( $M=19.82$ ,  $SD 2.51$ ) at a large East Coast university. Kim (2007) chose to use the short form of the measure due to its uni-dimensional structure and ability to yield a single score. Kim reported a reliability coefficient alpha of  $.81$  for the short form. Kim and Omizo (2003) reported a reliability alpha of  $.85$  with the short form on a sample of two hundred forty-two Asian American college students (140 women, 102 men) ranging in age from 18 to 57 years ( $M= 21.89$ ,  $SD = 6.75$ ) at a large mid-Atlantic university ( $n = 194$ ) and a large university in Hawaii ( $n = 48$ ). Again, Kim and Omizo chose to use the short form because of its brevity and efficiency in yielding the desired data. The creators of the

short form reported a reliability coefficient of .84 and a test-retest reliability of .80 with a largely European American sample of college students (Fischer & Farina, 1995).

*“Attitude” measure creation and piloting.* Adaptation of the ATSPPH items began with the replacement of descriptors of particular psychological helping professionals (i.e., psychologist, psychiatrist, etc.) with the word “mentor.” This was done to change the focus to attitudes towards mentors. Next, language regarding mental health related issues (i.e., “mental breakdown,” “emotional crisis or conflict,” “professional help,” “psychotherapy,” etc.) was “softened,” so as to not maintain a symptom-oriented focus on psychological issues. However, terms such as “breakdown,” “emotional issue(s),” and “problem,” were used to retain the sense of emotional struggle faced that might compel one to seek out a mentor for guidance or support. “Mentor” was defined for the youths as “an older non-parental adult who provides guidance, support, and/or information.”

The 29-item version of the ATSPPH was adapted in this manner and pilot tested on 10 9<sup>th</sup> graders in a special education classroom within a public school outside of Boston – this is the same community/school district from which the sample will be drawn; however, these pilot participants were in high school. The pilot testing occurred in the fall of 2007; the



students had only been in the 9<sup>th</sup> grade for a few weeks. Therefore, their “attitude toward seeking a mentor” was thought to have been ripe for surveying, and not too different from their “8<sup>th</sup> grade readiness to be mentored.” The reliability for the overall score of the modified ATSPPH scale in the pilot sample was .81.

Because the hypotheses and analyses do not consider the four subscales of the original ATSPPH (i.e., Need, Stigma, Interpersonal Openness, and Confidence), and in an attempt to reduce the number of items included on the survey, it was decided that the Short Form of the ATSPPH (ATSPPH-SF, Fischer & Farina, 1995) would be modified for mentoring and used in the final survey. The ATSPPH-SF only consists of 10 items and was reported as producing scores that correlated strongly (.87) with scores from the original 29-item version (Fischer & Farina, 1995). A few minor wording modifications were made to the ATSPPH-SF items based on focus group feedback from the pilot study respondents. For example: (a) double negatives were not used, (b) targeted ideas were stated in a clearer fashion, and (c) words and phrases that may have been confusing (i.e., strong character, resent, etc.) were simplified (i.e., strong will/personality, dislike, etc.). Items were rated on a 4-point, Likert-type scale 1 (*disagree a lot*), 2 (*disagree a little*), 3 (*agree a little*), and 4 (*agree a lot*), where higher scores indicated more positive attitudes towards

seeking professional help. In all, four items were reverse coded.

Composite (i.e., sum) scores on the mentor-modified ATSPPH-SF were computed and used accordingly in the analyses; these scores represent one's overall attitude toward mentor seeking (i.e., higher scores indicate greater, more positive, attitudes towards seeking a mentor).

#### *Likelihood to Engage a Mentor*

The Social Support and Rejection Scale (SSRS; Roffman, Pagano, & Hirsch, 2000) is a 22-item youth-self report scale designed to measure perceived levels of positive and negative interactions with significant non-parental adults. It is based on theoretical and empirical work that yielded the four scales considered to be important components of social support and rejection. Three positive scales were devised: (a) Feels valued (i.e., feeling of being valued and cared for; six items: "This person cared about how I am doing in school"), (b) Trust/confide (i.e., the extent to which one can trust or self-disclose in someone; five items: "I could talk to this person about my problems with my friends,") and (c) Mentoring (i.e., the roles of teacher, challenger, role model, and enabler/believer; six items: This person would give me useful advice in dealing with my problems"). A fourth scale, Negativity, consisting of six items, was constructed to assess

the degree to which one experienced negative, or stressful, elements in the relationship (i.e., "Sometimes I think that this person doesn't like me").

*"Likelihood" measure creation and piloting.* Adaptation of the SSRS was minimal. None of the original items were changed. The scale was modified insofar as the youths were asked to respond to the prompt: "I would be likely to put time and effort into a mentoring relationship if..." As with "attitude," the term "mentor" was defined for the youths as "an older non-parental adult who provides guidance, support, and information." Youths reported on how often they agreed with each item in the context of the hypothesized mentoring relationship, endorsing *Always, Often, Sometimes, Rarely, or Never* (scored 5, 4, 3, 2, or 1, respectively). In all, six items were reverse coded. The means of the ratings on the items composing each scale indicate the score on that scale, with high scores for the 3 positive scales indicating high levels of support within the relationship, and a high score on the negativity scale indicating high levels of stress and negativity within the relationship.

The 22-item version of the SSRS was adapted in this manner and pilot tested on 10 9<sup>th</sup> graders in a special education classroom within a public school outside of Boston – this is the same community/school district from which the sample was drawn; however, these pilot participants were in high school. The pilot testing occurred in the fall of 2007; the students

had only been in the 9<sup>th</sup> grade for a few weeks. Similarly, the students' "likelihood to engage a mentor" was thought to have been ripe for surveying, and not too different from their "8<sup>th</sup> grade readiness." The reliability for the overall score of the mentor-modified SSRS scale in the pilot sample was .84.

Roffman and colleagues (2000) reported the internal reliability of the four scales to be "adequate" across the three adult figures the youths are asked to refer to when answering the original scale (i.e., Feels valued: Club = .88, School = .84, Extended Family = .81; Trust/confide: Club = .78, School = .76, Extended Family = .74; Mentoring: Club = .79, School = .74, Extended Family = .81; Negativity: Club = .76, School = .68, Extended Family = .67). As noted above, the overall reliability estimate for the 22-item, modified-for-mentoring SSRS scale was .84 on the pilot sample; the Cronbach alphas for the subscales on the pilot sample were as follows: Feels valued: .83; Trust/confide: .88; Mentoring: .90; Negativity: .92.

### *Mentor Characteristics*

The participants were also asked six questions about mentors in their lives. Specifically, participants were asked: a) whether or not they had a mentor, b) the mentor's gender, c) this mentor's role in the community (i.e., family member, teacher, coach, etc.), d) the length of time known

(i.e., 0-6 months, 6-12 months, 12-18 months, etc.), e) how they met this mentor (i.e., family, school, friend, etc.), and f) if they reported not having a mentor, why not.

### *Power, Effect Size, & Sample Size*

To ensure sufficient statistical power for the detection of a difference, an adequate sample size is needed. Ideally, the sample size should be based on estimates of: (a) the expected size of the effect, (b) the total effect size, or the amount of variance explained by the predictors, (c) sample sizes across groups, (d) error variance across groups, (e) range restrictions, and (f) measurement error (Cohen, 1992).

Before data collection, considerable thought was given to the estimated effect sizes based on a review of past research using the same predictors and outcomes. This step was not entirely feasible as no previous studies to date have correlated these measures. Therefore, there is no a priori expected effect size for parental attachment on readiness to be mentored.

The estimated sample size for obtaining a medium eta-squared effect size (i.e., 0.3) with a desired power level of 0.80 and an alpha level of .01 through a MANCOVA with four groups (i.e., males with mentors, females with mentors, male without mentors, and females without

mentors) is approximately  $n=36$  (Cohen, 1992). This number increases to  $n=53$  for the correlation and regression analyses (effect size = 0.3; power = .80; adjusted alpha = .0083) with two predictors.

### *Hypotheses and Analyses*

#### *Scientific Hypothesis I:*

Males and females with mentors were expected to have statistically significantly higher means on the three parental attachment factors (viz., Affective Quality of the Relationships, Parents as Facilitators of Autonomy, and Parental Roles in Emotional Support), readiness to be mentored factors (viz., Attitude Towards Mentoring and Likelihood to Engage a Mentor) than their counterparts without mentors. Therefore, the four groups under analysis (viz., boy with mentors, boys without mentors, girls with mentors, and girls without mentors) were all expected to have statistically significantly different means on all five of the variables (viz., AQR, PFA, PRPES, ATTIT, and LIKELI). Furthermore, females with mentors were expected to have the highest levels of each given their theorized affinity for maintaining close relationships and their actual, reported relationship with a mentor.

*Statistical Hypothesis 1* ( $\alpha = .05$ ):

$$H_0: \mu_{1adj} = \mu_{2adj} = \mu_{3adj} = \mu_{4adj} \text{ (where } \mu_{adj} = \text{mean adjusted by covariates)}$$

$$\text{where } \mu_{1adj} = \begin{bmatrix} \mu_{AQR1} \\ \mu_{PFA1} \\ \mu_{PRPES1} \\ \mu_{ATTIT1} \\ \mu_{LIKELI1} \end{bmatrix}, \mu_{2adj} = \begin{bmatrix} \mu_{AQR2} \\ \mu_{PFA2} \\ \mu_{PRPES2} \\ \mu_{ATTIT2} \\ \mu_{LIKELI2} \end{bmatrix}, \mu_{3adj} = \begin{bmatrix} \mu_{AQR3} \\ \mu_{PFA3} \\ \mu_{PRPES3} \\ \mu_{ATTIT3} \\ \mu_{LIKELI3} \end{bmatrix}, \mu_{4adj} = \begin{bmatrix} \mu_{AQR4} \\ \mu_{PFA4} \\ \mu_{PRPES4} \\ \mu_{ATTIT4} \\ \mu_{LIKELI4} \end{bmatrix}$$

$$H_1: \mu_{iadj} \neq \mu_{jadj} \text{ (where } 1 \leq i, j \leq 4; \text{ and, } \mu_{adj} = \text{mean adjusted by covariates)}$$

*Data Analysis 1:*

A Multivariate Analysis of Co-variance was used to test this hypothesis. Bogat and Liang (2005) state that gender differences in natural mentoring prevalence and quality are likely due to a complex interaction of a number of factors. Based on the correlation matrix seen in Chapter IV, I used only one demographic variable (viz., age) as a covariate in order to partial out the “nuisance” variance attributable to this variable. This particular variable is beyond the control of an institution or intervention and is not easily subject to change. Therefore, in short, I held this “nuisance” variance constant among the groups (i.e., boys and girls, both with and without mentors) when testing for particular group

differences (i.e., main effects and interactions) on the five variables of interest (i.e., AQR, PFA, PRPES, Attitude, and Likelihood). Although gender, age, race, and parental employment (viz., socio-economic status) have been identified as covariates for mentoring outcomes, such as type of mentor engaged (Darling, Bogat, Cavell, Murphy, Sanchez, & Ensher 2006), as well as positive school attitudes and lower problem behavior (Zimmerman et al., 2002). Only those demographic variables that were statistically significantly correlated with the variables of interest were used as covariates; not all of the demographic variables were included.

*Scientific Hypothesis IIa:*

For those youths with mentors, each of the three aspects of parental attachment (viz., AQR, PFA, PRPES) were hypothesized as contributing to both their attitude towards mentoring and their likelihood to engage a mentor. Therefore, for those with mentors, greater levels of the three parental attachment factors were expected to correlate positively and statistically significantly with their attitude towards mentoring and the likelihood to engage a mentor. Conversely, for those youths without mentors, the three aspects of parental attachment were expected to correlate



negatively with their attitude toward mentoring and likelihood to engage a mentor.

*Statistical Hypothesis IIa* ( $\alpha = .05$ ):

With Mentors

$$\begin{aligned}
 H_0: & \quad P_{AQR, ATTITUDE} = 0; P_{AQR, LIKELIHOOD} = 0 \\
 & \quad P_{PFA, ATTITUDE} = 0; P_{PFA, LIKELIHOOD} = 0 \\
 & \quad P_{PRPES, ATTITUDE} = 0; P_{PRPES, LIKELIHOOD} = 0 \\
 H_1: & \quad P_{AQR, ATTITUDE} > 0; P_{AQR, LIKELIHOOD} > 0 \\
 & \quad P_{PFA, ATTITUDE} > 0; P_{PFA, LIKELIHOOD} > 0 \\
 & \quad P_{PRPES, ATTITUDE} > 0; P_{PRPES, LIKELIHOOD} > 0
 \end{aligned}$$

Without Mentors

$$\begin{aligned}
 H_0: & \quad P_{AQR, ATTITUDE} = 0; P_{AQR, LIKELIHOOD} = 0 \\
 & \quad P_{PFA, ATTITUDE} = 0; P_{PFA, LIKELIHOOD} = 0 \\
 & \quad P_{PRPES, ATTITUDE} = 0; P_{PRPES, LIKELIHOOD} = 0 \\
 H_1: & \quad P_{AQR, ATTITUDE} \leq 0; P_{AQR, LIKELIHOOD} \leq 0 \\
 & \quad P_{PFA, ATTITUDE} \leq 0; P_{PFA, LIKELIHOOD} \leq 0 \\
 & \quad P_{PRPES, ATTITUDE} \leq 0; P_{PRPES, LIKELIHOOD} \leq 0
 \end{aligned}$$

*Data Analysis IIa:*

Separate bivariate correlations, for boys and girls, with and without mentors, were conducted to test Hypothesis IIa.

*Scientific Hypothesis IIb:*

The three aspects of parental attachment were hypothesized to have a statistically significant positive relationship with both aspects of readiness to be mentored for those youths with mentors, both male and female. Therefore, it was expected that the three PAQ scales would statistically significantly predict both attitude and likelihood for both males and females, with and without mentors, above and beyond “nuisance” variance attributed to demographic bias.

*Statistical Hypothesis IIb (Bonferroni adjusted  $\alpha = .0083$ ):*

$$\begin{aligned} \text{Models: } \quad & \textit{Attitude} = \alpha + \beta_1 \textit{Demo} + \beta_2 \textit{AQR} + \varepsilon \\ & \textit{Attitude} = \alpha + \beta_3 \textit{Demo} + \beta_4 \textit{PFA} + \varepsilon \\ & \textit{Attitude} = \alpha + \beta_5 \textit{Demo} + \beta_6 \textit{PRPES} + \varepsilon \\ & \textit{Likelihood} = \alpha + \beta_7 \textit{Demo} + \beta_8 \textit{AQR} + \varepsilon \\ & \textit{Likelihood} = \alpha + \beta_9 \textit{Demo} + \beta_{10} \textit{PFA} + \varepsilon \\ & \textit{Likelihood} = \alpha + \beta_{11} \textit{Demo} + \beta_{12} \textit{PRPES} + \varepsilon \end{aligned}$$

$$H_0: \beta_i \neq 0$$

$$H_1: \beta_i > 0$$

As was the case with the use of covariates to test Hypothesis I, the number of demographic variables included in the regression analyses was dependent upon the resulting correlations with the outcome variables. Ultimately, only age exhibited a statistically significant correlation with the outcome variables, so it was the only demographic variable used in the regression analyses.

#### *Data Analysis IIb:*

Six multiple hierarchical regressions were used to test Hypothesis IIb.

#### *Mentor Characteristics*

As noted earlier, the students were asked six questions about the mentors in their lives: a) whether or not they had a mentor, b) the mentor's gender, c) this mentor's role in the community (i.e., family member, teacher, coach, etc.), d) the length of time known (i.e., 0-6 months, 6-12 months, 12-18 months, etc.), e) how this mentor was met (i.e., family, school, friend, etc.), and f) if they reported not having a mentor, why was this so (i.e., "Why no mentor?"). This information was gathered to learn more about the mentors in these youths' lives. The final question in this set,

“Why no mentor,” was asked specifically to gain some insight into why youths without mentors did not have a mentor in their lives.

In accord with the previously reviewed bodies of literature on mentoring, attachment, and help-seeking, it was hypothesized that youths would report a variety of reasons for not having a mentor. Specifically, youths without mentors were expected to report not having a mentor for reasons such as they did not know of anyone they could trust or because that they did not have a need for a mentor. Others were expected to report that they have not yet identified someone that they felt could serve as a mentor for them, while others were expected to report that they had family members that served the perceived functions of a mentor. The study data has been retained and is available to other researchers for confirmatory purposes.

### *Chapter IV: Results*

This chapter reviews the sample characteristics, measurement results, preliminary and primary analyses, as well as additional findings.

#### *Sample Characteristics*

Approximately 75% of the students who were given parental consent forms (i.e., n=140) returned the form signed in time for participation. In total, one hundred and four students (n=104) were administered the survey; all of these surveys were included in the study.

#### *Missing data*

Prior to data analysis, missing data was identified and addressed using the following criteria: if the particular interval measure for which data was missing was at least 90% complete, mean substitution was used. This resulted in thirty-two instances of mean substitution on the PAQ subscales, twenty-one instances of mean substitution on the attitude towards seeking a mentor scale, and no instances of mean substitution on the likelihood to engage a mentor scale. These adjustments allowed for the inclusion of the full number of students who returned signed parental consent forms (i.e., n=104).

There were no instances of missing nominal data (i.e., race/ethnicity, mentor presence). For cases missing ordinal data (i.e., U.S. birth status or number of years lived in the U.S.), series median substitution was used. Two cases required series median substitution for missing responses to U.S. birth status: one for self being born in the U.S., and one for father's birth in/out of the U.S. The final sample for this study consisted of 104 8<sup>th</sup> graders (45 males and 59 females).

### *Sample description*

Most of the students (94.2%, n=98) were 14 years-old; six students (5.8%, n=6) reported being 15 years-old; there were 45 males and 59 females. Exactly one-half of the students (e.g., 50%, n = 52; 19 male, 33 female) reported having a mentor, while the other half (n=52; 26 male, 26 female) reported not having a mentor. Participants' racial/ethnic statuses are represented by the following distribution: 53% (n=56) of the students reported being "White;" 2.9% (n=3) reported being "Black;" 18.3% (n=19) reported being "Asian/Pacific Islander;" 4.8% (n=5) reported being "Hispanic/Latin;" and 20.2% (n=21) reported being "Other." This last category included various combinations of ethnicities (i.e., European, Black/Haitian, Indian, Mexican, Middle Eastern, French, Italian, Native American, Jewish, Russian, American, etc.). These results can be seen in

Table 2, which compares the gender, race, and ethnicity percentages of this study's sample to those of the town's school district and the state.

Compared to the school district and state percentages, Hispanics/Latinos and Blacks were underrepresented in the study, whereas multi-race, non-Hispanics/Latinos were overrepresented. This finding may be a function of the particular schools that were sampled.

The majority (80.3%; n=84) of the students reported being born in the U.S. Only 18.3% (n=19) reported not having been born in the U.S.

Furthermore, 93% (n=97) of the participating students reported having lived in the U.S. for three or more years. Only 5% (n=5) of the students reported having lived in the U.S. for two or less years. Regarding participants' fathers, 61.5% (n=64) reported having fathers born in the U.S., while 37.5% (n=39) reported having fathers not born in the U.S. Ninety percent (n=94) reported that their fathers had lived in the U.S. for 3+ years. Almost half of the students (48%, n=50) reported having fathers with either a master's or doctorate degree; twenty-six students failed to respond to this item. Regarding participants' mothers, 68.3% (n=71) reported having mothers who were born in the U.S.; 31.7% (n=33) reported having mothers not born in the U.S. Approximately 96% (n=100) of the students reported that their mothers had lived in the U.S. for 3+ years; and, 49% (n=51) reported that their mothers had either a master's or doctorate degree.

Table 2.*Demographics of the obtained sample compared to district and state.*


---

	Sample	District	State
Total (n)	664	6,142	968,661
GENDER (%)			
Male	43	48.9	48.6
Female	57	51.1	51.4
RACE (%)			
Black	2.9	8.3	8.2
Asian/Pac Isl.	18.3	17.8	5.0
Multi-race, Non-Hispanic	20	3.7	2.0
White	53	62.0	71.5
ETHNICITY (%)			
Hispanic/Latino	4.8	8.1	13.3
Non-Hispanic/Latino	95.2	91.9	86.7

---

*Measurement Results*

The internal consistency, via Cronbach's alpha coefficient, was calculated to assess the reliability of the PAQ subscales (i.e., AQR, PFA, and PRPES), and the ATSM and LEM scales, for this sample. In terms of attachment measures, the alphas were as follows: 0.91 for the AQR, 0.84 for the PFA, and 0.78 for the PRPES. With regards to the attitude and likelihood to engage scales, the alphas were 0.82 and 0.92, respectively. A summary of the statistical characteristics of these measures are displayed in Table 3.



