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**HELP-SEEKING INTENTIONS IN ADOLESCENTS: LINKS TO
ATTACHMENT, DISTRESS, AND COPING**

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Abstract

This study used path analysis to examine the mediational role of coping and distress in the relation between attachment (anxiety and avoidance) and help-seeking intentions. Coping was measured through five distinct sets of coping behaviors, including primary control coping, secondary control coping, involuntary engaged coping, voluntary disengaged coping, and involuntary disengaged coping. The participants were 342 high school age adolescents from six schools in Central and Western New York. Results indicated that the relation between attachment anxiety and help seeking was mediated through the combined path of involuntary disengaged coping (emotional numbing and inaction) then distress, and additionally through the single mediator of distress alone. Attachment avoidance was not directly related to help-seeking intentions, but was indirectly related through involuntary engaged coping and distress. Both attachment anxiety and attachment avoidance were positively related to distress. Distress was also positively associated with intentions to seek counseling. Additionally, attachment anxiety and attachment avoidance were both positively related to maladaptive forms of coping. Finally, attachment avoidance, attachment anxiety, primary control coping, secondary control coping, involuntary engaged coping, voluntary disengaged coping, involuntary disengaged coping and distress accounted for approximately 14% of the variance in intentions to seek counseling.

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Chapter 1

Help-Seeking Intentions in Adolescents: Links to

Attachment, Distress, and Coping

This study investigated a theoretical model of the relations between attachment, distress, coping and professional help-seeking. Prior research has shown that different patterns of attachment are related to varying levels of distress and different levels of positive and negative coping (Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000; Cooper, Shaver, & Collins, 1998; Howard & Medway, 2004). In turn these levels of attachment, distress, and coping are related to different levels of help-seeking behavior in adolescents (Howard & Medway, 2004; Seiffge-Krenke & Beyers, 2005). In this study, path analysis was used to examine this model, in particular whether differing ways of coping and varying levels of distress mediate the relation between attachment and professional help-seeking.

Adolescents face a multitude of stressors in their daily lives, ranging from major life events such as the death of a family member, moving away from parents (Compas, Davis, Forsythe, & Wagner, 1987) and daily hassles such as babysitting, homework, studying, peer pressure and car trouble (Compas et al., 1987; Moulds, 2003). Many individual studies investigated the domains in which adolescents face stressors, for example, family financial strain (Blustein, 1997), parental divorce (Burns & Dunlop, 1998; Moulds, 2003; Sandler, Tein, Mehta, Wolchik, & Ayers, 2000), peer pressure for risky behavior (Lerner & Galambos, 1998), developing independence (Burnett & Fanshawe, 1997), social adjustment (DuBois, Bull, Sherman, & Roberts., 1998), sexual readiness (Lerner & Galambos, 1998), academic concerns and dealing with teachers

(Burnett & Fanshawe, 1997), bullying in school (Natvig, Albrektsen, & Qvarnstrom, 2001), teen pregnancy (Lerner & Galambos, 1998), sexuality concerns (Timlin-Scalera, Ponterotto, Blumberg, & Jackson, 2003). Further, Elkind (1984) reported that stress-related struggles of teens have increased by 300% in the previous 15 years.

Moulds (2003) investigated stress in high school age adolescents and stated that schools are in a particularly good position to intervene with students, especially to assist in coping with daily stressors and hassles. These interventions early on may even be productive in heading off future stress and coping related problems (Moulds, 2003). One avenue that is available to many school age adolescents is school mental health services, such as school counselors, school social workers, and school psychologists.

Professional counseling can be very important to adolescent mental health and well being. Unfortunately, many adolescents do not take advantage of available counseling resources (Boldero & Fallon, 1995). It is important to understand the factors that may contribute to or detract from adolescents' intentions to seek professional help. When these factors are understood, counseling professionals can better intervene and provide services for their students. Researchers have not yet explained why adolescents do or do not readily use counseling. Previous researchers, however, have investigated some factors in adults that may influence help-seeking, such as level of attachment (Shaffer, Vogel, & Wei, 2006), public stigma (Vogel, Wade, & Hackler, 2007) feelings of distress (Cepeda-Benito & Short, 1998; Cramer, 1999; Vogel & Wei, 2005), and coping (Kemp & Neimeyer, 1999). Not only is it important to understand that these factors are related to help seeking, but it is important to understand the specific paths through which attachment and help-seeking may be linked. Building on previous

research, Vogel and Wei found that that the associations between attachment and intentions to seek counseling were mediated by perceptions of social support and levels of distress. In the present study, the roles of psychological distress and coping as mediators of the relations between attachment and intentions to seek help if problems occur will be examined.

To understand stressors faced by adolescents, it is necessary to define psychological distress. In their seminal work on stress and coping, Lazarus and Folkman (1984), described psychological stress as the relationship between the person and the environment, in which the individual believes that his or her resources or skills will be overwhelmed and well-being will be interrupted. As established earlier, adolescents face a number of stressors (e.g., Clarke, 2006); adolescents have to find ways to weather this distress.

Many adolescents use help-seeking as a means of coping with this multitude of obstacles. Help-seeking may be informal or formal. Informal relationships may include speaking with friends, parents, teachers, or other non-professional adults. Formal help-seeking is when adolescents speak with physicians, psychologists, social workers, or counselors.

Of these two types of help-seeking processes, adolescents gravitate towards informal relationships. Boldero and Fallon (1995) investigated help-seeking in adolescents and found that adolescents use teachers and professionals as a last resort. Instead, adolescents were more likely to seek out the help of peers and parents. While it is important for adolescents to seek help when experiencing distress, these informal sources, especially peers and romantic partners, may not be able to fully meet adolescent

mental health needs. Many peers may not have the skills needed to help and may even exacerbate the problem (Rickwood, Deane, Wilson, & Ciarrochi, 2005). One reason that peers may exacerbate the problem is that many adolescents with emotional concerns have peers who have their own emotional concerns and difficulties (Sabornie & Kauffman, 1985).