Table 3

*Statistical Characteristics of Measures*

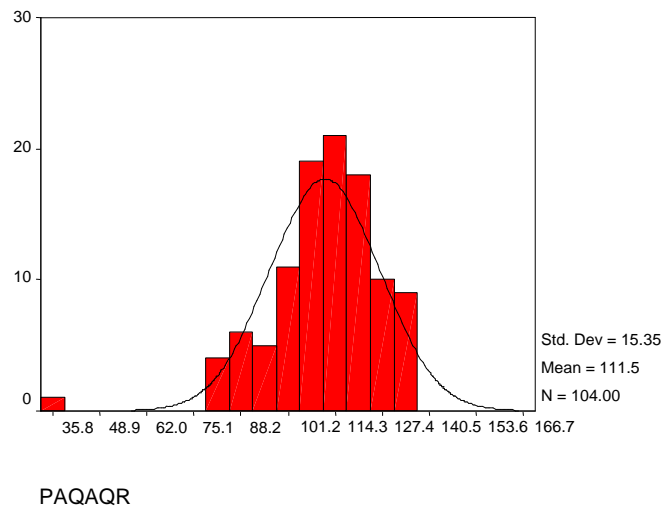
<u>Variable</u>	<u>Instrument</u>	<u>N</u>	<u>#</u>	<u>M</u>	<u>SD</u>	<u><math>\alpha</math></u>
				(scale)	(scale)	
1. Parental Attachment	PAQ: Overall	104	54	209.25	26.85	.9363
2. Affective Quality of Relationship	PAQ: AQR	104	28	111.50	15.35	.9095
3. Parent as Facilitator Of Autonomy	PAQ: PFA	104	14	53.41	8.30	.8365
4. Parental Role in Providing Emotional Support	PAQ: PRPES	104	12	43.38	7.05	.7759
5. Attitude Towards Seeking a Mentor	ATSM	104	10	27.51	5.97	.8175
6. Likelihood to Engage a Mentor	LEM	104	22	90.08	13.91	.9232

*Note.* *N* = number of participants responding to entire scale; # = Number of items

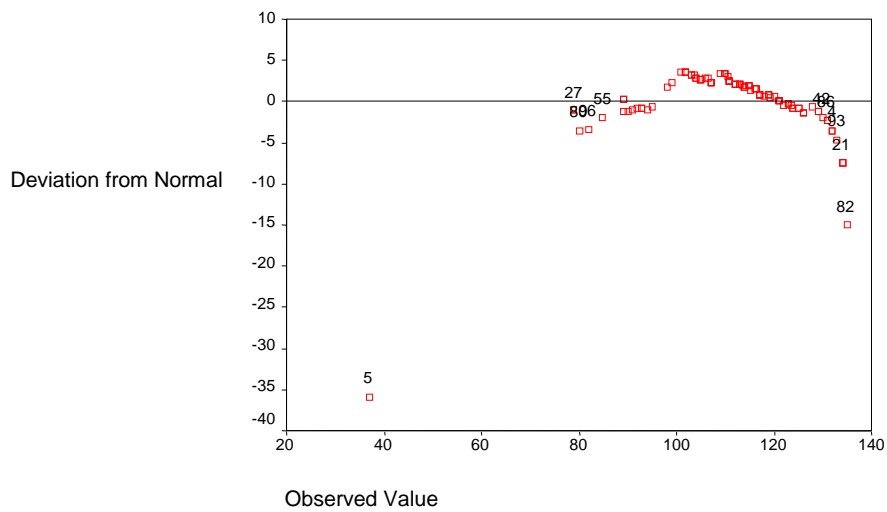
*Preliminary Analyses*

Before proceeding with the primary analyses described in chapter III, the distributions of the primary predictor and outcome variables were considered. As shown in Figure 2, the mean for the AQR was 111.5 (SD = 15.3). At first glance, the data appear normal, but a closer inspection revealed a negatively skewed distribution, with outlying cases falling at the low and high ends of the scores (Figure 3). A skewness statistic of -1.38 (SE = .237) confirmed that consideration of transformation (i.e., squaring to

reduce the negative skew) prior to running analyses was warranted, so as to adjust for non-normally distributed data (Glass & Hopkins, 1996). Similar results were observed for PFA.

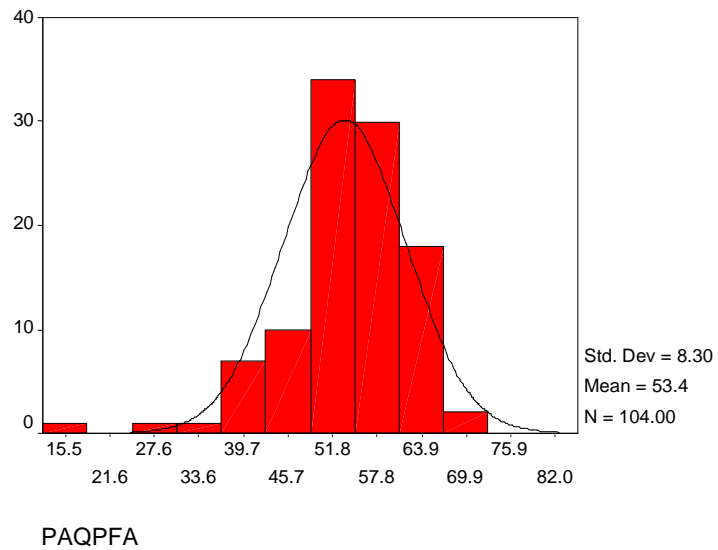


**Figure 2.** Histogram of AQR

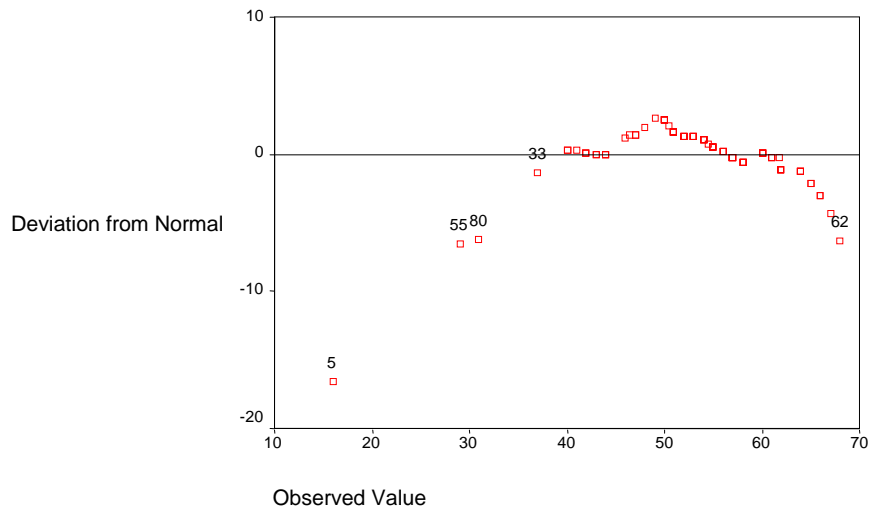


**Figure 3.** Detrended Normal Q-Q Plot of PAQAQR

The mean for the PFA was 53.4 (SD = 8.3). Closer examination of a histogram and detrended Q-Q plot (Figure 4 and 5) reveal a negative skew; a negative skewness statistic of -1.3 (SE = .237) confirmed that transformation of this variable would be necessary.



**Figure 4.** Histogram of PFA



**Figure 5.** Detrended Normal Q-Q Plot of PAQPFA

PRPES and ATTIT (i.e., ATSM) were both slightly negatively skewed (Figures 6 and 7); yet, their respective skewness statistics (i.e.,  $-.54$  and  $-.25$ ) were within acceptable limits (i.e., between  $1.0$  and  $-1.0$ ), indicating that transformation was not needed for these variables. Detrended Q-Q plots of the scores on these scales revealed outliers at both the low and high ends, though (Figures 8 and 9).

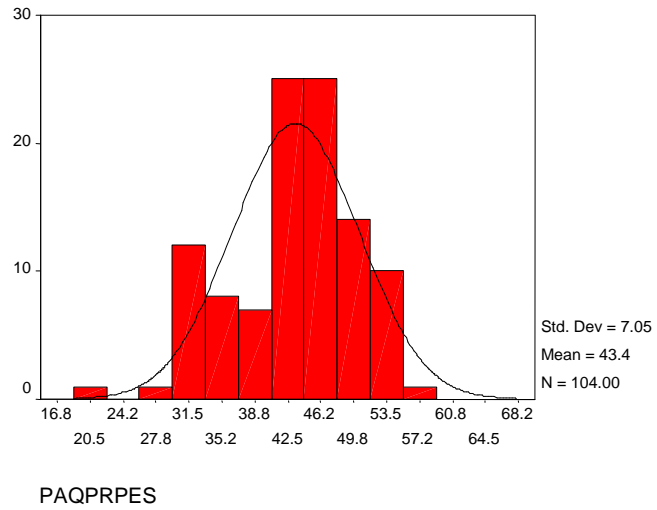


Figure 6. Histogram of PRPES

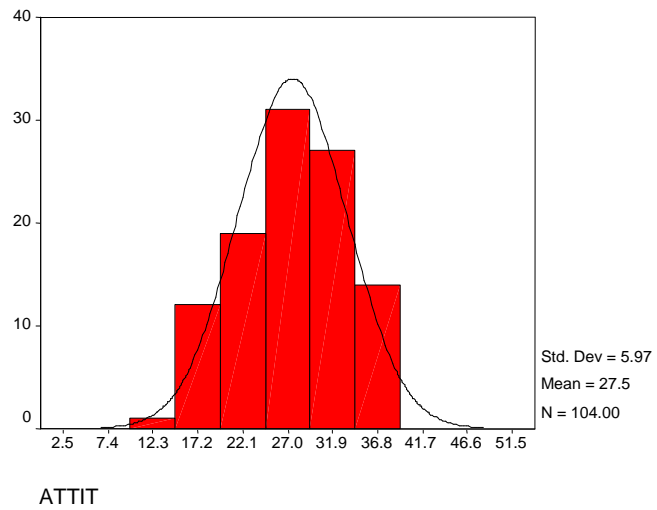
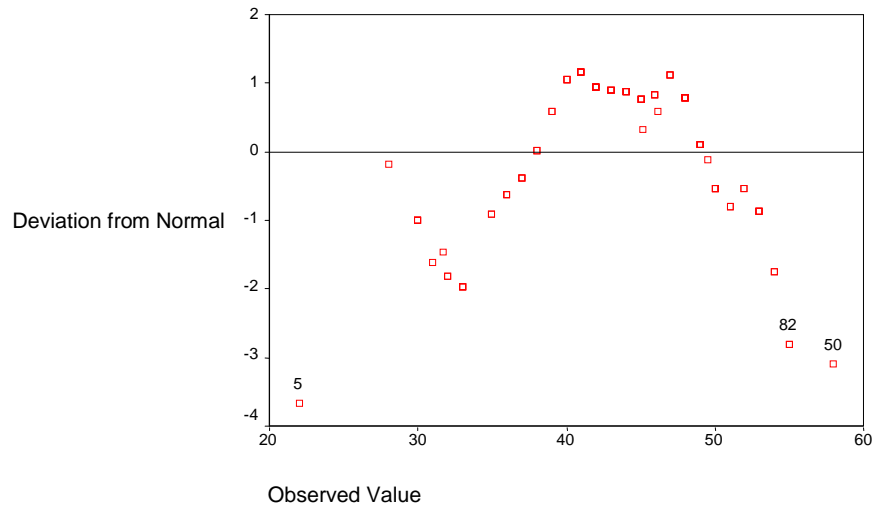
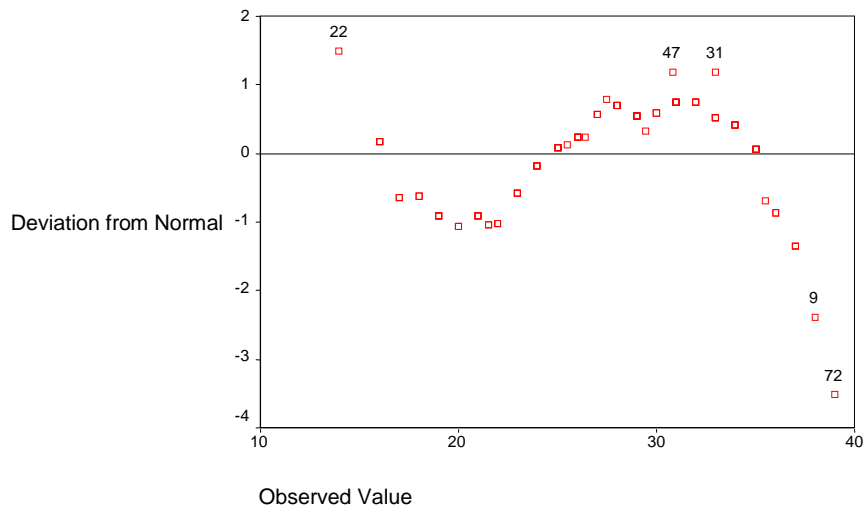


Figure 7. Histogram of ATTIT

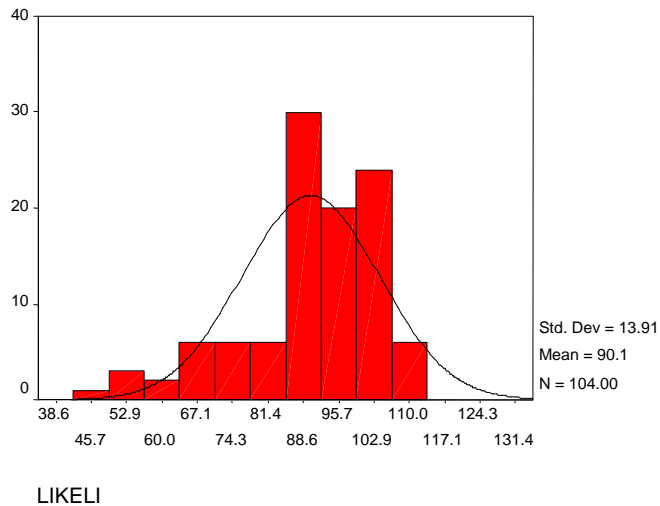


**Figure 8.** Detrended Normal Q-Q Plot of PRPES

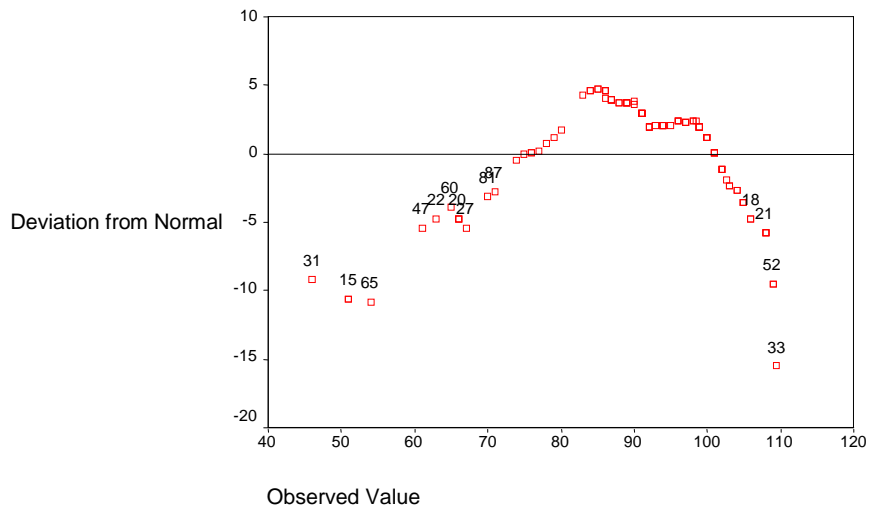


**Figure 9.** Detrended Normal Q-Q Plot of ATTIT

Finally, a histogram of LIKELI (i.e., LEM) revealed a negative skew (Figure 10); a skewness statistic of -1.14 (SE = .237) confirmed this. With outliers on both ends of the scale (Figure 11), LIKELI required transformation given its distribution within this sample. However, the purpose of these analyses was not to obtain predictor coefficients that represented the direct amounts of variance with the outcome variables. The rationale leading up to a decision on transformations is discussed later. Further diagnostic tests were performed on the variables prior to running the regression analyses.



**Figure 10.** Histogram of LIKELI



**Figure 11.** Detrended Normal Q-Q Plot of LIKELI

*Data Reduction*

In an attempt to be parsimonious in this next step of the analyses, some of the demographic data collected was combined. Specifically, self-reported responses to the ordinal variable, “Born,” for each participant and their fathers and mothers (i.e., were a) you, b) your father, and c) your mother) born in the U.S.? yes or no) aggregated into one variable named, “BORN.” Thus, scores on this new composite ranged from 0 to 3, with higher scores representing a move away from immigrant



status, or an increase in U.S. citizenship status. Conceptually, those born in the U.S. were considered to be more assimilated into Western societal and cultural practices and norms.

Similarly, the ordinal responses for each participant on the "Lived" variable, along with the information they provided about their fathers and mothers (i.e., How many years have a) you, b) your Father, and c) your Mother) lived in the US? 0-1, 1-2, 2-3, or 3+ years) was combined into another new composite variable named "LIVED." This new composite variable ranged from 3 to 12; higher scores represented an increasing amount of time exposed to Western societal and cultural practices and norms. Finally, the ordinal data from the "Education" responses for each participant's fathers and mothers were summed into a new composite variable named, "FAMOEDU," which ranged from 0 to 10; higher scores on this composite represented greater levels of education, and, ultimately, served as a proxy for socio-economic status, or access to resources. The statistical characteristics from the reduction of these demographic variables are displayed in Table 4. The obtained skewness values for the distributions of these variables suggested that transformation be considered if these variables were to be used in subsequent analyses. This decision will be discussed in detail later.

Table 4

*Summary of the reduced demographic variables.*

	<u>N</u>	<u>M</u>	<u>SD</u>	<u>Range</u>	<u>Skewness</u>
1. BORN	104	2.12	1.05	3.00	-.854
2. LIVED	104	8.67	1.30	9.00	-4.85
3. FAMOEDU	104	5.74	1.94	9.00	-.648

### *Primary Analyses*

The following summarizes the analyses conducted to test the hypotheses proposed in Chapter III. First, the mean differences, after partialling out “nuisance” variance, on the scales of parental attachment and readiness to be mentored, as grouped by gender (male or female) and mentor presence (yes or no), are reported. Then the correlational and regression analyses are presented.

### *Multivariate Analysis of Co-Variance (MANCOVA)*

*Assumptions.* Assumptions regarding the MANCOVA are: 1) homogeneity of covariance matrices, 2) independence of observations, 3) normally distributed error, 4) there must be a linear relationship between covariates and the dependent variables, 5) homogeneity of regression slopes exists, and 6) the covariates are measured without measurement error.

As discussed above, the variables AQR, PFA, and LIKELI were deemed to be in need of squaring to correct for their negatively skewed distributions. This step was taken to ensure that the assumption of homogeneity of covariance matrices was met at the .05 level (resulting Box's  $M = 54.514$ ;  $F = 1.096$ ,  $p = .305$ ). However, this step may interfere with the final the interpretation of the results as the transformed scales are no longer in meaningful units. This is discussed in Chapter V. Tests on the Durbin-Watson statistic for the two outcome variables, which were performed as a part of the regression diagnostics, revealed no presence of autocorrelation. Similarly, tests on the homoscedasticity of the outcome variables, which were performed as part of the regression diagnostics, revealed that the error was normally distributed. In having to determine the appropriateness of covariates, a Pearson's product, moment correlation matrix, split by gender, was created (see Table 5). This matrix was split by gender to highlight the various relationships among the variables within each gender group. Age was the only demographic variable that exhibited a statistically significant negative correlation with an outcome variable (viz., LIKELI for the boys) in this particular correlation matrix; therefore, it was the first demographic variable chosen as a covariate.