Professional help-seeking is a good resource for an adolescent overcoming distress and difficulties because a professional can focus on the adolescent's needs without the problems created by a peer relationship. Timlin-Scalera et al. (2003) found that high school students were apt to go to counseling if they thought their problem was serious enough. In their study, high school males reported they were most likely to seek professional counseling if they were experiencing concerns about their sexual orientation. In one of the few studies that investigated help-seeking and school counselors, Schonert-Reichl, Offer, and Howard (1995) found that adolescents were more willing to seek help from the school counselor if they were experiencing symptoms of anxiety and depression.

When adolescents fail to seek professional help, a variety of factors may be present. Adolescents may avoid seeking professional help because they view professional help as involving risk. Seeking help takes trust (West & Kayser, 1991) and a willingness to self-disclose distressful information (Vogel & Wester, 2003). Cepeda-Benito and Short (1998) and Cramer (1999) found that distress and help-seeking are positively related. Using an adolescent sample, Shirk, Gudmundsen, and Burwell (2005) found that as adolescents experienced higher levels of school or peer related stress they were more likely to seek support.

However, other researchers have argued that distress alone does not predict help-seeking; the process is an interaction between distress and the anticipated outcome of counseling (Shaffer et al., 2006; Vogel & Wester, 2003; Vogel, Wester, Wei, & Boysen, 2005). Many other factors also contribute to a willingness to seek counseling, such as past counseling experience, anticipated risk and benefit (Vogel & Wester, 2003; Vogel et al., 2005), and perceived public stigma (Vogel et al., 2007). In a qualitative study, West and Kayser (1991) interviewed students about seeking professional help in the schools. Adolescents gave reasons such as “It is difficult for me to talk to the counselor,” “I don’t trust counselors,” “Counselor was too busy or not in,” and “Counselors prefer students with good grades.” All of these factors contribute to whether or not adolescents will seek help from a counselor as opposed to informal help. Further, as discussed in following sections, whether an adolescent seeks help, and what type of help he or she seeks, may be related to his or her level of attachment.

A central focus of this study is the role of attachment in high school students’ intentions to use formal help-seeking, if problems occur. Although no studies have examined relations between attachment and formal help-seeking in high school students, a number of studies have examined links between attachment and help-seeking in college students and adults (Shaffer et al., 2006; Vogel & Wei, 2005). More specifically, adult attachment is conceptualized using two dimensions: anxiety and avoidance. Those high in attachment anxiety tend to be preoccupied with relationships and those high in attachment avoidance tend to be uncomfortable in close relationships (Mikulincer & Shaver, 2003; Shaver & Mikulincer, 2005). Those low in both attachment anxiety and attachment avoidance are thought to be comfortable in close relationships. Previous

researchers studying help-seeking in college students have found that individuals with different levels of attachment anxiety and attachment avoidance reported a varying willingness to seek professional help. Researchers found those individuals high in attachment anxiety are willing to seek professional help (Seiffge-Krenke & Beyers, 2005; Vogel & Wei, 2005). Conversely, Vogel and Wei found that those high in attachment avoidance are unwilling to seek help from professionals. Finally, those individuals who scored both low in attachment avoidance and attachment anxiety were likely and willing to seek professional help (Seiffge-Krenke & Beyers, 2005; Vogel & Wei, 2005). Attachment has also been found to be related to distress (Cooper et al., 1998; Vogel & Wei, 2005), coping (Merlo & Lakey, 2007), and emotional awareness (Woodhouse & Gelso, 2008). Although attachment and help-seeking in high school students was the central focus of this investigation, a test of the potential mediating role of coping and distress will be an important addition to the literature on adolescent attachment and help-seeking.

Chapter 2

Literature Review

The focus of this study was to test a conceptual model of the links between attachment, distress, coping, and professional help-seeking. This chapter reviews and synthesizes the theoretical and empirical literature on attachment and help-seeking while providing support for the role of distress and coping. First, the literature on attachment is reviewed. Attachment is the focal point of this study and this section on attachment includes a review of research on the history of attachment, attachment working models, attachment in infants and children, adolescent attachment and peer relationships, models of adult attachment, the theory of romantic attachment and finally, hyperactivating and deactivating strategies of emotion regulation associated with insecurity of attachment. Second, the literature on attachment and distress is reviewed. The third section addresses the development of contemporary perspectives on coping. Specifically, within this section on coping, the relation between attachment and varying ways of coping are discussed. The fourth section focuses on a review of the literature concerning professional help-seeking and the relation between attachment and professional help-seeking. The final section of this chapter includes a detailed description of all hypothesis and brief reviews of supporting literature for each hypothesis.

History of Attachment

Bowlby (1988) theorized that humans have a biological tendency to seek mental and physical contact from caregivers. He believed that an infant's need to have close proximity to the parent is genetic and evolutionarily selected because maintenance of proximity leads to protection of the baby from danger and thus, enhances the child's

survival. Thus, when infants do not obtain close proximity to the primary caregiver, they tend to experience a biologically determined anxiety.

According to Bowlby (1969), attachment is theorized to last through the life span. Bowlby wrote "...attachment behavior is held to characterize human beings from the cradle to the grave" (Bowlby, 1979; p.129, as cited in Ainsworth, 1991). While the attachment process is believed to be stable throughout life, it can be changed or altered through experiences. A person's attachment style is subject to change based upon positive or negative interactions with important others or environmental life circumstances. Children, who are secure, make strong emotional bonds with caregivers and use the caregiver as a secure base. Then, as children become adolescents, the emphasis on parents as attachment figures likely begins to shift focus toward romantic pair bonds as a source of a secure base. As adolescents get older, they can stay away from their homes for periods of time. However, even away from home a secure base is always beneficial (Allen & Land, 1999; Weiss, 1991).