Table 5

*Bivariate correlation matrix of variables split diagonally by gender (N = 104).*

		<u>Males: n = 45</u>								
	AGE	BORN	LIVED	FAMO	AQR	PFA	PRPES	ATTIT	LIKELI	
1. AGE	---	-.184	-.438**	-.220	.131	.182	-.073	-.215	-.363*	
2. BORN	-.112	---	.389**	.012	-.021	.047	-.017	.248	.230	
3. LIVED	.052	.399**	---	-.015	.020	.043	.077	.326*	.281	
4. FAMO	.153	.053	-.132	---	.121	.075	.155	.193	.202	
5. AQR	-.066	-.185	-.114	-.159	---	.872**	.575**	.239	.266	
6. PFA	-.102	-.079	.041	.006	.733**	---	.377*	.246	.096	
7. PRPES	.022	-.213	-.209	-.200	.787**	.519**	---	.235	.386*	
8. ATTIT	-.256	.208	-.053	.004	.211	.196	.168	---	.385**	
9. LIKELI	-.226	.058	-.088	-.088	.160	.172	.178	.519**	---	

Females: n = 59

Note: FAMO = FaMoEdu

\*  $p < .05$ , \*\*  $p < .01$

The statistically significant correlation between the attitude and likelihood scales signifies that a multivariate analysis of variance is appropriate. Also, this finding suggests that these two scales do partially measure the same construct, namely readiness to be mentored. This finding will be discussed in Chapter V. The homogeneity of the regression slopes was reviewed by examining the correlations between the predictor and outcome variables for the group of youths with mentors and the groups of youths without mentors. In order to do this, a Pearson's product moment correlation matrix, split by mentor presence, was created (see Table 6).

Table 6

*Bivariate correlation matrix of variables split diagonally by mentor presence (N = 104).*

<u>Boys and Girls with Mentors: n = 52</u>									
	AGE	BORN	LIVED	FAMO	AQR	PFA	PRPES	ATTIT	LIKELI
1. AGE	---	-.080	.047	-.019	-.033	-.006	.027	-.289*	-.313*
2. BORN	-.206	---	.214	-.083	-.041	.041	-.197	.216	.276*
3. LIVED	-.219	.439**	---	-.136	-.043	-.075	-.066	.137	-.110
4. FAMO	-.056	.113	-.123	---	.126	.143	.040	-.075	.127
5. AQR	.106	-.180	-.105	-.199	---	.794**	.701**	.276*	.502**
6. PFA	.100	-.074	.050	-.047	.807**	---	.434**	.264	.404**
7. PRPES	-.113	-.098	-.185	-.155	.683**	.475**	---	.243	.445**
8. ATTIT	-.270	.109	-.070	.233	.187	.201	.182	---	.460**
9. LIKELI	-.365**	-.004	-.012	.165	.039	-.007	.197	.404**	---

Boys and Girls without Mentors: n = 52

Note: FAMO = FaMoEdu

\*  $p < .05$ , \*\*  $p < .01$

As noted in Chapters II and III, mentoring literature has identified gender, age, and parental employment as factors influencing mentoring outcomes. Given the design of this analysis (i.e., 2 x 2: gender by mentor presence), gender was not included as a covariate, but rather as a fixed factor. The other fixed factor in the analysis was mentor presence (i.e., yes or no), which resulted in a matrix consisting of boys and girls, both with and without mentors. The attachment subscales (i.e., AQR, PFA, and PRPES), the attitude towards seeking a mentor scale (ATSM, or ATTIT), and the likelihood to engage a mentor scale (LEM, or LIKELI) were entered as outcome variables. The reduced demographic variable BORN was statistically significantly positively correlated with LIKELI for youths with

mentors. Therefore, it was also chosen as a covariate. Means and standard deviations from the MANCOVA are summarized in Table 7.

Table 7

*Means and standard deviations from the MANCOVA*

Variable:	<i>With Mentors</i>				<i>Without Mentors</i>			
	<u>Boys (n=19)</u>		<u>Girls (n=33)</u>		<u>Boys (n=26)</u>		<u>Girls (n=26)</u>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
1. AQR	113.36	12.87	111.76	16.30	108.56	17.95	112.76	13.23
2. PFA	54.74	6.86	53.35	7.67	51.57	9.92	54.37	8.41
3. PRPES	43.34	6.81	44.21	7.27	41.62	7.03	44.10	7.04
4. ATTIT	29.13	5.68	30.75	5.09	23.36	5.67	26.36	4.81
5. LIKELI	90.58	11.77	95.88	9.06	82.86	16.61	89.59	14.75

*Note:* Results using untransformed values are displayed.

With the inclusion of five outcome variables, a Bonferroni adjustment was made to the alpha level (i.e.,  $\alpha = .05 / 5 = .01$ ). With this new alpha level, the only multivariate test that was statistically significant was that of mentor presence (Wilks'  $\Gamma$ :  $F = 4.953$ ,  $p < .0001$ ). The effect size of this relationship was moderate as indicated by partial eta-squared = .209.

Of the univariate between-subjects tests, three relationships surfaced as statistically significant at the adjusted alpha level. The first of these three relationships was age with likelihood (squared) ( $F = 10.68$ ,  $p = .001$ , partial eta = .098). Although age failed to reach statistical

significance in the multivariate test, it was observed to be statistically significant in a univariate sense. However, an interpretation was not made from this result as the majority of the students were of the same age (i.e., 94% were 14 years-old); so, the statistically significant difference that was detected by this test was not practically meaningful.

The other two relationships that were statistically significant in the univariate between-subject tests were: mentor presence with attitude ( $F = 24.26, p < .0001, \text{partial } \eta = .198$ ), and mentor presence with likelihood (squared) ( $F = 7.06, p = .009, \text{partial } \eta = .067$ ). That is, with regards to hypothesis 1, boys and girls with mentors had statistically significantly higher scores on the readiness scales (i.e., attitude and likelihood) than those boys and girls without mentors. Counter to the original hypothesis, gender differences were not observed to be statistically significant on the paternal attachment subscales (i.e., AQR, PFA, and PRPES) or on the readiness to be mentored scales (i.e., attitude and likelihood). In sum, only mentor presence was observed to have statistically significant multivariate effects; and, only attitude and likelihood exhibited statistically significant univariate effects for those with, versus those without, mentors.

These analyses were aimed at broadening and deepening the conception of mentoring relationship formation for youths. The correlation analyses were intended to provide an idea of how these study variables

relate with one another; the regression analyses, were intended to provide more specific information about the unique relationships among the predictors and the outcome variables, after having partialled out the variance accounted for by age.

### *Correlation and Regression Analyses*

Regression diagnostics were conducted where multiple regression analyses were performed (See Appendix E). The purpose of these diagnostics was to ensure that the assumptions underlying Ordinary Least Squares (OLS) regression analyses have not been violated. OLS regression analysis makes several assumptions regarding the predictor. With fixed predictors satisfying the first assumption, the second assumption, requiring the predictor be measured without error is violated. However, this violation is not uncommon as rarely is anything ever measured without error. Finally, the relationship between the predictors and the outcomes were found to be linear. Regarding the residuals, the mean of the error terms for each observation over many replications was found to be zero, errors were found to be uncorrelated, and the error terms exhibited equal variance throughout the range of the predictors and that the distribution of the residuals is normal.



*Correlation Analyses.* Given the results of the bivariate correlations seen in Tables 5 and 6, null hypothesis IIa was rejected for boys and girls with mentors. In other words, for those youths with mentors, there were statistically significant positive correlations between each attachment scale and the likelihood scale. Interestingly, the attitude scale only exhibited a statistically significant correlation with one attachment scales: affective quality of the relationship. Therefore, the portion of null hypothesis IIa that referred to the attitude scale was partially accepted, as only one statistically significant relationship between the attachment scales (viz., AQR) and the attitude scale was observed. Given this unexpected finding (i.e., only one significant correlation was observed with the attitude scale, while three were observed for the likelihood scale), only four regression analyses were conducted and analyzed. With four regression analyses, the planned Bonferroni adjusted alpha ( $\alpha = .0083$ ) was re-adjusted to account for the decrease in number of analyses. Therefore, the re-adjusted a priori alpha for the regression analyses was set at  $\alpha = .0125$ .

*Regression Analyses.* With regards to the specified regression model(s) outlined in hypothesis IIb, only age and the BORN demographic variables were entered into a “demographic” block; this was done to

partial out the variance they accounted for. Given the findings noted above, a discussion of the final regression models is now warranted.

This study sought to explore variance accounted for by the attachment variables (i.e., AQR, PFA, and PREPES) in the outcomes of interest (i.e., Likelihood and Attitude). The diagnostics performed in the preliminary analyses and for testing the regression assumptions suggested that transformations of the AQR, PFA, and LIKELI variables were necessary to correct for negatively skewed distributions. Therefore, the squared terms for these three variables Likelihood variable were included in the final models. ATTIT and PRPES were not be squared as their distributions were within acceptable limits.

Additionally, although case 16 emerged as a case that carried an undue amount of influence on the solution for Likelihood (see Figures 16-21), and although cases 4 and 65 emerged as cases that had undue influence on the solution for Attitude (see Figure 25 and 26), I chose to retain them in the subsample under analysis (i.e., with mentors;  $n = 52$ ) in order to retain as many cases as possible. Additionally, in any given sample, it is expected that 5% of the cases are outliers and carry random sample error. Thus, this particular case may be an anomaly in this subsample, which may accurately reflect the population. These procedures, in addition to a list-wise deletion criteria, resulted in a

subsample size of  $n = 52$  and the best, linear, unbiased estimates of Likelihood and Attitude given the predictors chosen and the sample obtained (Equations 2-5). The models tested were as follows:

$$(\text{sq})\text{LIKELI} (y) = \text{Demo} (x_1, x_2) + (\text{sq}) \text{AQR} (x_3) + \varepsilon \quad (2)$$

$$(\text{sq})\text{LIKELI} (y) = \text{Demo} (x_1, x_2) + (\text{sq}) \text{PFA} (x_4) + \varepsilon \quad (3)$$

$$(\text{sq})\text{LIKELI} (y) = \text{Demo} (x_1, x_2) + \text{PRPES} (x_5) + \varepsilon \quad (4)$$

$$\text{ATTIT} (y) = \text{Demo} (x_1, x_2) + (\text{sq}) \text{AQR} (x_6) + \varepsilon \quad (5)$$

Again, as noted above, in this model a “Demographic block” was created that only included age and BORN. This was done to partial out the variance accounted for by these non-controllable characteristics prior to the inclusion of the respective attachment variables in the four models. The original units of measurement for Likelihood, AQR, and PFA were squared. Therefore, readily interpretable statements regarding the unstandardized coefficients of these variables were not able to be made. Alternatively, the standardized betas weights were referred to when making interpretations about the relationships among the variables. In accordance with a statistical tradition, the final statistical hypotheses were:

$$H_0: \beta_{\text{Demo}} = 0; \beta_{(\text{sq})\text{AQR}} = 0; \beta_{(\text{sq})\text{PFA}} = 0; \beta_{\text{PRPES}} = 0 \quad (6)$$

$$H_A: \beta_{\text{Demo}} \neq 0; \beta_{(\text{sq})\text{AQR}} \neq 0; \beta_{(\text{sq})\text{PFA}} \neq 0; \beta_{\text{PRPES}} \neq 0$$

Where  $\text{Demo}$  = demographic, and  $\text{sq}$  = squared term

Tables 8, 9, 10, and 11 summarize the results from the four hierarchical regression models tested. As observed, for youths with mentors ( $n = 52$ ), all three attachment variables account for statistically significant amounts of variance in LIKELI, above and beyond the influence of age and BORN, whereas only AQR accounted for a statistically significant amount of variance in ATTIT, above and beyond age and BORN. Therefore, hypothesis IIb was partially confirmed. The standardized beta weights convey the direction and magnitude of the relationship each predictor has with the respective outcomes (see Tables 8-10).

In these analyses, an increase in AQR was related to an increase in LIKELI ( $\beta = .531, p < .0001$ ); an increase in PFA was related to an increase in LIKELI ( $\beta = .445, p < .0001$ ); and, an increase in PRPES was related to an increase in LIKELI ( $\beta = .526, p < .0001$ ). Regarding ATTIT, an increase in AQR is related to a positive change ( $\beta = .277, p < .039$ ). Although this analysis drops its significance due to the Bonferroni adjustment, which set the a priori

significance value at  $\alpha = .0125$ , there is reason to believe that this finding constitutes a trend towards significance and should be considered further.

Table 8.

*Summary of a hierarchical regression predicting Likelihood to Engage a Mentor from the Parental Attachment Questionnaire subscale: Affective Quality of the Relationship after partialling out age and Born ( $n = 52$ ) ( $\alpha = .017$ ).*

Predictor:	Outcome: Likelihood (squared)									
	$R^2$	Adj. $R^2$	$R^2\Delta$	$F$	Sig. $F\Delta$	$b$	SE $b$	$\beta$	$t$	Sig. $t$
Step 1	.157	.123	.157	4.568	.015					
Age						-2293.3	1040.3	-.290	-2.20	.032
Born						498.50	264.49	.248	1.88	.065
Step 2	.424	.388	.267	22.293	<.0001					
Age						-2115.0	869.41	-.267	-2.43	.019
Born						552.39	221.13	.275	2.49	.016
AQR (squared)						.294	.062	.518	4.72	<.0001

Table 9.

*Summary of a hierarchical regression predicting Likelihood to Engage a Mentor from the Parental Attachment Questionnaire subscale: Parental Fostering of Autonomy after partialling out age and Born (n = 52) (α = .017).*

Predictor:	R <sup>2</sup>	Adj. R <sup>2</sup>	R <sup>2</sup> Δ	F	Sig. FΔ	Outcome: Likelihood (squared)				
						b	SE b	β	t	Sig. t
Step 1	.157	.123	.157	4.57	.015					
Age						-2293.3	1040.3	-.290	-2.20	.032
Born						498.50	264.49	.248	1.88	.065
Step 2	.326	.284	.169	12.07	.001					
Age						-2292.6	939.63	-.290	-2.44	.018
Born						465.59	239.08	.232	1.95	.057
PFA (squared)						1.00	.289	.412	3.47	.001

Table 10.

*Summary of a hierarchical regression predicting Likelihood to Engage a Mentor from the Parental Attachment Questionnaire subscale: Parental Role in Providing Emotional Support after partialling out age and Born (n = 52) (α = .017).*

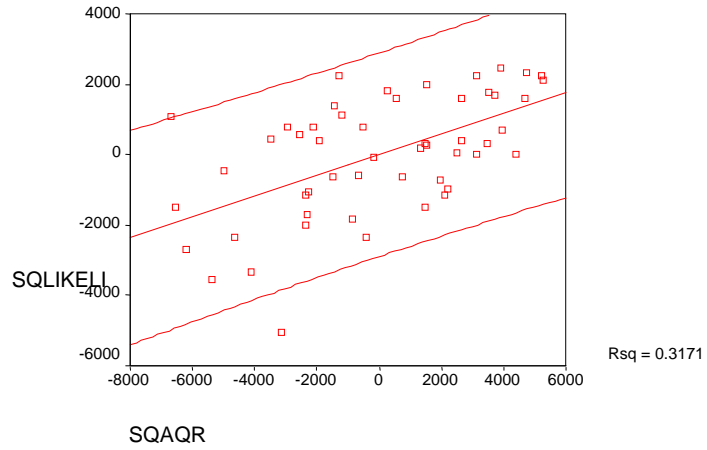
Predictor:	R <sup>2</sup>	Adj. R <sup>2</sup>	R <sup>2</sup> Δ	F	Sig. FΔ	Outcome: Likelihood (squared)				
						b	SE b	β	t	Sig. t
Step 1	.157	.123	.157	4.57	.015					
Age						-2293.3	1040.3	-.290	-2.20	.032
Born						498.50	264.49	.248	1.88	.065
Step 2	.429	.393	.272	22.82	<.0001					
Age						-2341.9	865.39	-.296	-2.70	.009
Born						707.63	224.32	.352	3.16	.003
PRPES						140.30	29.36	.532	4.77	<.0001

Table 11.

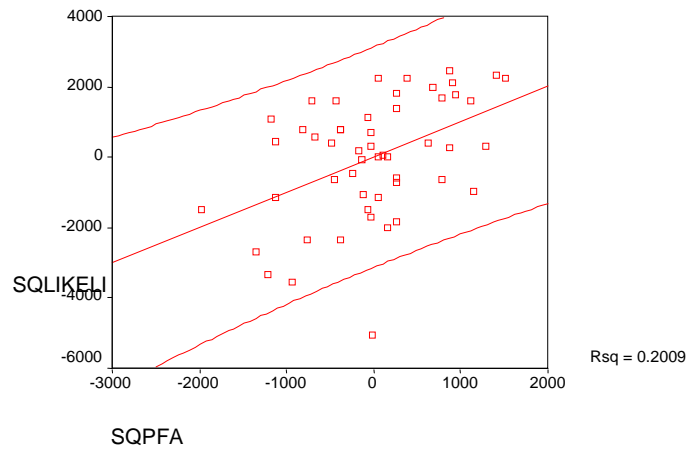
*Summary of a hierarchical regression predicting Attitude Toward Seeking a Mentor from the Parental Attachment Questionnaire subscale: Affective Quality of the Relationship after partialling out age and Born (n = 52) ( $\alpha = .017$ ).*

Predictor:	$R^2$	Adj. $R^2$	$R^2\Delta$	F	Sig. F $\Delta$	Outcome: Attitude				
						b	SE b	$\beta$	t	Sig. t
Step 1	.121	.085	.121	3.376	.042					
Age						-6.19	3.07	-.274	-2.04	.047
Born						1.11	.772	.194	1.44	.155
Step 2	.194	.143	.073	4.32	.043					
Age						-5.92	2.94	-.262	-2.01	.050
Born						1.19	.748	.208	1.59	.117
AQR (squared)						4.4E-04	.000	.270	2.08	.043

The partial regression plots displayed below in Figures 12-15 depict the respective relationships between the predictors and the outcomes, after the variance accounted for by age and BORN had been partialled out. Linear relationships were observed. These findings, in conjunction with the data gathered from the regressions analyses (see Appendix E) indicate that the steps taken have resulted in good models.

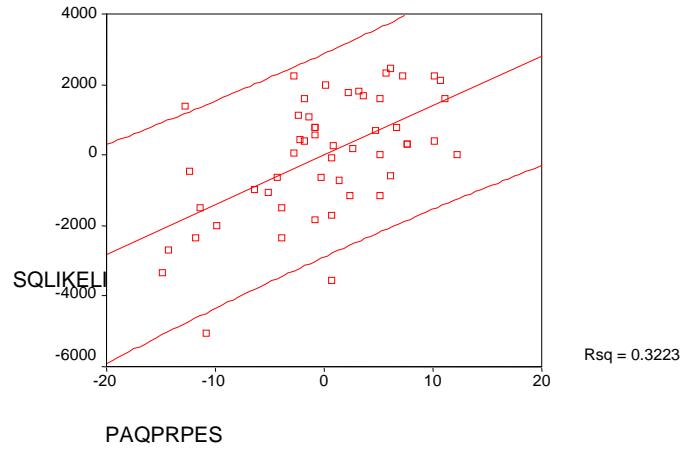


**Figure 12.** Partial Regression Plot: SQLIKELI vs. SQAQR

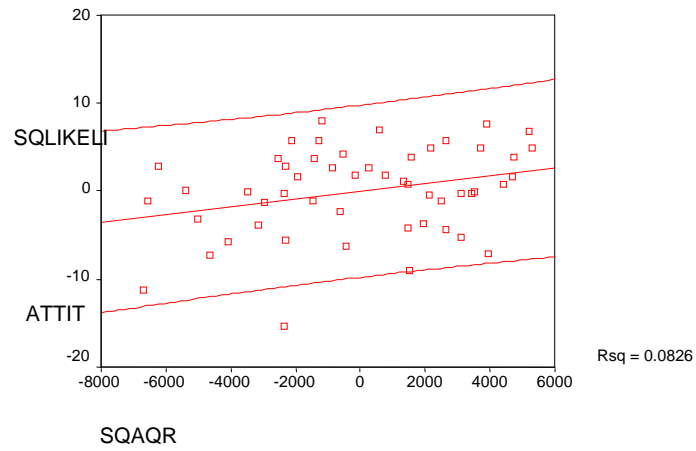


**Figure 13.** Partial Regression Plot: SQLIKELI vs. SQPFA





**Figure 14.** Partial Regression Plot: SQLIKELI vs. PRPES



**Figure 15.** Partial Regression Plot: ATTIT vs. SQAQR

In turning to the partial correlations, more information was obtained regarding the unique relationship each predictor had with the respective outcomes after having accounted for the variance attributed by age and BORN. Regarding the Likelihood analyses: AQR, Partial  $r = .563$ ; PFA, Partial  $r = .448$ ; PRPES, Partial  $r = .568$ . Again, it was observed that all three of the attachment variables have positive relationships with the LIKELI, while only AQR exhibited a positive relationship with ATTIT (Partial  $r = .287$ ).