Working Models and Attachment Through the Lifespan

According to Bowlby (1988; Bretherton & Munholland, 1999), children tend to develop working models of attachment figures, as either reliable and dependable (secure) models or undependable and unreliable (insecure) models of attachment figures. When experiencing dependable caregivers, children usually develop secure models in which others are perceived as trustworthy to provide needed care and the self is viewed as worthy of receiving care. If caregivers are unreliable, children often develop insecure models in which others are perceived as untrustworthy to provide needed care and the self is viewed as unworthy of receiving care. Main, Kaplan, and Cassidy, (1985) provided

empirical support for the development of working models in children (birth to age 5). As children grow into adults their working models of attachment remain active. According to a review of empirical literature by Bretherton and Munholland, attachment patterns in adults are governed by internal working models and adults working models are constructed from repeated interactions with their primary attachment figures.

Working models are adaptable early in life, but after repeated experiences throughout childhood and adulthood, working models may become solidified. According to a longitudinal study on attachment and close relationships through the lifespan, Simpson, Collins, Tran, and Haydon (2007) found that attachment at 12 months of age was related to social competence in elementary school, which in turn was related to relationships with close friends at age 16, which was then related to relationships when the individual was 20 to 23 years old. While previous research has found that attachment schemas are consistent it has also shown that attachment style can be altered under certain circumstances. Davila, Burge, and Hammen (1997) found through an empirical investigation that schemas can change through stressful situations. Lopez and Brennan, (2000) and Krause and Haverkamp (1996) theorized that attachment could be modified through therapy. Through a review of the literature, Collins, Guichard, Ford, and Feeney (2004) theorized that schemata seem to operate unconsciously, which makes them resistant to change, but they can be changed. According to Lopez's (1995) review of the literature, these schemas are consistent throughout life, but it is also important to acknowledge that these schemas also evoke certain environmental reactions that may reinforce these schemas.

Attachment in Children and Babies

It is helpful to understand attachment in children and how it relates to adult attachment, especially the theories of attachment through the lifespan and attachment in romantic relationships. Initial conceptions of romantic attachment were based on Ainsworth's and her colleagues seminal work on attachment in infants, thus Ainsworth's terms continue to be important for grasping the models of adult attachment. In infants, these patterns of attachment are built on a history between the baby and the caregiver. Attachment is conceptualized as an interaction between a specific parent and child, not as a characteristic of the child (Main et al., 1985).

Ainsworth, Blehar, Waters, and Wall (1978) found that babies can be placed into one of three categories depending on their attachment behavior. The categories are: Group A insecure-avoidant, Group B securely attached and Group C insecure-ambivalent. Babies are placed into categories by a laboratory procedure called the Strange Situation. In the Strange Situation, parent and infant are introduced to an experimental room. The infant explores the experimental room with the parent in the room. A stranger enters the room and the parent leaves inconspicuously. The parent then re-enters the room. The infant's behavior and interaction with the parent upon the parent and infant reunion is the basis for classifying the infant.

Group A, insecure-avoidant infants had no tendency to seek proximity or contact with the mother in the reunion. Infants in this group also did not tend to make eye contact with the caregiver, but instead kept attention on the toys. Caregivers, in this group, were almost averse to physical contact, expressed little emotion, and tended not to meet the baby's bids for comfort and security on a consistent basis.

Group B, securely attached infants were often easily soothed during reunion if distressed. These babies actively went to the caregiver upon her return and explored the room when mom was present. Security develops for this group because the caregiver meets the baby's needs.

Group C, insecure-ambivalent infants were inclined to actively try to make contact with mother, but when contact is made, the baby had the tendency to give the impression of wanting to move away. Yet, when the mother tries to put the infant down; the infant often cries and protests. When the baby reunites with the mother, the baby wants contact with the mother but is not soothed by that contact. The babies have not experienced consistent availability when their environment was threatening. The caregiver may have ignored the baby's bids for comfort, but in an inconsistent manner. At times, the caregiver met the baby's needs and at other times the caregiver did not meet these needs (Ainsworth, et al, 1978; Weinfield, Sroufe, Egeland, & Carlson, 1999).

Recently a fourth category was identified; this category is disorganized or disoriented attachment (Main & Solomon, 1990). This category is a mixture of avoidant and ambivalent behaviors and can also include bizarre disorganized behaviors. The babies, in this category, had a tendency to display contradictory patterns of behavior, such as intense attachment, followed by avoidance, freezing or dazed looks, or displays of distress, followed by moving away from the mother. These behaviors are hard to find because they are often fleeting and out of context (Lyons-Ruth & Jacobvitz, 1999). Parental behavior, in this category, is usually frightening or frightened. This parenting is a paradox to the baby because the source of security is also a source of disorganizing fear.

Adolescent Attachment and Peer Relationships

Consistent with Bowlby's assertion that attachment is a lifelong process, researchers began to investigate attachment in adolescents. While children, almost all individuals have parents or caregivers as attachment figures, but by late adolescence, peers and romantic partners also become attachment figures (Buhrmester, 1992). As will be discussed later in this chapter, not all peers or romantic partners become attachment figures; however, some very close individuals may become attachment figures (Weiss, 1994).

In a study in which 99 adolescents were asked to identify their primary attachment figures (Freeman & Brown, 2001), on average, parents and peers were equally likely to be rated as attachment figures. Secure adolescents reported their mothers as attachment figures over best friends, romantic partners, and fathers. However, for secure adolescents with romantic partners, the adolescents did not rate their mothers as high on attachment support as adolescents without romantic partners. Among insecure adolescents, romantic partners were considered the primary source of attachment. These results suggest that it appears that though parents remain important attachment figures for adolescents, adolescents begin to turn to romantic partners as attachment figures.

As individuals move from childhood to adolescence, relationships tend to move from hierarchical, such as parent to child, to peer to peer relationships that are egalitarian, with each member of the relationship providing support and receiving care (Allen & Land, 1999). Hazan and Shaver (1994) believed that through attachment behaviors, adolescents often use peers for a safe haven (turn to for comfort, support, reassurance), proximity and maintenance (staying near and resisting separation). However, these

adolescents still tend to use parents for a secure base, especially to engage in nonattachment behavior. Attachment security is generally stable through adolescence, though as discussed earlier in this chapter, is not unchangeable (Allen, McElhany, Kuperminc, & Jodl, 2004).