### *Mentor Characteristics*

As noted in Chapter III, the youths in this sample were asked six questions about the mentors in their lives: a) whether or not they had a mentor, b) the mentor's gender, c) this mentor's role in the community (i.e., family member, teacher, coach, etc.), d) the length of time known (i.e., 0-6 months, 6-12 months, 12-18 months, etc.), e) how this mentor was met (i.e., family, school, friend, etc.), and f) if they reported not having a mentor, why was this so (i.e., "Why no mentor?").

While no statistical tests were performed on this data, some interesting observations may be gleaned from the frequencies of the responses to these items (See Table 12).

Table 12.

*Summary of mentor characteristics data*

	<u>M-Gender</u>	<u>M-Role</u>	<u>M-Known</u>	<u>Why No Mentor</u>
<u>Boys (n=45)</u>				
With (18%)	Male (63%)	Fam Mem (47%)	0-6 m (0%)	Don't need (42%)
W/O (25%)	Female (39%)	Teacher (11%)	6-12 m (5%)	Par/Fam/Fri (19%)
		Comm Mem (21%)	12-18 m (5%)	Never thought (12%)
		Other (21%)	18-24 m (5%)	
			24+ m (84%)	
<u>Girls (n=59)</u>				
With (32%)	Male (12%)	Fam Mem (33%)	0-6 m (3%)	Par/Fam/Fri (54%)
W/O (25%)	Female (88%)	Teacher (18%)	6-12 m (0%)	DK/not found (31%)
		Comm Mem (6%)	12-18 m (9%)	Don't need (27%)
		Coach (6%)	18-24 m (24%)	
		Other (36%)	24+ m (64%)	

*Note.* Percentages for Boys and Girls, with and without mentors are based on entire sample (n = 104). Percentages for responses by boys and girls to mentor characteristic items "mentor gender," "mentor role," and "mentor known" are based on the number of boys (n = 19) or girls (n = 33) who have mentors; percentages for responses by boys and girls to mentor characteristic item "why not mentor" are based on number of boys (n = 26) or girls (n = 26) who do not have mentors. W/O = Without, M = Mentor, m = months, Fam = Family, Mem = Member, Par = Parent, Fri = Friend, Comm = Community, DK = Don't know

Eighty-eight percent of the girls with mentors reported having a female mentor, whereas 12% reported having a male mentor (approximately a 7:1 female to male mentor ratio). Of the boys with mentors, 39% reported having female mentors while 63% reported having male mentors (approximately a 1:2 female to male mentor ratio). These observations appear to contrast previous research regarding gender and mentoring matches, which states that both girls and boys are more likely to have female mentors (Bogat & Liang, 2005).

Second, mentors were most frequently reported to be family members (girls: 33%, boys: 47%). Interestingly, though, in light of this information, the girls with mentors also reported reaching out to teachers (18%), coaches (6%), community members (6%), and others (36%), whereas boys with mentors only reported reaching out to some teachers (11%), community members (21%), and other (21%). Of course, it is important to keep in mind that the sample included almost twice as many girls with mentors (32%) than boys with mentors (18%); however, girls compared to boys appeared more willing to branch out beyond the family to find a mentor, while their families remained a consistent source of mentoring support.

Third, most of the mentoring relationships reported in this sample have lasted for at least 2 years (i.e., at least by the age of 12).

Fourth, regarding those without mentors, frequencies were tallied of the various responses given to the question "Why no mentor?" Of the boys without mentors, 42% reported that they "Did not need help," while some "Never thought of it" (12%). Another response given by boys without mentors was "Have parents, family and friends" (19%). Of those girls without mentors, 54% reported "Having parents, family or friends," while 27% reported "Not needing one." Other girls without mentors responded "Don't know anyone" or "Haven't found anyone" (31%). These responses

were collapsed into the final groupings displayed in Table 12, which highlight a trend in the responses by both boys and girls that might lend insight into their respective attitudes towards seeking a mentor, likelihood to engage mentors, and the messages they received about the utility of mentoring in their particular lives. Forty-two percent of the boys without mentors reported that they “did not need help;” the second most frequent response was that they “had parents, family, and friends.” On the other hand, 54% of the girls without mentors reported that they had parents, family, and friends; the second most frequent response was that they “did not know a mentor, or have not found one.”

The most frequent response by boys might signify a trend towards self-sufficiency and autonomy, while the predominant response by girls might allude to a trend to utilize family and friends instead of mentors – both sets were consistent with literature on gender differences in help-seeking, and both possibly signify a successful transfer of the attachment organization to another non-parental adult or peer, or the successful attainment of attachment needs from close family and friends.

Interestingly, “lack of trust in others” was *not* a response frequently given as a reason for not having a mentor, which may provide further support for the previous finding that suggests that attachment may not play as large a role in one’s readiness to be mentored as initially thought.

In fact, it is quite interesting that, after problem recognition (i.e., “I don’t need one,” or “I don’t have any problems”), “Having parents” and “Don’t know anyone” are the second and third most common responses, respectively, for those without mentors. In other words, it is likely that the scarcity of mentors is a more salient obstacle for youths to obtaining a mentoring relationship than their ability to trust someone enough to engage them as a mentor. This may suggest that youths are more open to mentoring than adults believe them to be. Alternatively, the increased use of parents, as a secure base and safe haven during adolescence, may suggest that these youths have less of a need for others, which may result in a lower relationship between parental attachment and readiness to be mentored. Indeed, these findings are compelling as they stir up more questions about the understanding youths have of mentoring relationships and may be useful in thinking more specifically about how to utilize these findings. All of these considerations are discussed next in Chapter V.

### *Chapter V: Discussion*

This study integrates relevant literature in the areas of attachment, adolescence and help-seeking to illuminate the formation of informal youth mentoring relationships. Traditionally, these fields have been examined separately, and until now had not yet been combined in a study of precursors to youths' mentoring relationships. A youth's "readiness to be mentored" was conceptualized based on help-seeking literature, as consisting of a dispositional element (viz., attitude towards seeking a mentor) and a probable-action element (viz., likelihood to engage a mentor). Although it was outside of the purview of this study to empirically test the "readiness to be mentored" construct, a theoretical rationale for its basis has been included in Chapters II and III.

Specifically, it was expected that 8<sup>th</sup> grade boys and girls would differ in their experiences of parental attachment and readiness to be mentored. Moreover, it was hypothesized that those youths who reported higher levels of parental attachment would also report more positive attitudes towards seeking a mentor *and* a greater likelihood to engage a mentor. The results of this study indicated that, when considered independently, various aspects of the parental attachment relationship related differently to one's attitude towards seeking a mentor and one's likelihood to engage a mentor, respectively. The following sections

provide a discussion of the results reported in Chapter IV, including general conclusions, limitations, and implications for theory, research, and practice.

### *Discussion of the Results*

#### *Hypothesis I*

It was expected that significant differences would be detected across the means of the three parental attachment subscales and the two readiness to be mentored scales, between males and females with mentors and males and females without mentors (See Chapter III). Females with mentors were expected to report the highest levels of each scale, given their theorized affinity for maintaining close relationships and their actual, reported relationship with a mentor. Partial support was found for Hypothesis I. Of the two grouping variables (i.e., mentor presence and gender), only mentor presence was observed to be statistically significant in a multivariate sense. No gender differences were detected. These initial findings seem to suggest that boys and girls with mentors may experience greater levels of parental attachment *and* readiness to be mentored than their counterparts without mentors. That is, both higher levels of parental attachment and readiness to be mentored seemed linked to the presence of a mentor. However, the univariate results refine this



conclusion. The presence of a mentor was statistically significantly associated with higher levels of attitude towards mentoring and likelihood to engage a mentor, for both boys and girls. However, differences on the attachment scales did not contribute to the overall multivariate difference initially observed.

These results suggest that parental attachments among both youths *with and without* mentors *may not* differ as originally hypothesized. If such is the case, then the early caregiving experiences of youths (viz., the internal working models that have been theorized to serve as templates for how one interacts with future attachment figures), may not play as pivotal of a role in forming mentoring relationships as the review of previous research in the fields of mentoring, attachment, and help-seeking may have suggested. Other researchers have come to similar conclusions. Kagan (1999) cautioned against putting too much stock in the deterministic position that assumes that an individual's attachment profile forged early on sets the course for subsequent relationships. Similar to the positions set forth by other developmentalists, such as Lerner (1986), Ford and Lerner (1992), and Sroufe and colleagues (1999), Kagan suggested that attachment organizations are only one piece of the puzzle, one that works in concert with other organized systems within the individual and interacts with stimuli from the environment. Therefore, what

seems to be most significant about these findings is that youths without secure parental attachment relationships may not necessarily be at a disadvantage in developing relationships with other attachment figures, such as mentors.

Of additional interest regarding Hypothesis I is the absence of a gender difference across the parental attachment scales, as well as across the readiness scales. This finding counters the theories described in Chapter II that suggest that girls would be more likely to strive for more connection, whereas boys would tend to seek autonomy. In previous mentoring literature, some gender differences among mentors and their mentees have been observed, including differing reasons and rates of referral for mentoring, and greater prevalence of female versus male mentors (Bogat & Liang, 2005). In addition, gender factors have been thought to impact the nature and quality of the mentor relationship. However, the current finding suggests that these gender differences may not generalize to attitudes toward parental and mentor attachments. Or perhaps at this particular developmental stage, boys and girls do not significantly differ in their parental attachments and attitudes toward and desires to be engaged in mentoring relationships. The practical implication of this finding is that potential mentors may not need to approach and engage boys and girls at this age differently.

*Hypothesis II*

Hypothesis II was focused on a) detecting positive relationships between each attachment subscale and the two readiness subscales and b) detecting predictive power between these two sets of scales (See Chapter III). Based on the results of the bivariate correlations seen in Tables 5 and 6, Hypothesis IIa was partially confirmed, as described in Chapter IV. Among youths with mentors, significant positive correlations were observed between each attachment subscale and the likelihood scale, and between the affective quality of the relationship subscale and the attitude towards seeking a mentor scale. The latter scale did not exhibit statistically significant correlations with the other two parental attachment subscales (viz., parental fostering of autonomy and parental role in providing emotional support). Therefore, the portion of Hypothesis IIa that refers to correlations between the attitude scale and the PFA and PRPES scales is disconfirmed.

Regarding predictive power and the regression analyses used to test Hypothesis IIb, similar results are observed: all three attachment scales accounted for statistically significant amounts of variance in the likelihood scale, above and beyond the influence of the demographic variables, for

those youths with mentors in this sample. Also, as seen with the correlation analyses, only the affective quality of the relationship subscale accounted for a statistically significant amount of variance in the attitude scale, above and beyond the demographic variables, for those youths with mentors in this sample. Therefore, it is concluded that Hypothesis IIb is partially confirmed (See standardized beta weights in Tables 8-11).

There are a number of potential explanations for this unexpected lack of association between attitude towards seeking a mentor and the two parental attachment subscales, fostering of autonomy and provision of emotional support. Although some attachment literature would seem to suggest that strong parental relationships as exemplified by autonomy-granting and the provision of emotional support would predispose youths to seek out similarly supportive relationships with other adults, it is possible that for some youths, these same attachment factors would have the opposite effect. In other words, if youths perceive mentoring to serve the purpose of fulfilling a "need" or solving a problem, and they are already getting these needs met by a parent who is fostering autonomy or providing emotional or other support, then those youths might perceive themselves as not needing a mentor.

Moreover, youths who are taught to be autonomous or self-reliant, as well as those provided with emotional support, may believe that they

do not, or should not, need a mentor. Indeed, their relational contexts may reinforce this notion of self-reliance, or reliance upon certain individuals or systems. This suggests that the idea of the internal working model of attachment needs to be further delineated in understanding the formation of mentoring relationships. Certainly, the premise of the internal working model theory of attachment (Bowlby, 1973) may still be true in that previous caregiver relationships serve as a template for individuals' seeking out, engaging with, and trusting in others. However, it may be that certain conditions in parental relationships lead youths to seek out and engage with a mentor (i.e., affective quality), whereas other aspects of parental attachment (fostering of autonomy and provision of emotional support) lead youths to either feel self-sufficient or that their needs are being met in their relationship with their parent(s). In this way, these findings would continue to be consistent with George and Solomon's (1996, 1999) more contemporary model of attachment, which posits that children's experiences with primary caregivers, especially in times of stress and when in need of comfort, shape their sense of self-worth and dictate the type of response expected from future caregivers (e.g., trustworthy or not trustworthy). In short, there may be differential aspects of parental attachment that shape a youth's attitude towards and their seeking out of mentors, particularly under different conditions.

This study's findings suggest that it may be a mistake to view attachment as a unified construct in its relationship with one's readiness to be mentored. Rather, it may be important to examine various aspects of youths' parental attachment experiences and how they differentially relate to one's attitudes of mentoring and likelihood to engage a mentor. Moreover, it is possible that the facilitation of autonomy and provision of emotional support may play an insignificant role in shaping one's attitude towards seeking a mentor. Instead, perhaps emphasis should be placed on the affective quality of one's parental relationships when thinking about fostering one's attitude towards seeking a mentor. In other words, it may be that having a sense of safety in a relationship with a parent is the critical factor that fosters a positive attitude towards seeking out a mentor, whereas a parents' emphasis on youths' autonomy, as well as their provision of emotional support, may actually deter some youths from fully developing a positive attitude towards seeking support from other adults. Thus, in order to understand a youth's attitude towards seeking a mentor, it may be important to assess first a youth's affective experience of his or her relationship with parents. What is the valence and quality of this relationship? Pursuing these questions may help illuminate our understanding of how youths come to form attitudes towards mentors as viable sources of support and guidance.

Interestingly, the study findings suggest that attitude toward mentoring and likelihood of engaging a mentor may be differently influenced by parental attachment factors. According to the readiness to be mentored construct, which is based on a help-seeking model, ascertaining an attitude towards seeking a mentor may provide only a partial understanding of the mentor formation process. As elaborated on earlier, readiness to be mentored is hypothesized as consisting of *both* an attitudinal component *and* a probable-action component. Indeed, research from the field of social psychology has demonstrated that attitudes and behavior may at times be incongruent (Fazio, 1986; Fazio & Powell, 1997; Saunders et al., 1994). Indeed, one can have an indifferent or negative attitude towards mentoring experiences, but still engage in a mentoring relationship, given the opportunity to do so. A youth may engage a mentor for a number of reasons, such as social desirability, curiosity, or even desperation – all of which are likely to be contextually influenced. Alternatively, the study results taken at face value may suggest that different aspects of parental attachment differentially influence different parts of the mentoring formation process. Specifically, forming an initial positive attitude toward seeking a mentor might only require a positive affective quality regarding previous attachments. But because the likelihood of actually engaging a mentor might rely on

additional prerequisite skills—such as personal initiative and agency that come with autonomy-granting and emotionally supportive parents—these aspects of parental attachment may become relevant in this latter part of the mentor formation process. Taken together, these findings provide evidence of the conceptual differences between these two aspects of the mentor formation process (i.e., attitude toward mentoring and likelihood to engage a mentor) and highlight the complexity of the relationships among these variables.

#### *Additional findings*

In this section, boys' and girls' responses to the questions about mentoring characteristics are discussed. It is important to note, again, that no statistical tests were performed on this data, and that the conclusions drawn are solely based on frequencies and trends in responses.

Regarding gender differences in mentor presence, it is interesting to note that fewer boys (18%) reported having mentors than girls (32%). Bogat and Liang (2005) reported that one of the most common gender differences observed in mentor relationships was regarding the gender of the mentee; mentees were more likely to be male, whereas mentors were more likely to be female. This discrepancy between the current finding and that reported in Bogat and Liang's (2005) article might be explained



in that the latter refers to formal mentoring relationships, and the current refers to informal mentoring relationships. Thus, it might be that compared to girls, boys are more likely to be referred for mentoring programs due to their higher levels of delinquency and other problems. On the other hand, boys compared to girls might be less likely to seek out natural mentoring relationships on their own accord.

Alternatively, it may be that boys who might otherwise be in need of mentoring are receiving support elsewhere, perhaps from parents, families, or friends. Moreover, as mentioned in Chapter IV, the most frequent response by boys without mentors to the question "Why no mentor?" was "Don't need one" (42%). This finding might signify a trend among boys towards self-sufficiency and autonomy, while the most frequent response by girls to the question "Why no mentor?" (viz., "Have parents, family, and/or friends" (54%)) might point to a trend among girls to utilize family and friends instead of mentors. Therefore, given this finding girls may be more willing to branch out beyond the family to find a mentor, yet also be apt to retain their families as a consistent source of mentoring support. Boys, on the other hand, may be more limited in this regard; they may be less likely to venture beyond the family for mentoring, or attachment, needs. These findings are consistent with literature on gender differences in openness to various relationships and help-seeking

(see Chapter II); however, they raise questions about youths' perceptions toward the role of mentors. That is, if youths without mentors are getting their mentoring, and perhaps attachment, needs met by parents, family, or friends (i.e., girls), or if youths without mentors do not feel they need a mentor (i.e., boys), then what do youths think the purpose of a mentor is, and do they understand mentors as serving roles unique from friends, parents, teachers, and counselors that deal with problems or needs?

For those with mentors ( $n = 52$ ), girls most frequently responded that their mentor was a family member (21%), other (23%), or a teacher (12%); boys most frequently reported that their mentors were family members (17%), community members (7%), or others (7%). These distributions highlight that girls may be more willing to branch out from their families to search for a mentor. If this is the case, perhaps efforts at creating mentoring relationships for boys and girls can be addressed in different ways in various contexts. For example, perhaps efforts to create mentoring opportunities for girls can be fostered in the community by enlisting the efforts of female professionals who may be interested in donating time to mentor girls. Conversely, mentoring opportunities for boys may be fostered by enlisting the help of family members, who may potentially serve as mentors for boys.

As noted in Chapter IV, boys reported having more male mentors, while girls reported more female mentors. This finding suggests that although research shows that both boys and girls are more likely to be matched with female mentors (Bogat & Liang, 2005), when boys and girls choose their own mentors, they prefer same-sex mentors. Bogat and Liang (2005) noted that the prevalence of female mentors in programs may be due to a growing shortage of male mentors in communities available to mentor youths. However, the current finding suggests that greater efforts must be made to recruit male mentors to ensure that boys' natural inclination toward male role-modeling and mentoring is met, which might ultimately decrease the number of unsuccessful matches, and premature terminations among boys.

The question regarding the duration of the mentor relationship revealed that most mentors were in the youths' lives for more than two years. This finding provides some support for the notion that youths may be ready to develop mentoring relationships at a fairly early age. Indeed current literature supports the notion that successful mentoring is more likely to be associated with longer lasting and earlier starting relationships, particularly with boys (Cavell, 2005).

### *General Conclusions*

A number of interesting and important conclusions can be drawn from the findings. First, it seems that parental attachment and readiness to be mentored, as measured in this study, are associated with whether one has a mentor. Specifically, those youths with mentors, in this sample, had greater scores on the two readiness to be mentored scales, as hypothesized. However, it is not known if: a) a positive attitude towards mentor seeking or a greater likelihood to engage a mentor pre-existed the reported mentoring relationships, b) the presence of mentoring relationships led to and/or cultivated either one's attitude or likelihood, or both, or c) if the reported attitudes and likelihoods were the results of unique, individual processes for each youth.

Second, for the youths in this study with mentors, only affective quality of the relationship was statistically significantly related to attitude towards seeking a mentor, whereas all three parental attachment subscales were statistically significantly related to likelihood to engage a mentor. It may be that this finding signifies the relative importance of the affective quality of parenting relationships in priming a youth for a positive attitude towards a future mentoring relationship. Perhaps the affective

quality established in the relationship between a caregiver and a youth is one of the most important aspects of the relational experience for youths that potentially carries over to one's other relationships, such as those with mentors. Interestingly, Kenny (1987) found that the Affective Quality of the Relationship subscale was significantly positively correlated with a sense of cohesion, or connectedness, within families. It might be that a sense of positive affective quality in formative attachments leads to cohesion, or connectedness, that ultimately helps determine one's attitude towards other formative attachments, such as mentoring relationships.

Among those without mentors, the most frequently cited reason for not having a mentor was the perception that a mentor "was not needed." The finding that many youths without mentors claim they do not need one raises questions such as: a) what would lead a youth to think he or she did not *need* a mentor?, and b) is a "need/problem" a prerequisite for seeking a mentor? The definition of a mentor provided for the youths in this study did not suggest that a mentor's role was to solve problem or meet needs (e.g., a therapist or counselor). Instead, the definition was designed to reflect a role that would be relevant in the life of every young person by virtue of this developmental stage. The definition was: "a Mentor is often older than you, has more experience than you, willing to listen to you and share their experiences with you, willing to guide you

through some area of your life (not a parent, or someone who raised you, a peer or a romantic partner). Nevertheless, despite the definition provided to them, it is possible that the youths in this sample tended to misunderstand the purpose and role of mentors. Given that formal mentoring programs often target “high-risk youths” to help them deal with problems and needs, the public perception of mentoring that may be shared by this study’s youths may be that mentoring is a response to a particular problem or need. Therefore, future research may be done to explore how youths’ understand what mentoring is and what it means to them. Moreover, it may be important to educate youths on the benefits of mentoring, and thus improve their chances for taking advantage of such an opportunity.

As noted in Chapter II, little is known about the content and process of mentoring messages transmitted inter-generationally in various families, and in different communities over time, and in what ways these messages serve youths in such families. Of the sparse body of literature on the process of mentoring, Spencer’s (2002) qualitative study found that some youths anticipated having fun with their mentors, while others longed for the individualized attention provided by the adult. Spencer’s findings seem to converge with results of the current study in that affective quality of the relationship was shown to contribute to attitude towards seeking a

mentor *and* likelihood to engage a mentor. Yet, little else is known about specific attitudes held of mentoring relationships by youths, and how these preconceptions influence their decisions of whether or not to partake in mentoring relationships. In a more recent study, Spencer (2006) again employed qualitative methods to further elucidate the process that took place between adolescents and their adult mentors who were engaged in a relationship for at least one year. What Spencer found was that in those pairs that managed to forge deep and lasting connections, the adults were, over time, able to shift their initial intention from “helping a needy youth” to “a desire to help their mentee reach his or her full potential.” This study by Spencer provides evidence that even adults may hold preconceptions of mentoring as problem and need focused, and it is conceivable that their views may influence their mentee’s views of the purpose of mentoring. Alternatively, perhaps the frequency with which the youths in the current sample responded “Don’t need” indicates that many youths *are*, in fact, getting their needs met elsewhere and not in “need” of a mentor.

It is also possible that youths reporting that they do not have or do not need a mentor may be influenced by cultural and other contextual or demographic factors. Contextual factors have been shown to shape the values one is exposed to, thereby influencing problem recognition,

decision to seek help, and service selection (Srebnik, Cauce, & Baydar, 1996). Subsequently, the ideas youths' have about what a youth-adult mentoring relationship should look like and be used for is shaped in concert with these values. Thus, further research could focus on elucidating the preconceptions youths of varying racial/ethnic backgrounds, socio-economic statuses, gender typicality, religious beliefs, immigrant statuses, and regions have about the structure and function(s) of mentoring relationships. Information gathered from this type of research may be helpful in thinking about how to prepare youths from various racial, ethnic, and cultural backgrounds to receive mentoring.

Gender differences on the parental attachment scales and readiness to be mentored scales were not observed in this study, which may suggest that boys and girls do not have differential levels of readiness to be mentored or different mentoring needs. This finding does not preclude the possibility that boys and girls may have other differences relevant to the formation of mentoring relationships that were not empirically examined in this study. For example, the findings regarding mentor characteristics revealed that boys and girls do seem to differ in their utilization of mentors, as well as their reasons for not engaging mentors, and tend to turn to different people in their lives for mentoring-



type, or attachment, needs. Future research focusing on gender differences in readiness to be mentored is needed to clarify these findings.

### *Theoretical Considerations*

In the following sections, theoretical implications of the findings from this study are discussed.

#### *Development*

Developmental path models for the influence of mentoring have been posited (Rhodes, 2002, 2005; Rhodes et al., 2006); yet, a path model that addresses the formation of mentoring relationships does not currently exist. The results from this study suggest that perhaps a path model could be utilized for the purpose of better understanding the factors that influence formation of mentoring relationships, and how these factors relate to one another, over the course of an individual's childhood and into adolescence. Specifically, future theoretical efforts could aim at expanding existing path models of mentoring to include the mentoring relationship formation phase – perhaps including some of the demographic variables targeted in this study, such as age, citizenship and immigration statuses, number of years lived in the U.S., and parental education. Also, new path models that incorporate other variables, such

as race and ethnicity, could be examined. Such undertakings would not only inform future empirical ventures, but they could also provide a theoretical map for creating developmentally-appropriate prevention and intervention programs for youths. Indeed, the findings from this study serve as a jumping off point to begin further questioning about how the formation of mentoring relationships for youths occur.

### *Mentoring, attachment, and adolescence*

This project has, in part, represented an attempt to portray the mentoring relationship as an adaptation of the parent-child attachment relationship, which serves a decidedly protective function (i.e., a secure base and safe haven) in the process of identity formation and coping with various stressors. Contemporary research on adolescent development has consistently supported the idea that adaptive autonomy is developed in the presence of secure relationships that transform and endure well beyond adolescence (Allen, Moore, & Kuperminc, 1997; Fraley & Davis, 1997; Grotevant & Cooper, 1986; Hill & Holmbeck, 1986). Therefore, rather than being antithetical to healthy development, the attachment system plays an integral role in helping youths meet developmental challenges. And, just as some have theorized that one's internal parental attachment

organization is transferred to peers when one is an adolescent, (cf., Kenny, 1987; Kenny, Moilanen, Lomax, & Brabeck, 1993), the results of this study bring to fore the consideration that various aspects of one's parental attachment organization may also be transferred to mentors. Yet, the application of this theoretical model (viz., youths' attachment transfer to potential mentors in the service of forming a mentoring relationship) is not fully understood.

In this study, it was observed that for youths with mentors, differential aspects of the parental attachment relationship contributed to differential changes, respectively, in the two dimensions of one's readiness to be mentored. Further work should be done to empirically test the readiness to be mentored construct. Indeed, this construct could possibly be comprised of more or fewer factors, or completely different factors. Furthermore, readiness to be mentored might be understood differently for diverse youths under various circumstances. Specifically, youths from diverse race, ethnicities, cultures, socio-economic strata, and other groups may exhibit readiness to be mentored in different ways. For example, a youth from a collectivistic culture may hold a negative attitude towards mentoring as a viable source of support based on contextually-infused values, which may diminish their likelihood to engage a mentor, possibly because they are already satisfying their attachment

needs through their group affiliation. Also, as mentioned earlier, the results from this study call into question the messages youths, particularly children, receive from parents, teachers, counselors, and other proximal adults regarding the purpose and utility of mentoring relationships. Models conceptualizing the impact of mentoring messages should be devised and explored.

Further work in this regard may also allow for a more nuanced understanding of the actual engagement of a mentor, as it is still unclear where, in the process of mentoring formation, the actual engagement of a mentor takes place.

#### *Help-seeking and adolescence*

The results of this study suggest that help-seeking among adolescents can be perceived as a type of dependent behavior that conflicts with both one's needs for autonomy (Deci & Ryan, 1987) and with the traditional Western emphases on independence, mastery, and self-reliance (Markus & Kitayama, 1991). Indeed, studies have confirmed that many youths' reluctance to ask for help is related to their strivings for independent mastery (Butler & Neuman, 1995; van der Meij, 1988);

teachers have also been shown to hold the view that independence is a more desirable coping strategy (Nelson-Le Gall & Scott-Jones, 1985).

How youths perceive the role and meaning of the help sought may determine if, when, and how the youth seeks out help or support. Some have defined adaptive help-seeking as behavior initiated (a) when youths cannot overcome a difficulty alone and (b) when the mode of help or support promotes understanding and mastery, rather than task completion (Butler & Neuman, 1995; Nelson-Le Gall & Scott-Jones, 1985; Newman & Schwager, 1995). Youths without mentors in this study may have been reluctant to ask for help because it was perceived as a sign of weakness that threatened their perceptions of their own abilities. Perhaps the respective social contexts for youths who responded in this manner do not value this form of support. Some have found that people are more reluctant to request help for personally meaningful activities than for personally unimportant activities (Nadler, 1987; Tessler & Schwartz, 1972), and are less likely to request, or seek out, help when tasks are presented as tests of abilities rather than as opportunities to learn (Butler & Neuman, 1995). Indeed, this may be a function of socialization. It may be that some youths have actually been taught that self-sufficiency is the preferred method for getting a need met.

Moreover, results from this study also suggest that what may be perceived as help-avoidance behavior by youths may actually be a sign of healthy, positive development. As noted earlier, youths in various contexts may receive different messages about autonomy or reliance on others, which, in turn, may influence their understanding of “needing” a mentor. Youths who “Don’t need” mentors may very well have healthy internal working models that influence their ways of relating to others; yet, at the same time, contextual influences (i.e., values, or needs being met elsewhere) may preclude them from seeking and engaging in a mentoring relationship.

Given these complex theoretical considerations, the following section will discuss how questions spurred by this study can be explored in future research.

### *Research Implications*

This study identified differences for 8th grade youths, both with and without mentors, regarding their attitudes towards seeking a mentor and likelihood to engage a mentor. As discussed in Chapter II, one’s readiness to be mentored has not been studied in previous research. Therefore, the field of mentoring should consider further inquiry into the overarching question of what it means, for both adults and youths, to be “ready to be

mentored.” This line of inquiry may hold important implications for youth mentoring practice and policy, given that one of the greatest challenges in mentoring programs is the development of successful and lasting matches (Cavell & Smith, 2005; Darling, 2005; Dubois et al., 2002; Rhodes et al., 2006).

Findings from this study support the need to build upon the readiness to be mentored construct. Future work should be done to further refine and test the definition of this construct, by including measurement development and validation. Moreover, additional research should be done to examine the outcomes of readiness to be mentored. Does increased readiness lead to increased likelihood of having a mentor, as well as lasting and successful matches?

In this sample, adolescents with higher levels of parental attachment reported a greater likelihood to engage a mentor; but, only those with greater levels of affective quality of their parental attachment relationships reported greater levels of positive attitude towards seeking a mentor. Future research that takes into account the multidimensional aspects of parental attachment and mentor formation process should be done to assess whether they may be additional parental attachment characteristics that were not measured in the current study that may also play a differential role in the various parts of forming a mentoring

relationship. For example, parental transmission of values regarding help-seeking is another area for future research. To what extent do parents' cultural experiences and background influence adolescents' views of mentoring? By parent modeling and example, adolescents will learn how to cope when faced with overwhelming stressors and/or when other problems arise. According to Caucé and colleagues (2002), ethnic minority parents often choose mental health professions less frequently than White parents. Children learn from their parents about what is an acceptable form of coping or dealing with stress. Do problems stay within the family? As cultural values and traditions are handed down in families, so potentially are the beliefs about mentoring. Future research can explore how these values are transmitted from generation to generation and whether factors, such as parental level of acculturation, are related to adolescents' views of problems, particularly those that are psychological in nature. Future research can examine what help-seeking pathways are most adaptive for particular families.

Future research could also examine how youths move through the help-seeking pathway (Srebnik et al., 1996; Veroff et al., 1981) en route to a mentoring relationship, from the initial problem recognition phase, through the decision to seek help and service selection phases, and to



the service utilization phase. Further research is needed to explore how culture and context impact each step of this process.

Regarding the data gathered in this study, some additional analyses could be performed without the collection of additional data and without utilizing new statistical techniques. For example, the with and without mentor group differences on the attachment subscales for those youths with various combinations of high and low attitude and high and low likelihood could be explored. A correlation or regression analysis may provide insight into possible relationships among mentor presence and the attachment subscales for those with various combinations of attitude and likelihood, which might shed some light on the questions related to the influences behind having/not having, or needing/not needing, a mentor.

For example, another two-by-two grouping matrix could be created by using high and low levels of attitude and likelihood. Then, multivariate and univariate tests could be conducted to determine if differing levels of parental attachment are observed. Also, non-parametric tests could further elucidate if the presence of a mentor was more likely to be observed under certain combinations of attitude and likelihood. This particular research pursuit may be helpful in further elucidating the conditions under which various aspects of one's parental attachment relate to one's readiness to be mentored and, ultimately, the

presence of a mentor. In other words, future research may reveal differential patterns of attachment, which may be helpful in determining how adults invested in supporting youths can shape their own interactions.

Integrating both attachment and mentoring, Main (1999) has suggested that future research on attachment be conducted within the context of mentoring, and leadership, relationships among small groups of adolescents. In pairing direct observation with qualitative interview data on this population, researchers may better understand how a balance of feeling safe and exploring the world is developed, and reshaped, with individuals who have already come to form some template for trusting others based on previous caregiver interactions. Such a focus could have potential clinical research implications insofar as therapists also serve as secure bases from which patients gain a sense of safety, emotional support, and encouragements of autonomy. With this in mind, it may be even more of a possibility that youths without positive parental attachments might be able to benefit from a corrective relational experience that would then “prepare” them to engage in a mentoring relationship. In this way, youths who do not have a secure parental relationship may benefit from short-term clinical corrective relational interventions that then enable them to better utilize naturally occurring mentor relationships.

Finally, future research on the formation of mentoring relationships would also benefit from the exploration of parental attachment relationships across a range of races and ethnicities, ages, socio-economic classes, and, perhaps, regions. For example this particular study focused on 8<sup>th</sup> grade youths in a town west of Boston. Subsequent studies concerned with similar questions might explore other relationships among the constructs of interest with diverse individuals that from a range of geographic locales, representing different demographic compositions, community values, and access to resources, among other differences. By sampling diverse groups, more information can be gathered regarding various contextual influences. Perhaps, in controlling for ethnicity, region, or SES, via matched samples, and in conducting interviews as an additional form of data, one might be able to explore the values and messages about mentoring that are communicated to youths in their various cultural contexts. In doing so, clinicians and educators may identify strategies for offering support and guidance to diverse youths.

#### *Implications for Practice*

Results of this study may not only inform natural mentoring relationships, but formal mentoring relationships as well. Currently, many professionals in psychology and education are being asked to think about

mentoring opportunities for youths they work with in order to decrease the frequency of drop-out, increase attendance and academic achievement, or reduce risky behaviors (DuBois & Silverthorn, 2005a, 2005b). Yet, there is little research to guide these professionals in a practical manner, particularly with regards to forming successful and lasting mentoring relationships.

The current study highlights areas that may be available for intervention in both informal and formal mentoring relationships. First, with many youths responding that they “don’t need” a mentor or that they “have family, friends, or peers” to help them, it may be useful to think about how mentor program staff, mental health professionals, educators, and parents can teach youths to become better consumers of potential mentoring relationships. An approach that *informs and educates* youths about the benefits of mentoring relationships and how to play a role in forming them may increase a youth’s likelihood to engage with a mentor, and thus benefit from this type of relationship.

How individuals acknowledge and define a problem has also been identified as critical to success in mentoring engagement. Thus, it may make sense for clinicians, educators, and parents to maintain open lines of communication with one another simply because what may be a problem for someone in one context may not be a problem for that same

person in another context. Individuals, groups, and cultures also define problems very differently. Therefore, it may be necessary for parents to stay in close contact with adult caregivers (i.e., teachers, community program leaders, clinicians, etc.) in order to begin the discussion about, and possibly identify, particular needs and problems. Yet, many youths do not have parents who can act as an advocate or resource in this manner. In fact, this very need is one that this study aimed to address.

Findings from this study highlight mentoring qualities that mentees naturally gravitate toward, such as same sex mentors that begin in early adolescence. This provides information for mentor programs that may help to improve the success of mentor matches. Moreover, the latter may also be improved with initial assessments of parental attachment histories, given that the latter may predispose youth toward certain attitudes toward and proclivities for engaging in mentor matches. In particular, this study found that parental attachment did not contribute to the presence of a mentor for this sample, which may signify that an insecure attachment does not prevent youths from connecting with mentors. This finding suggests that youths may be able to be “prepared to receive” mentoring relationships despite poor formative attachments. With certain aspects of one’s parental attachment predicting specific aspects of one’s readiness to be mentored (i.e., affective quality of the relationship

predicts attitude towards seeking a mentor), clinicians, educators, mentor staff, and parents may be able to shape their interactive style (i.e., enact a warm and accepting stance) with youths to foster the development of a positive attitude towards seeking out mentors. Moreover, caregiving adults may also adopt more of a role in fostering autonomy and providing emotional support, which may promote a greater likelihood to engage a mentor in the future. It is possible that these elements to one's readiness to be mentored are neither genetically predetermined, nor determined solely by early caregiving styles; rather, these elements can be taught over time, thus preparing youths regardless of previous attachment styles, particularly those who may have negative or insecure parental attachments, to receive mentoring relationships in the future.

Potential non-familial mentors should recognize that many adolescents who seek them out for mentoring may come because they perceive themselves as having a problem or need to be addressed by the mentor. Some research has yielded results that support the idea of creating systemic mentoring experiences for young children prior to assessing their needs and relational histories (Hererra, 1999; Hererra, Sipe & McClanahan, 2000). Indeed, findings from this study and previous research suggest that introducing the idea and experience of mentoring

to youths may be best implemented at a young age (Cavell & Smith, 2005; Keller, 2005).

Although the current study did not explore cultural group differences, mental health professionals and educators should not ignore or downplay potential cultural influences in adolescents' attitudes towards seeking mentors and likelihood to engage mentors. Given the complexities of determining the role that culture plays in influencing attitudes and behavior, mental health professionals and educators should strive to keep cultural issues as working hypotheses in their work with diverse youths, especially as culture relates to help-seeking (Cauce et al., 2002). Furthermore, given the complexities that are associated with racial, ethnic, and cultural groups, along with individuals from diverse religious backgrounds and other social identities, mental health professionals and educators should be aware of the multiple influences, especially that of peers, on youth's values, attitudes, and behaviors. For example, adolescents growing up in urban settings are exposed to a wider range of values, traditions, and learn how to negotiate these multiple worlds, in comparison to their rural counterparts (Larson, 2000). Thus, youths in urban settings may have a broader base of personal and vicarious experiences to draw upon. This may impact the youth's attitude toward seeking a mentor and likelihood to engage a mentor by shaping the youth's opinion

of the mentoring experience altogether. Subsequently, this could lead the youth to actually engaging a mentor whether or not a problem or need had been identified.

### *Limitations of the Study*

#### *Design Bias*

Two initial concerns about the limitations of this study have to do with the cross-sectional, self-report structure of this study. First, as with all cross-sectional designs, inferences of causality and directions of effect cannot be made. Thus, while theory drives a directional understanding of the relationships among study variables, the results of this study do not necessarily identify directionality among the findings. Second, in self-report measures, versus open-ended interviews, participants' responses are constricted to the predetermined response categories provided and, ultimately, may not reflect the full range of the participants' feelings and experiences. However, as a method for focusing on one's perceived experiences with relevant concepts, such as attachment, development, help-seeking, and mentoring, and more broadly one's subjective experience, self-report measures are both theoretically and practically advantageous in comparison to other methods. Nonetheless, future research on "readiness to be mentored" would be enhanced by



longitudinal, multi-method design. For example, qualitative and quantitative approaches may be used together to assess study variables at various time-points, as well as case by case differences among those belonging to similar groups (i.e., SES, geographic region, etc.).