Attachment in Adults

Theory of Romantic Attachment

Building upon previous research on infants and caregivers, attachment was investigated as part of close relationships, especially romantic ones (Hazan & Shaver, 1987; 1994). Hazan and Shaver found that romantic relationships may take on the qualities of attachment relationships. Ainsworth believed that many relationships, like pair-bonds and some close friendships may form affectional bonds and attachment relationships (Ainsworth, 1989; 1991); when the person takes on a role that cannot be taken on by another person. As touched upon previously, not all close relationships are attachment relationships; only some relationships may become strong enough to be classified as attachment relationships (Weiss, 1994). To be considered an attachment relationship, the relationship must meet three criteria: proximity seeking, secure base, and separation protest. Proximity seeking refers to an individual's attempts to remain in proximity of the attachment figure, particularly in times of stress. Secure base indicates the attachment figure fosters security and exploration. Separation protest denotes the individual does not want to be separated from the attachment figure and will protest the separation.

According to Weiss (1994), there are a number of similarities between attachment relationships in childhood and adulthood. First, a bond develops with the attachment

figure based on positive and negative experiences in the relationship. Also, as in childhood, the individual experiences feelings of separation distress and increased proximity seeking under stress. Finally, the loss of an attachment figure in adulthood creates the same grief as the loss of a parental attachment figure.

As stated earlier, there are also differences between attachment relationships in childhood and adulthood. Differences between attachment in childhood and adulthood include the fact that in adulthood an individual usually relinquishes the parents as attachment figures. As children grow into adolescence and then adulthood they focus on forming romantic pair-bonds as attachment relationships. Unlike parent and child relationships, in which differences in power exist, adult pair bonds are symmetrical relationships (Weiss, 1994).

Models of Adult Attachment

Current romantic self report measures use two dimensions to characterize adult romantic attachment. The two dimensions include anxiety (preoccupation with relationships) and avoidance (discomfort with closeness). It can be helpful to understand the history of the development of current dimensional conceptualizations of attachment because much earlier research relied on categorical conceptualizations of attachment. In order to further discuss previous work based on attachment theory, it may be necessary to understand the terms frequently seen in earlier research and how they are related to the current dimensional approach.

Hazan and Shaver (1987) developed the first categorical model for their seminal study on attachment and romantic relationships. They identified three categories of attachment based on the categories Ainsworth et al. (1978) identified in infants: secure,

avoidant, and anxious. Secure individuals are easy to get close to and are comfortable in close relationships. Avoidant individuals are uncomfortable being close and in close relationships. Anxious individuals worry that their partners do not like them.

Bartholomew and Horowitz (1991) created a four category model consisting of secure, preoccupied, dismissing-avoidant, and fearful-avoidant categories. This model is similar to the Hazan and Shaver's (1987) model, but it divided the avoidant category into two subtypes. Secure individuals are comfortable with intimacy and autonomy. Preoccupied individuals have an emphasis on relationships. Dismissing-Avoidant individuals are dismissing of intimacy and counter-dependent. Fearful-Avoidant individuals are fearful of intimacy and socially avoidant, yet long for connection with others, whom they fear will be rejecting.

A two-dimensional model was created most recently by Brennan, Clark, and Shaver (1998). This 2-Dimensional model consists of an avoidance scale and an anxiety scale. Those who score high on avoidance will be dismissing of intimacy and a rejection of close relationships. Those high in anxiety will be preoccupied with relationships. Recently, Shaver and Mikulincer (2005) conceptualized adult romantic attachment as measured by these two dimensions as a personality characteristic or a general orientation toward all close relationships. Thus, these dimensions are not only relevant for romantic relationships but with any relationship or situation in which that attachment system is activated. The validity of this theory has been shown through numerous studies involving non-romantic relationships in which romantic attachment was found to be related to representations of self and others, psychological defenses, emotion regulation, and interpersonal behaviors (see Mikulincer & Shaver, 2003; Shaver & Mikulincer, 2002).

The Brennan et al. (1998) two-dimensional model was created through a factor analysis of all available measures of adult romantic attachment, which included over 323 items. This analysis resulted in two scales: anxiety and avoidance (18 questions each). Though previous models used a categorical approach as did Ainsworth et al. (1978) in their seminal work with infants, Fraley and Waller (1998) found evidence that individual differences in adult attachment are distributed quantitatively not categorically. Thus, Fraley and Waller's findings suggest it is more valid to use a dimensional approach than a categorical approach. In fact, the two-dimensional model of anxiety and avoidance was also initially identified within the discriminant analysis conducted by Ainsworth et al., but Ainsworth decided to use categorical descriptions (Brennan et al., 1998). One benefit of using a dimensional approach is that researchers have more power to discern effects (Fraley & Waller, 1998).

The newer two-dimensional model is related to all previous categorical models of attachment. If factor analyzed using three factors, this model is similar to the three categories of Hazan and Shaver (Brennan et al., 1998). If the ECR is factor analyzed to give four factors, the results are similar to Bartholomew and Horowitz (1991). Specifically, the dismissing-avoidant category described by Bartholomew and Horowitz would be analogous to scoring high on the dimension of avoidance, while also scoring low on the dimension of anxiety. The fearful-avoidant category is synonymous with scoring high on the dimensions of avoidance and anxiety. The anxious category is comparable to scoring high on anxiety dimension and low on avoidance dimension. The secure category is parallel to scoring low on the avoidance and anxiety dimensional scales. In the present review of the literature, some studies are reviewed that use

categorical language, whereas others use dimensional language. In the present study, the dimensional model is used for simplicity and the older categorical language used in previous research is translated into dimensional terms following the example provided by Mikulincer, Shaver, & Pereg (2003).