### *Sample Bias*

Characteristics of this study's sample limit the generalizability of the observed results and, ultimately, their applicability to other subgroups. However, purposeful sampling was employed in this study insofar as a particular sample was sought out, so that results from this study may be generalizable to a particular population with similar characteristics. As noted earlier in Chapter III, findings from this study are intended to generalize to a diverse population of 8<sup>th</sup> graders in public schools not too far west of Boston. The diversity of the obtained sample resembles the population and varies by race/ethnicity, country of birth, and length of time living in the U.S. However, the parents of the students in the sample were, for the most part, highly educated – approximately half of the fathers and half of the mothers held graduate degrees. This characteristic of the sample may have implications insofar as many youths included in this study may have a greater than average access to resources, in

comparison to peers that may be less privileged, which may include access to a mentor. Furthermore, youths with highly educated parents may also be exposed to particular values, such as a greater push for autonomy and self-reliance, thus possibly decreasing a need for a mentor, or a greater push for success in a particular vocation, thus possibly increasing the need for a mentor.

Also noted in Chapter III, eighth grade adolescent youths 14 and 15 years of age comprised the population of interest. These individuals are completing their final year in junior high, and (many) are preparing for a natural, developmental transition to high school, where they will be exposed to new and expanding opportunities to be mentored. Thus, this particular sample was targeted as it represents an age/developmental stage thought to be ideal for inquiring about readiness to be mentored.

Self-selection for participation in this study is an element that poses some concern. Those youths who participated may possess a degree of psychological mindedness, or awareness, regarding mentoring issues over those who chose not to participate. Participating youths may have shared temperamental characteristics that compelled proximal adults (i.e., parents and teachers) to encourage the youths to participate in the study. Or, perhaps, those youths who were of a particular socio-economic status had resources (i.e., parental presence, financial,

educational, recreational, etc.) that valued the mentoring model and, thus, passed along a value perhaps less commonly found in other socioeconomic statuses. Therefore, it is unclear if the study's findings would generalize to a similar group of diverse youths simply because of unmeasured shared characteristics.

An advantage of this particular sample, as mentioned earlier, is its specificity to the population of interest; this increases the applicability of the results to similar groups. However, because of the sample's limited size, it is difficult to thoroughly explore distinct differences, or patterns, among sample subgroups, or to discern whether patterns of relationships found among variables applies to all subgroups. Demographic differences may shape youths' levels of parental attachment and readiness to be mentored. Furthermore, age, race, gender, socioeconomic status, and/or number of years in the U.S. may foster conditions under which differential (viz., qualitative and quantitative) experiences and perceptions of parental attachment and mentoring occur – demographic variables may lead to greater access to resources, which may lead to more frequent or “better quality” mentoring experiences.

Interestingly, mentoring has been associated with youths on distant ends of the spectrum when it comes to level of functioning. On one hand, mentoring has been linked with high-risk and underserved youths'

who may come from fractured homes and are in need of a guiding light in their lives (i.e., Big Brother/Big Sisters). These youths may be connected to mentoring relationships more readily; however, these youths may be more at risk of experiencing prematurely terminating mentoring relationships due to high turnover among mentors who work with this population (i.e., lower SES youths). In contrast to high-risk youths, mentoring is also associated with individuals who are particularly high-achieving and require specialized, technical guidance; however, these youths may have trouble getting matched with a mentor due to the dearth of these types of mentors. Furthermore, less is known about the mentoring experiences of middle class, urban, and suburban, youths. In this study, the limited sample size prevented a closer comparison among demographic groups; although, some comparative differences were noted.

### *Measure Bias*

One form of measurement bias relates to the self-report structure of this study's measures. Measures of self-reported parental attachment, attitude, and likelihood, may have caused particular difficulty. The phenomenon of social desirability may have led participants to distort

their reported true levels of parental attachment, attitude towards mentoring, and/or likelihood to engage a mentor. This may have been due to a desire to present a positive view of self to the researcher, but distorted responses may also result from a respondent's desire to preserve their self image. Youths who actually experienced low levels of parental attachment may have felt an internal pressure to positively portray their caregiver experiences in order to maintain a stable sense of self and of their family functioning. However, as discussed in Chapter III, two of the subscales of the PAQ (viz., AQR and PRPES) were not shown to correlate significantly with a social desirability scale, while the PFA subscale did have a slight correlation with socially desirable responses (Kenny, 1987). The same can be said about the attitude scale (Fischer & Turner, 1970); less is known along these lines about the likelihood scale (Roffman et al., 2000).

Eighth grade youths may also demonstrate varied levels of attitude towards seeking a mentor and likelihood to engage a mentor. This may have to an under- or over-estimation of readiness to be mentored for this sample, as youths early in their development may hold relatively impressionable opinions on a number of matters. Interestingly, for this very reason, this sample may be particularly receptive to positive messages

about mentoring were such messages to be shared, or dispersed, at school, at home, and in the community.

Measure content may also bias this study's results. Measures were chosen for this study based on help-seeking theory. This was due to the lack of availability of scales designed to measure the particular hypothesized elements of interest (i.e., attitude towards mentoring and likelihood to engage a mentor). Therefore, the measures used in this study were created by adapting two valid and reliable scales designed to measure conceptually similar constructs (i.e., attitude towards seeking professional psychological help and social support and rejection). As detailed in Chapter III, these scales were then piloted on a small, mock sample. The reliabilities of the adapted scales were obtained in both the pilot and study samples, and were deemed acceptable. Yet, a specific instance of measure bias may be the adaptation and use of a help-seeking scale.

The ATSPPH, which is a self-report instrument that assess attitudes towards help-seeking, is based on the premise that one has a problem or a need for which they might seek help. Therefore, although this scale was adapted to inquire about mentoring, the items retained their focus on behavior in the context of having a need or problem. This caveat is helpful to keep in mind when trying to interpret the data. In particular,

when replying to the adapted ATSPPH items, youths may have associated mentors with problems or needs, even though the definition of mentor given to them stated otherwise. Subsequently, it makes sense to think that youths without needs would be likely to reply that they “don’t need” a mentor. Indeed, the use of these particular measures, though, poses a particular concern for the validity of the adapted scales.

Both of the adapted readiness scales appear to have face and content validity for their respective constructs; yet, whether or not these newly adapted scales measured what I intended they measure could only be determined should they demonstrate convergent validity, or a correlation with measures that have been shown to reliably and validly assess the constructs of interest. This step did not occur because, as stated earlier, there have been no previous studies that have examined the conceptual construct of readiness to be mentored, or its dimensions. Thus, the question regarding the degree to which the current scales represent the constructs of interest should remain in one’s mind as the results and conclusions proffered by this study are read.

### *Statistical Bias*

Given the validity questions that surround the use of the scales that represented attitude towards seeking a mentor and likelihood to engage a mentor, the introduction of measurement error becomes a statistical concern. Greater measurement error would lead to bias in the obtained statistics of interest (i.e., eta-squared, Pearson's  $r$ , and the regression coefficients), possibly suppressing any true effects, thereby leading to a Type II error. Given that some findings were not found to be statistically significant, the possibility of having committed a Type II error becomes a more salient concern. One area to explore in this regard is the a priori Alpha levels, which may have been too stringent. In particular, although the Bonferroni adjustment, technically, requires AQR to lose its statistical significance, it may make more sense to extend the range of significance to include  $p$ -values from 0.0125 to 0.10, so that trends towards significance may also be analyzed.

Also, the effect sizes would have to be considered. These are the amounts of change, represented by the various statistics of interest (viz., eta-squared, Pearson's  $r$ , and the regression coefficients), necessary for statistical significance. These values would be obtained from previous



research using the same predictors (AQR, PFA, PRPES (PAQ subscales)) and outcomes (Attitude, Likelihood (Readiness to be Mentored subscales)). However, as noted in Chapter III, no studies to date have examined these measures in the aforementioned manner; therefore, no effect sizes for eta-squared, Pearson's  $r$ , and regression coefficients were determined a priori.

### *Concluding Thoughts*

Mentoring has been linked to a range of positive academic, social, and emotional benefits (DuBois & Silverthorn, 2005a; Grossman & Rhodes, 2002; Rhodes et al., 2000) and is often identified as a potential target for youth intervention. Although the outcomes associated with mentoring have been well documented, antecedents to the formation of mentoring relationships, or the readiness to be mentored, have not been studied. Developmental (i.e., age and gender), as well as contextual (i.e., culture, socio-economic status, and politico-historical climate), factors are thought to have an impact on the formation of mentoring relationships for youths. More specifically, context may exert its influence on youths' mentoring relationship formation by way of introducing values that shapes

the youth's help-seeking process, which, in turn, is thought to influence one's readiness to be mentored.

Attachment theory has proven useful in understanding the phenomenon of mentoring, as well as the formation of these relationships for adolescents. Readiness to be mentored is a construct that has not been previously studied, despite evidence that suggests that not all youths successfully take advantage of opportunities to be mentored by caring adults in their communities. Thus, a conceptual construct was conceived based on help-seeking theory and hypothesized as consisting of attitudinal and a probable-action elements.

What this study found was that parental attachment did not contribute to the presence of a mentor, and that various aspects of parental attachment differentially predict one's attitude towards seeking a mentor and one's likelihood to engage a mentor. Also, a number of youths reported that they either "did not need" a mentor or that they had "parents, family, or friends" that met their needs, which raises the question of how do youths understand the role and utility of mentoring relationships in their specific life situations.

In sum, understanding precursors to mentoring is a first step in understanding the entire pathway of a mentoring relationship's influence on beneficial outcomes among youth. Parents, schools, communities, and

mentoring program staff must think about increasing youths' readiness to be mentored, in order to help youths more successfully engage in both informal and formal mentoring relationships.

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Appendix A

Letter to Principals

Dear \_\_\_\_\_:

My name is Ravi Gatha and I am a fourth-year doctoral student in the Counseling Psychology program at Boston College. I have also just recently concluded three-years of tenure as a Clinical Associate clinician at the Brookline Community Mental Health Center, where I provided mental health services for children, adolescents, adults, and families for the past three years. I have actually worked closely with \_\_\_\_\_ at \_\_\_\_\_ on a few cases and groups.

I am writing to ask if I could engage you in a discussion about gaining permission to collect quantitative data on 8th graders at your school that will be used in my dissertation (to partially fulfill the requirements for my degree at Boston College) - I initially sent this email to \_\_\_\_\_ thinking that she could facilitate this conversation; she suggested that I contact you directly regarding this request.

The (confidential & de-identified) data that I hope to collect will be about youths' impressions of their parental relationships and ideas about mentoring. The purpose of the study is to help educators, practitioners, and researchers better understand why some youths are more apt to have positive attitudes towards mentoring relationships and engage them, while others hold less favorable views of mentoring and are unlikely to engage mentors. The surveys, which will be administered during non-academic class-times and take approximately 30 minutes, will include questions about students' parent relationships and thoughts about mentoring.

Through the survey, I hope to learn how caregiving relationships influence youths' attitudes about, and decision to engage, non-parental, caring and supportive adult figures. As you can imagine, this line of inquiry, which has not been previously explored, holds tremendous implications for integrating mentoring models in schools across all grades, especially given the dearth of social supports available to many students.

I have already gained permission from \_\_\_\_\_ of the four schools I am hoping to collect data in (\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ are the others).

I anticipate that the remaining schools will be amiable to allowing me to collect data from their students, as I have good working relationships with the respective schools' guidance counselors. In having communicated my research intentions with the school guidance counselors at these four schools, those who have responded thus far find this study to be a meaningful contribution to the fields of psychology and education, as well as a potentially informative entrée into the study of psychology for the transitioning eighth graders (Kim has offered to sit in on a discussion about this, too, to help organize the collection pending your approval).

I hope to be able to gain approval for conducting this study from the Town's Human Subjects/Institutional Review Board by late May (5.30) or early June (6.6) at the latest. Therefore, I hope to gain permission from the respective principals by the end of this week - to ensure enough time for the Town to review my survey. I have attached my survey for your review at your convenience.

I would greatly appreciate the opportunity to speak with you about this request. Please do not hesitate to contact me (via email or phone – cell: 617.642.5795) with any questions and/or concerns, or to schedule a meeting - my schedule this week is quite flexible. Thank you in advance for your time and consideration in this request.

Sincerely,

Ravi H. Gatha, M.Ed.  
Doctoral Candidate  
Counseling Psychology  
Boston College

## Appendix B

### Parent Consent Form

Dear Parents/Guardians:

My name is Ravi Gatha and I am writing to ask your permission for your child to take part in a 40 minute survey on 8<sup>th</sup> grade students' relationships and mentoring experiences. I am a Counseling Psychology doctoral candidate in the Lynch School of Education at Boston College, but I have also worked in Brookline for the past three years as a child/adolescent mental health clinician for the Brookline Community Mental Health Center. In fact, I have worked closely with Baker's upper-grade Guidance Counselor, Katy Sazama, and principal, Tom Cavanagh, to provide services for individual students and groups of children. They have graciously offered to help me with this project; now, I am asking your help.

I am in charge of conducting this study, which is for my dissertation, and partially fulfills the requirements for my degree. The study has been approved by Boston College, the Town of Brookline, and your child's school's principal. Your child is eligible to participate in this study as an 8<sup>th</sup> grade student in one of four Brookline Public Schools; Driscoll, Lincoln, and Pierce are also participating. Your child will be one of about 200 children among these four schools to participate. Upon returning a signed consent (permission) form, your child will receive a small gift certificate. Then, if he/she agrees to complete the survey, he/she will be eligible for winning a larger gift certificate in a raffle. Your child's participation is completely voluntary. Your decision (whether or not to allow him/her to participate) will have no effect(s) on his/her grades, academic standing, or any services he/she might receive at school, or elsewhere in the community.

#### **Purpose:**

The purpose of the study is to help researchers and educators better understand why some youths are more likely to have positive attitudes towards mentoring relationships and engage them, while others hold less favorable views of mentoring and are unlikely to engage mentors. The surveys will include questions about students' relationships and thoughts about mentoring. Through the survey, I hope to learn how relationships influence youths' attitudes about, and decision to engage, non-parental, caring and supportive adult figures. This study will be supervised by Dr.

Belle Liang in the Counseling Psychology department in the Lynch School of Education at Boston College.

**Procedures:**

If you give permission and your child agrees, he/she will complete a 40 minute-long survey during a non-instructional time of a regular school day (such as lunch or study hall). During this time, s/he and other students in her/his school will meet with me to fill out the survey.

**Risks/Costs:**

To the best of my knowledge, this study involves no more risk of harm to participating students than what they would experience in everyday life. However unlikely, students who have questions or concerns that arise from survey participation may speak with a school guidance counselor or me. There is no cost for your child to participate in this study.

**Benefits:**

Participants will likely have no direct benefits from taking this part in the study. However, we hope that the information from these surveys will be used to support youth mentoring services, particularly in schools.

**Compensation:**

Participating students will be exposed to the field psychology, which could serve as a springboard for their interests as they move on to high school. Furthermore, I would be happy to sit down and talk with any and all students interested in more specific information pertaining to this study or the larger field of psychology. Additionally, each participating student will receive a small gift certificate as a token of my appreciation for returning a signed consent form, and be eligible for a winning a larger gift certificate through a raffle, for their completion of the survey.

**Withdrawal from the study:**

Your child may choose to stop her/his participation in this study at any time. Her/his decision to stop her/his participation will have no effect on her/his grades or academic standing.

**Confidentiality:**

Confidentiality of all responses will be maintained. Identifying information (your child's name) will be immediately separated from the survey

responses and will be stored in a locked cabinet in my house; no one but me will have access to this information. The informed consent and assent documents will be destroyed by shredding three years after the results of the study are published and the raw data will be destroyed within 10 years.

The information I receive will be kept strictly confidential. Confidentiality may be breached in only extenuating circumstances where there is reason to believe that your child is in danger or has been abused, or that your child is a danger to him/herself or someone else. These are the only situations in which I would share your child's responses with you. Also, although very unlikely, researchers may be asked to provide information which has identifying information to people responsible for ensuring ethical research practices, such as members of the Boston College Institutional Review Board.

Information from this study will be combined to look for patterns in students' responses in relation to survey items. When I write up the study to share it with other researchers at meetings or in journals, I will write about the combined information, not individual responses.

**Questions:**

Please feel free to contact me (cell: 617.642.5795, gatha@bc.edu) with questions about this letter/study or contact the Boston College office for Human Research Participant Protection (617.552.4778) with any questions about your child's rights as a participant in a research study.

**Certification:**

I have read and I believe I understand this Informed Consent document. I believe I understand the purpose of the research project and what my child will be asked to do. I have been given the opportunity to ask questions and they have been answered satisfactorily. I understand that I may withdraw my permission for my child's participation in this research study at any time, and that my child can refuse to answer any focus group question(s), if requested. I understand that the researcher will work to keep the information received confidential. My child's name will not be on the data collected; instead a coded number will be used for data transcription, and a pseudonym will be used if quotations are published. I



understand that I should keep one copy of this Informed Consent document for my personal reference.

\_\_\_ I DO give my informed and free consent for my child/ward to be a participant in this study.

\_\_\_ I DO NOT give my informed and free consent for my child/ward to be a participant in this study.

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Signature of Parent/Guardian**

\_\_\_\_\_  
**Printed Name of Parent/Guardian and Relationship**

\_\_\_\_\_  
**Printed Name of Child Participant**

Appendix C

Student Assent Form

**PARTICIPATION IN A RESEARCH STUDY**

***“RELATIONSHIPS AND MENTORING”***

This letter is to ask if you want to be part of a research study on youths’ relationships and mentoring. You will receive a small gift certificate for your participation. Your parent/guardian and your school have said that it’s OK for you to be part of this study, if you want. If you do, you will be one of about 200 8<sup>th</sup> or 9<sup>th</sup> graders in the Boston area who will take these surveys.

My name is Ravi Gatha and I am the one doing the study. I am a student in Psychology and Education at Boston College.

You don’t have to be part of the study if you don’t want to, and nothing bad will happen to you if you say “no.” Please ask questions if there is something you don’t understand.

If you decide to be part of the study, you will fill out a 45 minute long survey in the school cafeteria or in another available room at school. I will ask you questions about your parent and mentoring relationships. All of your responses will be kept confidential. Your names and other personal information will be kept separate from your survey answers. I will protect this information by keeping it in my house in a locked cabinet which only I have access to. If some students get upset when they fill out the surveys, I will let them know about someone they can talk with about it.

Normally, your answers will be completely confidential from everyone, including your parents/guardians and teachers. But I may need to tell someone about some of your answers if I think someone has seriously hurt you, or that you might hurt yourself or someone else. If I think that you might hurt yourself or someone else, I will also need to tell your parents/guardians. When I write reports about what I learn from responses of youths like you, I will not use names, but instead I will talk about how “groups of youths” responded.

While you are taking this survey, you can skip any question, or several questions. You can also tell me that you want to stop. It's up to you.

If you would like to work with me to help me learn about youths' parent and mentoring relationships, then please write your name and the date at the end of this page.

---

**Date**

---

**Signature of Participant**

---

**Printed Name of Participant**

---

**Witness/Informant**

Appendix D

Survey

**ABOUT YOU**

1. What is your GENDER?
  - a. Male
  - b. Female
  
2. What is your GRADE?
  - a. Seventh (7)
  - b. Eighth (8)
  - c. Ninth (9)
  
3. What is your AGE?
  - a. 14 years old or below
  - b. 15 yo
  - c. 16 yo
  - d. 17 yo
  
4. What is your RACIAL/ETHNIC background (indicate all that apply):
  - a. White
  - b. Black
  - c. Asian/Pacific Islander
  - d. Native American
  - e. Hispanic/Latin
  - f. Other (please write): \_\_\_\_\_
  
5. Were YOU BORN in the US?
  - a. Yes
  - b. No
  
6. How long have YOU lived IN THE US?
  - a. 0 to 1 years
  - b. 1 to 2 years
  - c. 2 to 3 years
  - d. 3 + years
  
7. Was YOUR FATHER BORN in the US?
  - a. Yes
  - b. No

8. How long has YOUR FATHER lives IN THE US?
  - a. 0 to 1 years
  - b. 1 to 2 years
  - c. 2 to 3 years
  - d. 3 + years
  
9. What is the highest level of EDUCATION completed by your FATHER?
  - a. High School or less
  - b. Some college
  - c. College Bachelor's degree
  - d. Master's degree (MA, MS, MBA, MSW)
  - e. Doctorate degree (EdD, DBA, PhD, MD, DO, DDS, DVM)
  - f. Law degree (JD, LLB)
  - g. Don't know
  - h. Does not apply
  
10. Was YOUR MOTHER BORN in the US?
  - a. Yes
  - b. No
  
11. How long has YOUR MOTHER lived IN THE US?
  - a. 0 to 1 years
  - b. 1 to 2 years
  - c. 2 to 3 years
  - d. 3 + years
  
12. What is the highest level of EDUCATION completed by your MOTHER?
  - a. High School or less
  - b. Some college
  - c. College Bachelor's degree
  - d. Master's degree (MA, MS, MBA, MSW)
  - e. Doctorate degree (EdD, DBA, PhD, MD, DO, DDS, DVM)
  - f. Law degree (JD, LLB)
  - g. Don't know
  - h. Does not apply

**ABOUT YOUR PARENTS**

Think about the:

**ONE PARENT/CAREGIVER WHO HELPED TO RAISE YOU MOST OF THE TIME AND WITH WHOM YOU FEEL CLOSEST.**

13. In this section I am thinking about my:
- a. biological mother or father
  - b. stepmother or stepfather
  - c. adoptive mother or father
  - d. foster mother or father
  - e. other (please write-in) \_\_\_\_\_
  - f. I will not be answering this section because I did not have any parents/caregivers.

Using these categories, write the number that applies to your PARENT/CAREGIVER for each question.

---

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Not at All	Somewhat	Moderate	A Bit	Very Much
(0-10%)	(11-35%)	(36-65%)	(66-90%)	(91-100%)

---

**My PARENT/CAREGIVER...**

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 14. is someone I can count on to listen to me when I feel upset. | 1 | 2 | 3 | 4 | 5 |
| 15. supports my goals and interests.                             | 1 | 2 | 3 | 4 | 5 |
| 16. sees the world differently than I do.                        | 1 | 2 | 3 | 4 | 5 |
| 17. understands my problems and concerns.                        | 1 | 2 | 3 | 4 | 5 |

18. respects my privacy.	1	2	3	4	5
19. limits my independence.	1	2	3	4	5
20. gives me advice when I ask for it.	1	2	3	4	5
21. takes me seriously.	1	2	3	4	5
22. likes me to make my own decisions.	1	2	3	4	5
23. criticizes me.	1	2	3	4	5
24. tells me what to think or how to feel.	1	2	3	4	5
25. gives me attention when I want it.	1	2	3	4	5
26. is someone I can talk to about anything.	1	2	3	4	5
27. has no idea what I am feeling or thinking.	1	2	3	4	5
28. lets me try new things out and learn on my own.	1	2	3	4	5
29. is too busy to help me.	1	2	3	4	5

---

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Not at All	Somewhat	Moderate	A Bit	Very Much
(0-10%)	(11-35%)	(36-65%)	(66-90%)	(91-100%)

---

30. has trust and confidence in me.	1	2	3	4	5
31. tries to control my life.	1	2	3	4	5
32. protects me from danger and difficulty.	1	2	3	4	5
33. ignores what I have to say.	1	2	3	4	5
34. is sensitive to my feelings and needs.	1	2	3	4	5
35. is disappointed in me.	1	2	3	4	5
36. gives me advice whether or not I want it.	1	2	3	4	5
37. respect my decisions, even if they don't agree.	1	2	3	4	5
38. does things for me which I would rather do for myself.	1	2	3	4	5
39. is someone whose expectations I feel I have to meet.	1	2	3	4	5
40. treats me like a younger child.	1	2	3	4	5

***DURING TIME SPENT TOGETHER, MY PARENT/CAREGIVER WAS SOMEONE:***

41. I looked forward to seeing.	1	2	3	4	5
42. with whom I argued.	1	2	3	4	5
43. with whom I felt comfortable.	1	2	3	4	5



44. who made me angry.	1	2	3	4	5
45. I wanted to be with all the time.	1	2	3	4	5
46. towards whom I felt cool and distant.	1	2	3	4	5
47. who got on my nerves.	1	2	3	4	5
48. who made me feel guilty and anxious.	1	2	3	4	5
49. I liked telling about what I have done recently.	1	2	3	4	5
50. for whom I felt feelings of love.	1	2	3	4	5
51. I tried to ignore.	1	2	3	4	5
52. to whom I told my most personal thoughts and feelings.	1	2	3	4	5

---

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Not at All	Somewhat	Moderate	A Bit	Very Much
(0-10%)	(11-35%)	(36-65%)	(66-90%)	(91-100%)

---

53. I liked being with.	1	2	3	4	5
-------------------------	---	---	---	---	---

54. I didn't want to tell what has been going on in my life. 1 2 3 4 5

**FOLLOWING TIME SPENT TOGETHER, I WOULD LEAVE MY PARENT/CAREGIVER:**

55. with warm and positive feelings. 1 2 3 4 5

56. feeling let down and disappointed. 1 2 3 4 5

**WHEN I HAVE A SERIOUS PROBLEM OR AN IMPORTANT DECISION TO MAKE:**

57. I look to my PARENT/CAREGIVER for help. 1 2 3 4 5

58. I know that my PARENT/CAREGIVER will know what I should do. 1 2 3 4 5

59. I ask my PARENT/CAREGIVER for help if my friends can't help. 1 2 3 4 5

60. I think about what my PARENT/CAREGIVER might say. 1 2 3 4 5

61. I talk it over with a friend. 1 2 3 4 5

62. I work it out on my own, without help from anyone. 1 2 3 4 5

**WHEN I GO TO MY PARENT/CAREGIVER FOR HELP:**

63. I feel more sure of my ability to handle the problems on my own. 1 2 3 4 5

64. I continue to feel unsure of myself. 1 2 3 4 5

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 65. I feel that I would have gotten more understanding from a friend.                              | 1 | 2 | 3 | 4 | 5 |
| 66. I feel sure that things will work out as long as I follow my <u>PARENT/CAREGIVER'S</u> advice. | 1 | 2 | 3 | 4 | 5 |
| 67. I am disappointed with my <u>PARENT/CAREGIVER'S</u> response.                                  | 1 | 2 | 3 | 4 | 5 |

**GO TO THE NEXT PAGE**

**ABOUT MENTORS**

**A MENTOR is:**

- **NOT a parent or someone who raised you**
- **often older than you**
- **has more experience than you**
- **willing to listen, and share their own experiences**
- **willing to guide you through some area(s) of your life (e.g., academic, social, athletic, religious)**
- **NOT a peer or romantic partner.**

**Please rate the following items using the this scale**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
	Disagree a Lot	Disagree a Little	Agree a Little	Agree a Lot
68. If I believed I was having a breakdown, my first thought would be to find a mentor.	1	2	3	4
69. The idea of talking about problems with a mentor strikes me as a bad way to get rid of emotional issues.	1	2	3	4
70. If I were experiencing a serious problem at this point in my life, I would be confident that I could get real help from a mentor.	1	2	3	4
71. There is something honorable about a person who is willing to cope with conflicts and fears <i>without</i> being mentored.	1	2	3	4

72. I would want to get mentoring if I was worried or upset1  
for a long period of time. 2 3 4
73. At some future time, I might want to have a mentor. 1 2 3 4
74. A person with an emotional issue *is* likely to solve it with1  
a *mentor's* help. 2 3 4
75. Mentoring isn't for me because it might take a lot of time1  
or cost a lot. 2 3 4
76. A youth should first try work out their own problems with1  
emotional issues – mentoring should be a last resort. 2 3 4
77. Emotional issues, like many things, tend to work out by1  
themselves. 2 3 4

**GO TO THE NEXT PAGE**

**MORE ABOUT MENTORS**

**Think about the definition of “Mentor” used earlier...**

**Then, respond to items below using this prompt to start each statement:**

*“I would be likely to put time and effort into a non-parent, mentoring relationship if...”*

---

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

---

- |   |   |   |   |     |
|---|---|---|---|-----|
| 78. ...this person cared about how I am doing in school     | 1 | 2 | 3 | 45  |
| 79. ...this person is very sure I can do well in the future | 1 | 2 | 3 | 45  |
| 80. ...this person cares about me even when I make mistakes | 1 | 2 | 3 | 45  |
| 81. ...this person really listens to and understands me     | 1 | 2 | 3 | 45  |
| 82. ...this person looks out for me and helps me            | 1 | 2 | 3 | 4 5 |
| 83. ...this person and I both have fun when we're together  | 1 | 2 | 3 | 45  |
| 84. ...I talk to this person about problems with my friends | 1 | 2 | 3 | 45  |
| 85. ...I talk to this person about problems with my         | 1 | 2 | 3 | 4 5 |

parents/family

86. ...I feel safe when I'm with this person	1	2	3	4	5
87. ...I tell this person things that are very private	1	2	3	4	5
88. ...I talk to this person when something makes me angry or afraid	1	2	3	4	5
89. ...this person gives me useful advice in dealing with my problems	1	2	3	4	5
90. ...this person has qualities or skills that I'd like to have when I'm older	1	2	3	4	5
91. ...I learn how to do things by watching and listening to this person	1	2	3	4	5
92. ...this person introduces me to new ideas, interests, and experiences	1	2	3	4	5
93. ...this person pushes me to succeed at the things I want to do	1	2	3	4	5
94. ...sometimes I think that this person doesn't like me	1	2	3	4	5

---

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

---

95. ...I don't like things this person says or does	1	2	3	4	5
96. ...this person is too busy to pay attention to me	1	2	3	4	5
97. ...this person and I get angry at each other	1	2	3	4	5
98. ...I feel this person will let me down	1	2	3	4	5
99. ...I tell this person what I'm thinking, he/she will laugh at me.	1	2	3	4	5

---

**EVEN MORE ABOUT MENTORS**

**Think about the definition of “mentor” used earlier and use this scale to respond to the following items:**

---

1	2	3	4	5
Never	Rarely	Sometimes	Often	Always

---

100. I can really be myself with this mentor.	1	2	3	4	5
101. I believe my mentor really likes me.	1	2	3	4	5



102.	My mentor helps me even more than I ask or I imagine.	1	2	3	4	5
103.	My mentor tells me about things that happened to him/her that help me with my own life.	1	2	3	4	5
104.	My mentor helps me to get to know myself better.	1	2	3	4	5
105.	My mentor encourages me and believes in me.	1	2	3	4	5
106.	I try to be like my mentor.	1	2	3	4	5
107.	My mentor and I have a lot in common, such as the same interests, beliefs, or values.	1	2	3	4	5
108.	I feel happy after being with my mentor.	1	2	3	4	5
109.	My mentor tries hard to understand my feelings and goals about school, my life or whatever is important to me.	1	2	3	4	5
110.	I like my relationship with my mentor so much that I want to find other relationships like this one.	1	2	3	4	5

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	Never	Rarely	Sometimes	Often	Always
111.	I feel comfortable talking to my mentor even about the most important things that bother me.			234	5
112.	My mentor pushes me too hard.			1	2
			3	4	5
113.	There are certain things that I can't tell my mentor.			1	234
				3	45
114.	My mentor and I can work out our differences.			1	2
				3	45
115.	When we don't agree, I can talk to this mentor about the way I feel without worrying if he/she will think badly of me.			234	5

**STILL MORE ABOUT MENTORS**

**Please answer the following questions about your mentor...**

- 116. Do you have a mentor?
  - a. Yes
  - b. No
  
- 117. What is your mentor's gender?
  - a. Male
  - b. Female
  
- 118. This mentor is a...

- a. Family member
- b. Teacher
- c. Coach
- d. Community member
- e. Other (please write): \_\_\_\_\_

119. How long have you known this mentor?
- a. 0-6 months
  - b. 6-12 months
  - c. 12-18 months
  - d. 18-24 months
  - e. 24 months + (how long: \_\_\_\_\_)

120. How did you meet this mentor?
- a. Family
  - b. School
  - c. Friend
  - d. Sports
  - e. Other (please write): \_\_\_\_\_

121. If you don't have a mentor, why not?
-

**YOU ARE DONE!**

**PLEASE MAKE SURE YOU HAVE ANSWERED ALL OF  
THE ITEMS...**

**...THANK YOU FOR YOUR PARTICIPATION.**

## Appendix E

### Regression Diagnostics

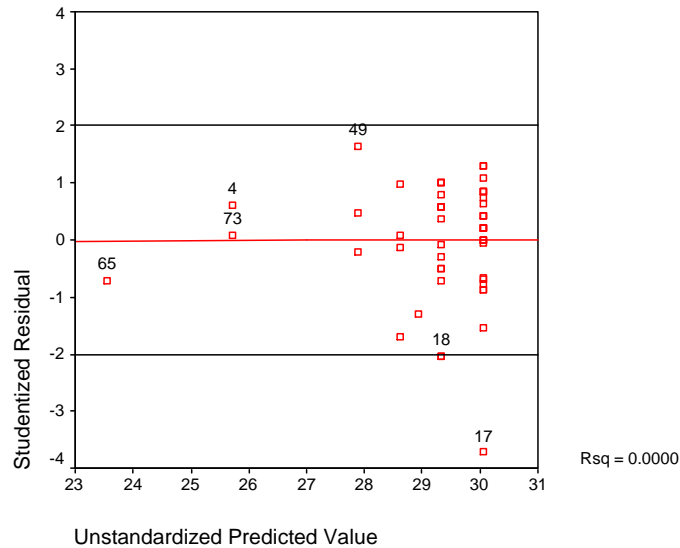
As noted in Chapter IV, regression diagnostics were performed on regression analyses to ensure that OLS assumptions were met. Table 13 summarizes the results from the simple regression tested in this diagnostic procedure.

Table 13.

*Summary of a one "block" simple regression predicting Attitude Toward Seeking a Mentor using age and Born for the purpose of regression diagnostics (n = 52).*

Predictor:	<u>Outcome: Attitude</u>									
	$R^2$	$Adj. R^2$	$R^2\Delta$	$F$	$Sig. F\Delta$	$b$	$SE b$	$\beta$	$t$	$Sig. t$
Step 1	.071	.033	.071	1.877	.164					
Age						-4.34	1.77	-.215	-1.56	.125
Born						.722	.707	.141	1.02	.313

Figure 16 is a scatterplot of the unstandardized predicted values of Attitude against its studentized residuals. A restricted distribution of the error terms was observed; the terms assume a slight "fan" shape. This might signify the presence of an autocorrelation, perhaps due to another variable.



**Figure 16.** Scatterplot of Predicted ATTIT

This was tested by referencing the obtained Durbin Watson Statistic for this regression model,  $d = 1.52$ . According to Chatterjee and Price (1977), the test for significance calls compared this obtained  $d$ -value against critical lower and upper Durbin Watson values. This significance test is a test on the hypothesis:

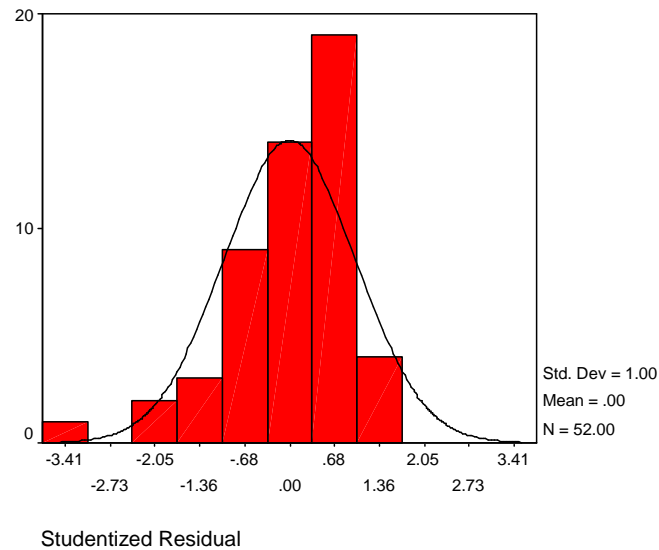
$$H_0: \rho = 0$$

$$H_A: \rho > 0$$

Where:  $\rho$  = the autocorrelation of the population

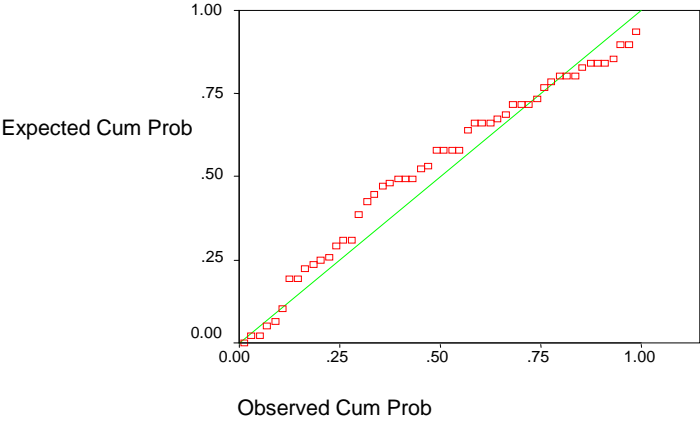
To interpret this value, this statistic was observed as it approached 2. With as  $N = 52$  and  $k = 1$ , the critical lower Durbin Watson bound of  $d_L = 1.53$  and the critical upper bound of  $d_U = 1.60$  were used. Having obtained a  $d$  that is (barely) less than  $d_L$ , the Null hypothesis is rejected, meaning that there may appear to be autocorrelation among the error terms for the “block” of demographic variables.

Figure 17 is a histogram of the studentized residuals for Attitude values. Here we see a relatively normal distribution of the residuals; thus, it can be said that the unconditional distribution of the residuals is normal, or homoscedasticity has been achieved.



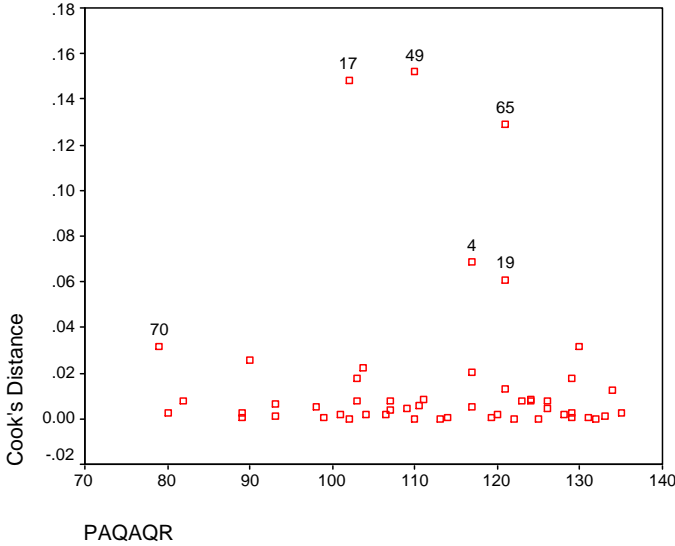
**Figure 17.** Histogram of Studentized Residual of ATTIT

Figure 18 is a normal probability plot of the studentized residuals for the predicted values of Attitude. In order to interpret this graph, Hair et al (1995) suggested mentally flipped and rotated graph, so that the Observed Cumulative Probability is on the Y-axis and the Expected Cumulative Probability is on the X-axis. In doing so, it was observed that the points form a bulge in the center of the line (bulging down) of the mentally rotated chart. With this, Mosteller's (1977) "bulging rule" was consulted for the appropriate transformation function on the first predictor.