Hyperactivating and Deactivating Strategies

Mikulincer et al. (2003) theorized that attachment anxiety begins with inconsistent care from the attachment figure, stifled exploration, and a caregiver who is intrusive and overprotective. For those who are high in attachment anxiety, seeking the attachment figure is not rewarding and does not lessen fear and anxiety. Instead, those high in attachment anxiety spend a great deal of time worrying that the attachment figure will not be around.

According to Fuendeling (1998) and the theoretical model of Mikulincer et al. (2003), attachment anxiety may lead to hyperactivating strategies. A hyperactivating strategy is an intense focus on and hyper-vigilance about an attachment figure. Hyperactivating strategies include a concern about and activity aimed at attaining a sense, either perceived or actual, of security from an attachment figure. This strategy creates an overdependence on relationships with the attachment figure. The process starts with the unavailability of an attachment figure.

According to the model by Mikulincer et al., (2003), attachment avoidance begins with consistent rejection when trying to get close to the caregiver. This leads to an inability to express needs and an overemphasis on self reliance. Seeking an attachment figure is not rewarding, but is punishing. Individuals with attachment avoidance believe

that the attachment figure is not available, so there is no use in trying to get close (proximity seeking).

This constant rejection may lead to deactivating strategies (Fuendeling, 1998; Mikulincer et al., 2003). A deactivating strategy is a denial of interpersonal needs and a suppression of attachment related cues. Deactivating strategies exist when an individual actively stops looking for support and tries to handle any distress alone, even if distress is not admitted. Those who are using deactivating strategies tend to avoid proximity, even if contact with others would be useful and would actively avoid stress or threatening events. These individuals rarely acknowledge psychological distress (Collins, 1996)

Psychological Distress and Attachment

Attachment anxiety is positively associated with psychological distress (see Fuendeling, 1998, for a review; Mallinckrodt & Wei, 2005; Vogel & Wei, 2005; Wei, Heppner, & Mallinckrodt, 2003). Individuals high in attachment anxiety tended to focus and ruminate on negative moods (Woodhouse & Gelso, 2008). In a studies with late adolescents, Kobak and Sceery (1988) and Cooper, Albino, Orcutt, and Williams (2004) found that adolescents high on attachment anxiety, were more anxious than their peers and reported more distress. According to previous research, those high in attachment anxiety do not have a nuanced awareness of feelings. Those high in attachment anxiety rated themselves as high in distress and poor in ability to communicate emotions (Mallinckrodt & Wei, 2005).

While the research on anxiety is consistent, the literature on avoidance and psychological distress is mixed. Most research on attachment has found that individuals high in attachment avoidance tend to not experience or report feelings of distress (Lopez,

Mauricio, Gormley, Simko, & Berger, 2001; Lopez, Mitchell, & Gormley, 2002).

Individuals high in avoidance and low in anxiety do not report levels of distress higher than that of secure individuals who are low in both attachment anxiety and avoidance (Lopez, Melendez, Sauer, Berger, & Wyssmann, 1998). However, some research has suggested that those high in attachment avoidance experience distress, but they unconsciously (Fraley & Shaver, 1997) and/or consciously suppress the distress that they feel (Mikulincer & Florian, 1998 for a review of literature). Fraley and Shaver found that those high in attachment avoidance could suppress their attachment related distress by focusing on something else.

Some authors have also argued that advanced statistical methods may be powerful in discerning distress for individuals high in avoidance (Mallinckrodt & Wei, 2005; Wei et al., 2003). For example, Mallinckrodt and Wei used Structural Equation Modeling to control for the correlation between anxiety and avoidance as well as for measurement error in assessing distress in their model. Wei et al. used batteries of assessment instruments such as the Beck Depression Inventory, Adult Attachment Scale, Problem Solving Inventory, Hopelessness Scale, State Trait Anxiety Inventory, and Inventory of Interpersonal Problems. Wei et al. argued that individuals high in avoidance are more likely to report distress on batteries of tests, as compared to single assessments of distress. Both Mallinckrodt and Wei and Wei et al. found a positive relation between avoidance and distress. Further support for the relation between those high in attachment avoidance and distress was found by Mikulincer, Florian, and Tolmacz (1990), who used projective tests to identify distress in individuals high in avoidance. Additionally, other researchers found that if individuals high in avoidance experienced extremely high levels

of stressors, such as living in a war zone, they admitted distress (Mikulincer & Florian, 1998; Mikulincer, Florian, & Weller, 1993).

The mixed results with respect to avoidance suggest that the relation between avoidance and distress is quite complex, unlike the relation between attachment anxiety and distress. These results suggest that those individuals high in attachment avoidance are usually able to deactivate, whether consciously or unconsciously, and keep distress provoking information out of awareness. At times, however, when these individuals' abilities to use deactivating strategies are preempted, distracted, or overwhelmed, they will admit distress.

Coping

This section begins with a history of the development of coping models, before moving on to consider links between attachment and coping. It is helpful to understand the development of coping models because much research has used earlier models. Thus, it is useful to know terms used in previous research in order to understand relations between findings from earlier studies and more current research on coping. More recent work on a theoretically and empirically sound model of coping in adolescents is discussed next (for reviews see Connor-Smith et al, 2000 and Rickwood et al., 2005).

This section ends with a review of the literature on attachment and coping.

Coping can be defined as: “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141, as cited in Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). Initially, coping was thought of in terms of two mutually exclusive types: problem-focused and emotion-

focused (Folkman & Lazarus, 1980). Problem-focused coping entails problem solving or doing something to alter the stress. Emotion-focused coping is aimed at reducing or managing the emotional distress that is triggered by the situation. Research revealed, however, that in almost all coping situations both problem- and emotion-focused coping are used (Folkman & Lazarus, 1980). Lazarus and Folkman emphasized that coping is not a linear process. Emotion-focused and problem-focused coping may cycle repeatedly in a stressful situation, continually influencing each other. While the two types were useful in describing coping, they needed to be broken down further into subtypes that could reflect different forms of emotion-focused or problem-focused coping. Problem-focused coping, for example, could have consisted of studying for a big test or cheating on the test. Emotion-focused coping can include both acceptance of an illness and avoidance of thinking about the illness. Many researches since Lazarus and Folkman have refined their initial theory, as described below.