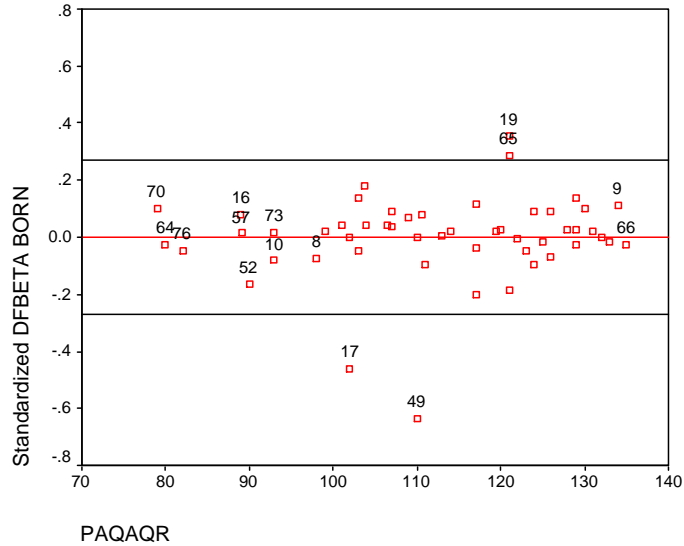
**Figure 18.** Normal P-P Plot of Regression SRESID for predicted ATTIT

Figures 19 and 20 display whether or not any outlying cases hold a statistically significant amount of influence on the regression solution for ATTIT onto AQR and how those, respective, influences might affect the solution. In Figure 19, case 17, 49, and 65 are quite distanced from the majority of the predicted value distribution, possibly signifying that these cases do, in fact, hold an undue amount of influence on the regression solution for ATTIT onto AQR, as per Pedazur (1997).





**Figure 19.** Cook's D vs. AQR



**Figure 20.** Scatterplot of SDFBeta vs. AQR

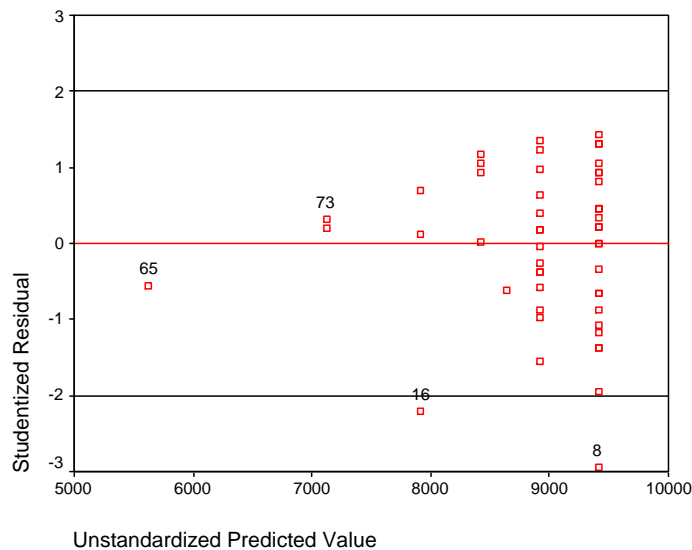
Turning to Figure 20, cases 19 and 65 land well above the upper 2 SE line, + .27, as per Pedazur's (1997) "cutoff" suggestion. An interpretation of this may be that these cases, by their mere presence in the calculations, inflate the regression coefficients for the solution of ATTIT onto AQR. Similarly, cases 17 and 49 occur below the lower -2SE line and may lower our regression coefficients. In creating a final model, removing these cases from the calculations, so as to obtain a "best" estimate of our coefficients, was considered.

Next, the regression diagnostics for LIKELI onto AQR, PFA, and PRPES are discussed. Table 14 summarized a simple regression predicting LIKELI from age and BORN.

Table 14.  
 Summary of a one "block" simple regression predicting Likelihood to Engage a Mentor using demographic variables for the purpose of regression diagnostics (n = 52).

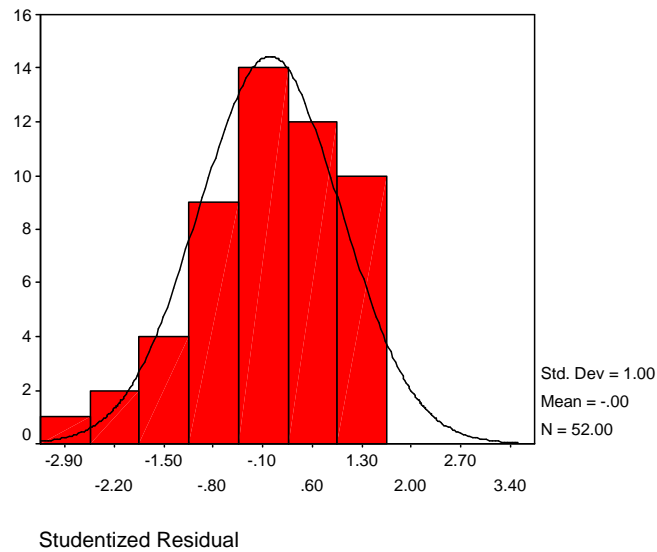
Outcome: Likelihood (squared)										
Predictor:	$R^2$	Adj. $R^2$	$R^2\Delta$	F	Sig. F $\Delta$	b	SE b	$\beta$	t	Sig. t
Step 1	.157	.123	.157	4.568	.015					
Age						-2293.3	1040.34	-.290	-2.20	.032
Born						498.50	264.49	.248	1.88	.065

Figure 21 is a scatterplot of the unstandardized predicted values of Likelihood against its studentized residuals. A restricted distribution of the error terms was observed; the terms assume a slight "fan" shape. This might signify the presence of an autocorrelation, perhaps due to another variable. This was tested by referencing the obtained Durbin Watson Statistic for this regression model,  $d = 2.09$ . Having obtained a  $d$  that is (barely) less than  $d_L$ , as noted above, the Null hypothesis is accepted, meaning that there does not appear to be autocorrelation among the error terms for the "block" of demographic variables.



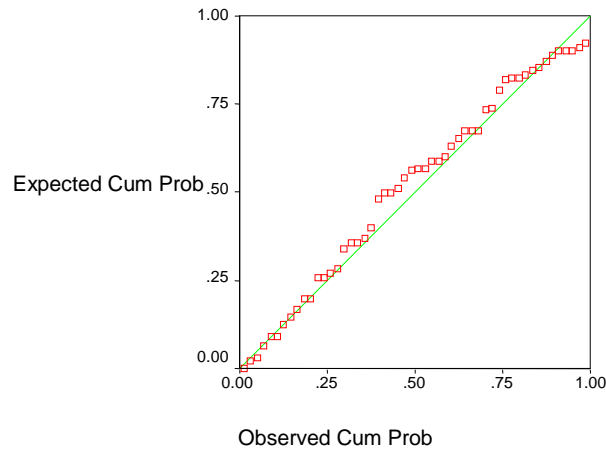
**Figure 21.** Scatterplot of predicted LIKELI

Figure 22 is a histogram of the studentized residuals for Attitude values. Here we see a relatively skewed distribution of the residuals; thus, it can be said that the unconditional distribution of the residuals may not be normal, or homoscedasticity has not been achieved. Thus, a transformation was considered.



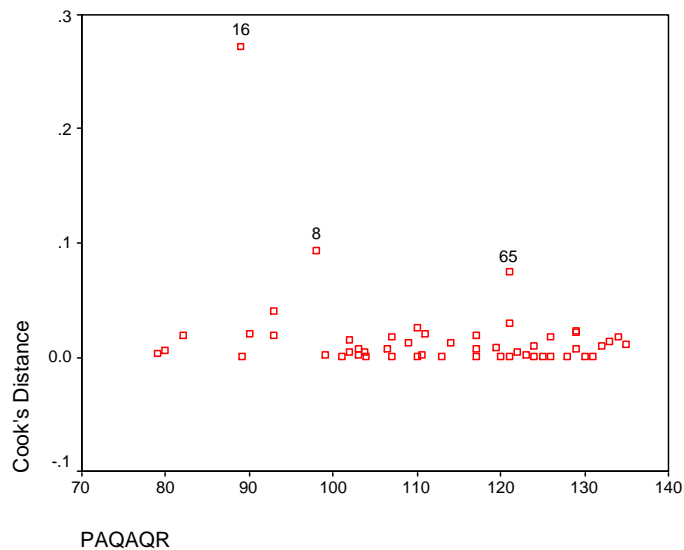
**Figure 22.** Histogram of SRESID for LIKELI

Figure 23 is a normal probability plot of the studentized residuals for the predicted values of Likelihood. As with Attitude, Mosteller's (1977) "bulging rule" was consulted for the appropriate transformation function on the first predictor.



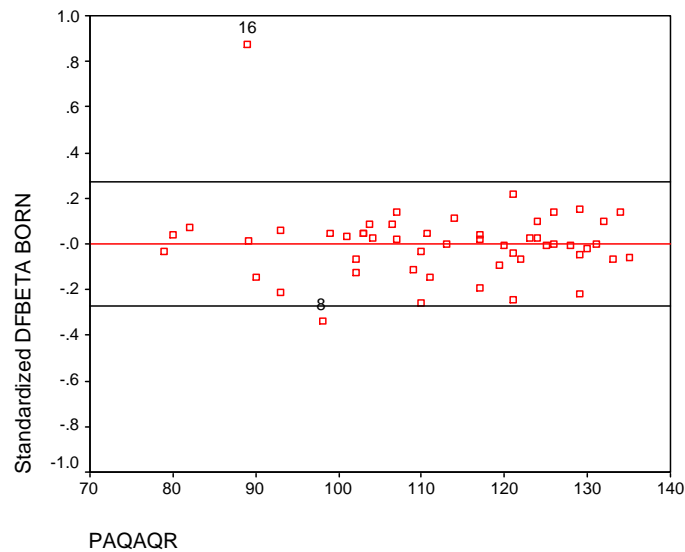
**FIGURE 23.** Normal P-P Plot of Regression SRESID for predicted LIKELI

Figures 24 and 25 display whether or not any outlying cases hold a statistically significant amount of influence on the regression solution for LIKELI onto AQR and how those, respective, influences might affect the solution. In Figure 25, case 16 is quite distanced from the majority of the predicted value distribution, possibly signifying that this case does, in fact, hold an undue amount of influence on the regression solution for LIKELI onto AQR, as per Pedazur (1997).



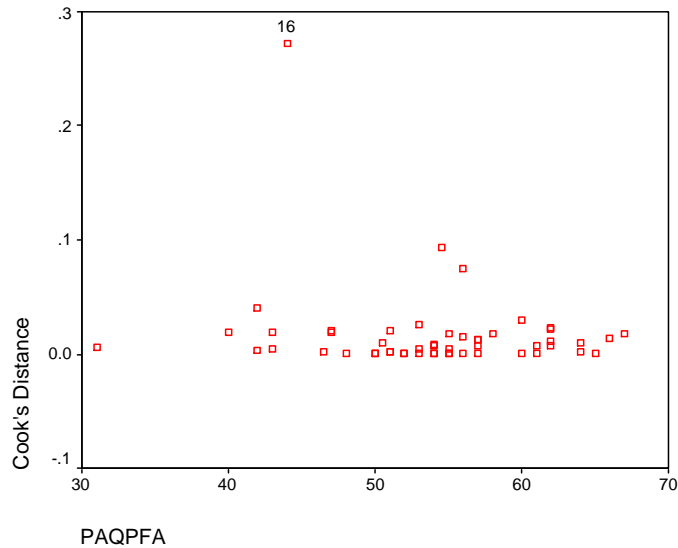
**Figure 24.** Cook's D vs. AQR

Turning to Figure 26, case 16 lands well above the upper 2 SE line, + .27, as per Pedazur's (1997) "cutoff" suggestion. An interpretation of this may be that this case, by its mere presence in the calculations, inflates the regression coefficients for the solution of LIKELI onto AQR. Similarly, case 8 occurs below the lower -2SE line and may lower the regression coefficients. In creating a final model, removing these cases from the calculations, so as to obtain a "best" estimate of our coefficients, was considered.



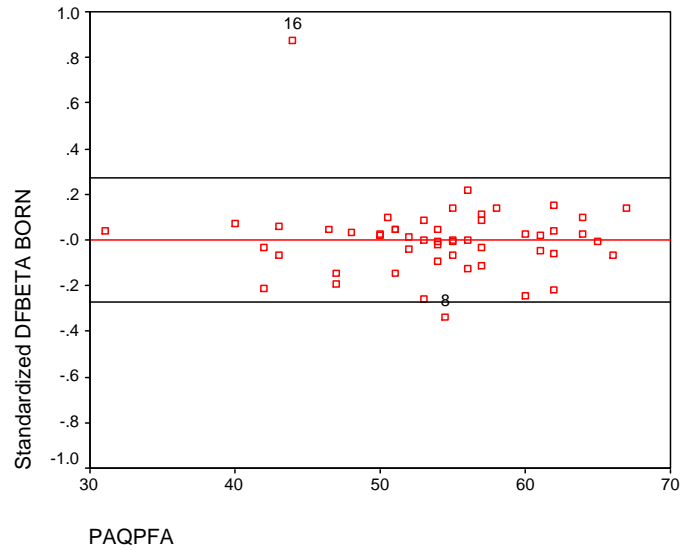
**Figure 25.** Scatterplot of SDFBeta vs. AQR

The following figures display regression diagnostic data regarding the regression analyses of LIKELI onto PFA and PRPES, respectively. In Figure 26, case 16, as was the observation with AQR, is quite distanced from the majority of the predicted value distribution, possibly signifying that this case does, in fact, hold an undue amount of influence on the regression solution for LIKELI onto AQR, as per Pedazur (1997).



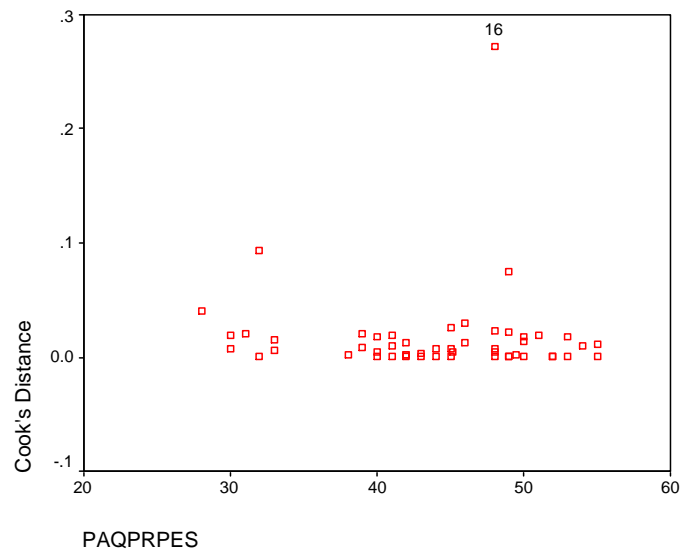
**Figure 26.** Cook's D vs. PFA

Turning to Figure 27, again, case 16 lands well above the upper 2 SE line, + .27, as per Pedazur's (1997) "cutoff" suggestion. An interpretation of this may be that this case, by its mere presence in the calculations, inflates the regression coefficients for the solution of LIKELI onto PFA. Similarly, case 8 occurs below the lower -2SE line and may lower the regression coefficients.



**Figure 27.** SDFBeta vs. PFA

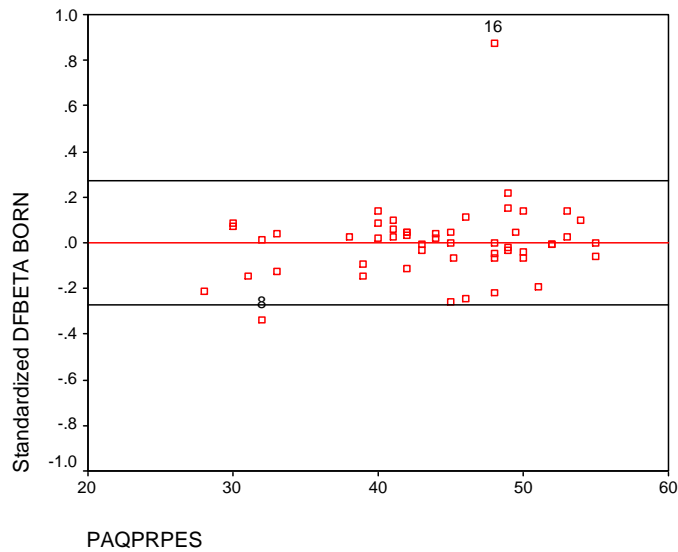
Figure 28, again, revealed that case 16 is quite distanced from the majority of the predicted value distribution, possibly signifying that this case does, in fact, hold an undue amount of influence on the regression solution for LIKELI onto PRPES.



**Figure 28.** Cook's D vs. PRPES



Turning to Figure 29, again, case 16 lands well above the upper 2 SE line, + .27, as per Pedazur's (1997) "cutoff" suggestion. An interpretation of this may be that this case, by its mere presence in the calculations, inflates the regression coefficients for the solution of LIKELI onto PFA. Similarly, case 8 occurs below the lower -2SE line and may lower the regression coefficients.



**Figure 29.** SDFBeta vs. PRPES

Table 15 allows for a commentary on the potential collinearity of the predictors. Collinearity occurs when there is a high amount of correlation among the predictors; this causes problems for predictive models by inflating the standard error. The method for interpreting this phenomenon is through an examination of the Tolerance and VIF statistics. The Tolerance statistic describes the amount of unique variance each new predictor introduces to the equation, whereas the VIF (Variance Inflation Factor) addresses the degree to which our standard error is increased due to predictor correlation.

Table 15.

*Collinearity statistics for three hierarchical regressions of Likelihood to Engage a Mentor (Models 1-3) and Attitude Toward Seeking a Mentor (Model 4) using Parental Attachment Subscales, after partialling out age and Born (n=52).*

	Statistic:	
	Tolerance	VIF
<u>Model 1: (sq) LIKELI</u>		
1. Age	.992	1.01
4. Born	.991	1.01
5. (sq) AQR	.996	1.00
<u>Model 2: (sq) LIKELI</u>		
1. Age	.994	1.01
4. Born	.992	1.01
5. (sq) PFA	.998	1.00
<u>Model 3: (sq) LIKELI</u>		
1. Age	.993	1.00
4. Born	.956	1.04
5. PPRES	.961	1.04
<u>Model 4: ATTIT</u>		
1. Age	.992	1.01
4. Born	.991	1.01
5. (sq) AQR	.996	1.00

Although some statistically significant correlations among the predictors (see Table 6) for the subsample of youths with mentors were observed, in interpreting the Tolerance and VIF statistics in Table 15 the respective Tolerance levels remain relatively high as the final predictors for both the LIKELI analyses (i.e., AQR: .996; PFA: .998; PRPES: .961) and the ATTIT analyses (i.e., AQR: .996) are approached. Also, there are no dramatic increases, or decreases, in the VIF as each predictor is entered. Thus, relatively good models, in terms of collinearity, seem to have been specified.

Tables 16 through 19 are of the collinearity diagnostics for the four regression analyses. Here we see further evidence that the models specified are "BEST," insofar as unique variance proportions are associated with each, respective, dimension of the models tested.

Table 16.

*Collinearity diagnostics for regression model testing LIKELI and AQR (squared) (n=52).*

	$\lambda_i$	Cond. Index	Variance Proportions			
			1	2	3	4
<u>Dimensions:</u>						
1.	2.94	1.00	.00	.01	.01	.01
2.	.926	1.78	.00	.97	.00	.00
3.	.110	5.16	.02	.01	.78	.17
4.	2.57E-02	10.69	.98	.01	.20	.82

Table 17.

*Collinearity diagnostics for regression model testing LIKELI and PFA (squared) (n=52).*

	$\lambda_i$	Cond. Index	Variance Proportions			
			1	2	3	4
<u>Dimensions:</u>						
1.	2.94	1.00	.01	.01	.01	.01
2.	.925	1.78	.00	.97	.00	.00
3.	.103	5.34	.03	.01	.85	.17
4.	2.82E-02	10.23	.97	.00	.14	.82

Table 18.

*Collinearity diagnostics for regression model testing LIKELI and PRPES (n=52).*

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	$\lambda_i$	Cond. Index	Variance Proportions			
			1	2	3	4
<u>Dimensions:</u>						
1.	2.96	1.00	.00	.01	.01	.02
2.	.923	1.79	.00	.97	.00	.00
3.	.106	5.27	.02	.01	.81	.06
4.	1.05E-02	16.78	.98	.00	.17	.94

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Table 19.

*Collinearity diagnostics for regression model testing ATTIT and AQR (squared) (n=52).*

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	$\lambda_i$	Cond. Index	Variance Proportions			
			1	2	3	4
<u>Dimensions:</u>						
1.	2.94	1.00	.00	.01	.01	.01
2.	.926	1.78	.00	.97	.00	.00
3.	.110	5.16	.02	.01	.78	.17
4.	2.57E-02	10.69	.98	.01	.20	.82

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