Typically, emotion-focused coping was viewed as a passive relinquishment of control over the situation (Rothbaum, Weisz, & Snyder, 1982). Relinquishing control was seen as negative but Rothbaum et al. proposed that appropriate and successful coping could include primary control (problem focused) and secondary control (emotion focused) coping. Primary control coping refers to the individual's attempts to alter the stressful situation. Secondary control coping means that the individual attempts to adapt to the stressful situation. They proposed that under certain stresses or strains it is adaptive and useful to accept the stressful situation and not try to change it. Both primary and secondary means of coping are considered appropriate and the individual keeps control over the stressful situation.

Later, Suls and Fletcher (1986) suggested that coping could also be broken down into approach (directing attention toward the stressor) or avoidance (energy directed away from the stressor). The distinction between approach and avoidance is similar to the terms introduced by Tobin, Holroyd, Reynolds, and Wigal (1989), engaged and disengaged coping.

Another important question that has arisen in coping research entails voluntary and involuntary coping (Eisenberg, Fabes, & Guthrie, 1997). This distinction differentiates between coping that is automatic and coping that is under the control of the individual. At most times, coping includes both voluntary and involuntary aspects (Compas et al., 2001).

Coping Model

Recently, researchers have integrated a variety of coping theories to form a comprehensive theory (Compas et al., 2001; Connor-Smith et al., 2000). This comprehensive theory of coping includes two broad dimensions: (a) voluntary to involuntary coping and (b) engaged to disengaged coping (Compas et al., 2001 for review). Voluntary coping is under someone's control, and an individual makes a conscious decision to cope in a certain way (Compas et al., 1997). Involuntary coping, on the other hand, is an unconscious reaction to a stressful situation. Engaged coping is when a person confronts the stressful situation. Disengaged coping is when the individual tries to avoid and not deal with the stressful situation.

Voluntary engaged coping is divided into primary control and secondary control coping. Primary control coping deals with actively trying to change the problem or control the environment. Strategies of primary control coping consist of problem-solving,

emotion regulation, and emotional expression. Problem-solving consists of actively searching for a solution to the problem and is usually directed toward the source of the stress or of receiving support. Problem-solving may be active or may consist of thinking of ways to correct the stressor. An example of problem solving may be, an adolescent had a fight with his girlfriend; he then goes and talks to her about the argument. Emotional regulation, according to Garnefski, Kraaij, and Spinhoven (2001) and Garnefski and Kraaij (2006) consists of acceptance of stressors, a refocus on planning, specific steps to handle the situation, positive refocusing, and positive reappraisal of the situation, which is giving the stressful event some positive significance, and putting the problem into perspective. Emotional expression (support seeking) can be a component of emotion regulation (Connor-Smith et al., 2000; p. 980). Seeking help or support may consist of talking to someone about the problem.

Secondary control coping consists of accepting circumstances of the problem. It is a voluntary decision that the stressor cannot be actively changed for the moment or indefinitely, so the individual accepts his or her circumstances for the moment. Secondary control coping has been found to be especially useful in research of adolescents with cancer or health concerns; their coping deals with accepting the diagnosis (Morlong & Evered, 2007). Secondary control coping consists of positive thinking, cognitive restructuring, which is trying to focus on what is being learned, acceptance, and distracting to keep one's mind off the problem by doing other things. An example of secondary control coping may be an adolescent who had a fight with his girlfriend, so he goes to the gym to take his mind off of the fight.

Both primary and secondary control coping can be used with one another, maybe even back and forth; it may be the case that the energy saved during secondary control coping is used to be more active in primary control coping (Skinner, Edge, Altman & Sherwood, 2003). Secondary control coping may just be a temporary state, such as going to the gym to relieve stress (secondary control coping) before the individual goes home to study (primary control coping) for finals; whereas, disengaged coping would be going to the gym or out with friends (avoidance, disengaged coping) and then forgetting about finals and never going home to study.

This model also consists of voluntary disengaged coping, involuntary engagement, and involuntary disengagement coping (Connors-Smith et al., 2000). Voluntary disengaged coping consists of strategies such as denial, avoidance, and wishful thinking. Involuntary engaged coping consists of rumination on the problem, such as, an inability to stop thinking about the problem, intrusive thoughts, psychological arousal, such as, stomach aches and heart palpitations, and involuntary actions, such as, not being able to control what one does or says. Involuntary disengaged coping consists of strategies such as inactivity, numbing, and cognitive interference, such as, the mind going blank.

Another important aspect of coping is the distinction between domain specific coping and global coping. Domains in coping research are categories of stressors that are similar, such as coping with relationship difficulties, cancer, heart disease, family concerns, pain, academics, etc. (Ptacek & Pierce, 2003). Global coping is the theory that an individual copes in the same way with most stressors. Global measures of coping are poorly correlated to momentary reports of coping in stressful situations (Ptacek, Smith,

Espe, & Rafferty, 1994; Smith, Leffingwell, & Ptacek, 1999; Schwartz, Neale, Marco, Shiffman & Stone, 1999). Domain specific coping, on the other hand, has been found to be a more valid measure of how an individual copes than global measures of coping because it was found that people consistently cope in specific ways in stressful domains for enduring periods of time (Ptacek & Pierce, 2003).

Sperling (2003) investigated coping domains and found that in domains in which individuals have some control, as in romantic relationships, the coping repertoire used is more diverse. When individuals experience a stressful domain like an illness, they use fewer ways of coping. According to Sperling, it may be that an illness allows for fewer coping alternatives. In this study the focus will be on the domain of social stress because social stress is related to attachment relationships.

It is important to keep in mind that no coping strategies can be seen as always beneficial, nor are they always negative. According to a review of the literature, Skinner et al., (2003), found that the same coping acts, such as, avoiding the situation and exercise, can be used under both positive and negative coping styles. The same strategies are also used differently on different coping measures and across studies. Any positive coping behavior taken to the extreme can be negative and many negative coping behaviors can be positive and beneficial, if done in moderation.

In sum, the integrative model of coping includes five types of coping: (a) primary control coping, (b) secondary control coping, (c) voluntary disengaged coping, (d) involuntary engaged coping, and (e) involuntary disengaged coping (Connor-Smith et al., 2000). Only primary and secondary control coping are considered to be positive and adaptive ways of coping. Primary control coping comprises an active focus on

overcoming the stressor and secondary control coping consists of accepting a stressor that cannot be changed. Involuntary engaged coping involves a focus on and rumination on the stressor. Voluntary disengaged coping consists of a deliberate attempt to avoid thinking about or engaging the stressor. Involuntary disengaged coping consists of a numbing and blocking of thinking about the stressor. Support for this model comes from confirmatory factor analysis (Skinner et al., 2003) on four domains of stress: social stress, economic strain, family conflict, and pain (Connor-Smith et al., 2000). The following section will provide an overview of previous research supporting the relation of levels of attachment and coping.

Attachment and Coping

Attachment styles may influence individuals to cope in certain ways (Ognibene & Collins, 1998; Schmidt, 2005; Seiffge-Krenke & Beyers, 2005) with cognitive and emotional coping leading to behavioral coping (Collins, 1996). Attachment working models serve as an inner structure used to organize and cope with stressful situations (Bowlby, 1988; as cited in Mikulincer & Florian, 1998). While empirical research has established a link between attachment and coping, previous research on coping has not used the integrative model by Connor-Smith et al. (2000) but various earlier models and conceptions of coping.

Individuals who differ in attachment are inclined to cope with stress in different ways. Secure attachment helps an individual to see stressful situations positively and make adjustments in coping. Scharf, Mayseless, and Kivenson-Baron (2004) found in a study of Israeli adolescent males that those low in both anxiety and avoidance used more problem-focused coping by actively looking for solutions to the problem. Those low in

attachment avoidance and low in attachment anxiety are likely to use engaged coping strategies such as problem solving (Mikulincer et al., 2003), emotion regulation (Fuendeling, 1998), and emotional expression along with the secondary control coping strategy of accepting compromises (Seiffge-Krenke & Beyers, 2005). According to a theoretical model by Mikulincer and Florian (1998), those high in attachment avoidance and/or high in attachment anxiety may be potential risk factors that lead to poor coping and maladjustment.

According to Fuendeling (1998), individuals low in both attachment anxiety and attachment avoidance use problem solving and social methods such as help-seeking to regulate their own affect. Since individuals low in both attachment anxiety and attachment avoidance perceive threats as low and have low levels of self-blame they facilitate positive affect in intimate relationships. In a study of 112 participants over 5 years, Seiffge-Krenke and Beyers (2005) found that adolescents low in attachment anxiety and attachment avoidance used social support seeking to cope with stressors. These findings are in line with previous research, which has found that adolescents low in both attachment anxiety and avoidance used social support (Charles & Charles, 2006; Kobak & Sceery, 1988; Ognibene & Collins, 1998; Schmidt, 2005), especially family (Howard & Medway, 2004; Simpson, Rholes, & Nelligan, 1992) as a way to cope with stressors in their lives.

According to Howard and Medway (2004), adolescents low in attachment anxiety and low in attachment avoidance also use positive avoidance, a term synonymous with secondary coping, to deal with stressors. The adolescents used strategies such as exercising, watching television, and listening to music. The authors also concluded that

these adolescents were less likely to use negative avoidance strategies. Negative avoidance is synonymous with voluntary and involuntary disengaged coping, suggesting, based on the results of the study that perhaps individuals low in both attachment anxiety and attachment avoidance may be less likely to use disengaged coping strategies.

Attachment Anxiety and Coping

Individuals high in attachment anxiety use hyper-activating strategies to cope with stress (Mikulincer et al., 2003; Shaver & Mikulincer, 2002). Hyper-activating strategies are a general arousal of the attachment system, where the individual is trying to constantly engage the attachment figure to seek help. This creates a hyper-vigilance regarding threat. Often, they have an over dependence on relationships (Hazan & Shaver, 1994).

Those high in attachment anxiety used social support when experiencing stress (Ognibene & Collins, 1998; Seiffge-Krenke & Beyer, 2005), but it is used in indirect and ineffective ways (Fuendeling, 1998). Individuals high in attachment anxiety are very emotionally expressive and exaggerate their affect to gain social support (Mikulincer et al. 2003; Searle & Meara, 1999); unfortunately this support is rarely helpful to alleviate distress (Fuendeling, 1998). They usually do not have genuine emotional exchanges and do not express anger for fear of hurting the relationship (Fuendeling, 1998). This may be the result of chronic anxiety and mistrust of relationships (Fuendeling, 1998). In relationships, they tend to experience more anger and rumination than are warranted (Simpson et al., 1992). Additionally, when those high in attachment anxiety use cognitive means of coping, their remembrance of past events and their memories are highly

emotional (Fuendeling, 1998; Mikulincer & Orbach, 1995). They perceive blame and criticize themselves for problems (Mikulincer et al., 2003).

Research on coping associated with anxiety would suggest that an adolescent high in attachment anxiety might use involuntary engaged coping, such as rumination, as a way of coping with stressors. According to Howard and Medway (2004), Ognibene and Collins (1998), and Simpson et al. (1992), those high in anxiety use strategies such as anger, yelling, and blaming others as a reaction to stress. These reactions may also be related to the internalizing of stress and may be due to the rumination and hyper vigilance of adolescents high in attachment anxiety (Allen & Land, 1999).

Furthermore, an individual high in attachment anxiety is also apt to take part in disengaged coping, especially externalizing at-risk behaviors (Allen & Land, 1999; Allen, Moore, Kuperminc, & Bell, 1998) or behaviors such as, drinking alcohol, using drugs, fighting, and skipping school (Ognibene & Collins, 1998). According to Allen and colleagues, these acting out behaviors might also be one way that the adolescent is trying to get a response from a caregiver or attachment figure (p. 326). Additionally, adolescents high in attachment anxiety are more likely than those adolescents low in both attachment anxiety and avoidance, and those high in attachment avoidance to use self-mutilation as an affect regulation strategy (Kimball, 2003). While at-risk behavior may be a product of many factors, such as peer group, environment, etc., it is also a way to cope with or express negative emotions, such as distress and anxiety (Allen et al., 1998). Cooper et al. (1998) found that adolescents high in anxiety are more apt than those high in attachment avoidance to take part in social coping methods which might be the result of their affective traits and their social skills.

Attachment Avoidance and Coping

Since individuals high in attachment avoidance are not apt to admit they are in distress, they usually do not engage in active coping (Fraley & Shaver, 1997). According to Fraley & Shaver, avoidant individuals are able to ignore attachment related stress by focusing on other, non-attachment-related, topics. The authors speculated this is most likely done without the active knowledge of the individual. In dealing with stressors, those high in attachment avoidance use deactivating strategies (Fuendeling, 1998; Mikulincer & Orbach, 1995; Mikulincer et al., 2003). Deactivating strategies consist of distancing of threat and attachment related cues. Since attachment figures are not available, the goal is to keep the attachment system deactivated, so as to reduce stress and frustration (Fuendeling, 1998; Mikulincer et al., 2003). According to a review of the literature by Shaver and Mikulincer (2002), this involves trying not to think about the situation or person, as well as known vulnerabilities, thoughts, memories, and feelings of distress, keeping these out of awareness from the beginning.

Emotion regulation for those high in attachment avoidance is usually comprised of inattention, repression of positive and negative affect (Fuendeling, 1998; Shaver & Mikulincer, 2002) and diverting attention from the stressor (Schmidt, 2005). Research on cognition and attachment has shown that persons high in attachment avoidance do not attend to or encode memories related to negative affect (Mikulincer & Orbach, 1995) and attachment (Fraley, Garner, & Shaver, 2000), and do not have difficulty suppressing these thoughts (Fraley & Shaver, 1997). Individuals high in attachment avoidance have been found to deny distress or anxiety while scoring high in anxiety on projective tests (Fuendeling, 1998).

Mikulincer, Birnbaum, Woddis, and Nachmias (2000), Mikulincer, Gillath, and Shaver (2002) and Mikulincer, Dolev, and Shaver (2004) studied reaction times of those who scored high in attachment avoidance to attachment related stressors, while under a high cognitive load. For this study, participants had to memorize a string of numbers, either seven digits (high cognitive load) or two digits (low cognitive load) and were shown attachment-related words. The participants who had to memorize seven digits had reaction times to the attachment related words that were impaired. Since high cognitive load impacted reaction time, suppression of attachment affect by avoidant individuals may reach consciousness or behavioral intention under high cognitive strain. Thus individuals high in attachment avoidance may have a more difficult time repressing distress under conditions of high cognitive strain.

Individuals high in attachment avoidance did not tend to seek support to cope with distress, did not use social support for affect regulation, and had a low expectation of a willingness of others to help (Mikulincer et al., 2003). Kobak and Sceery (1988) found that those high in avoidance and low in anxiety had more distant relationships and fewer social supports and because of this, these individuals did not seek support to cope. Vogel and Wei (2005) found that these individuals isolated themselves and did not believe they had social supports, which are necessary for going to others for help (Searle & Meara, 1999). Self-disclosure mediated the relationship of avoidance, loneliness and subsequent depression (Wei, Russell, & Zakalik, 2005). Individuals high in attachment avoidance were uncomfortable self disclosing, which in turn, led to feelings of loneliness and depression. (Wei et al., 2005).

If an individual high in attachment avoidance is in a relationship, he or she will tend not to want to rely on his or her attachment figure for support and will not show emotion to that partner. He or she will suppress anger and hostility toward the attachment figure because it is incongruent with emotional distancing (Mikulincer & Shaver, 2005).

Those high in attachment avoidance may be apt to use methods of disengagement, which are congruent with deactivating strategies. They might tend to use negative avoidance (Howard & Medway, 2004; Ognibene & Collins, 1998; Simpson et al., 1992) and risky behaviors (Allen & Hauser, 1996; Allen & Land, 1999; Cooper, 1994) to avoid actively dealing with the stressor. While at-risk behavior may be a product of many sources, such as the peer group and the environment, this behavior is also a way to cope with or express negative emotions of distress and anxiety (Cooper et al., 1998).

Adolescents high in attachment avoidance were less apt to take part in social coping methods and preferred to disengage alone. Cooper et al. argued that this was due to a lack of social skills. Though adolescents high in attachment avoidance still took part in at-risk behaviors, they did not take part in risky behavior any more than adolescents low in both attachment anxiety and avoidance (Cooper et al., 1998). Adolescents high in avoidance took part in fewer high risk behaviors, such as alcohol (Cooper, 1994) and drug use (Shedler & Block, 1990). However, when they did engage in risky behaviors it was related to poor coping to deal with emotional distress.

Concerning involuntary disengaged coping, Dozier and Kobak (1992), found that individuals high in attachment avoidance reported elevated levels on physiological measures while denying distress. According to Fraley and Shaver (1997), those high in avoidance do not seem to experience attachment related distress. The authors

hypothesized that individuals high in avoidance may be able to very effectively keep distress out of their awareness and focus on other things. This may be done without conscious control.

Attachment and Professional Help-Seeking

Help-seeking can be conceptualized as a social transaction between an individual's emotions and thoughts and social relationships. When the individual experiences distressing thoughts and emotions, he or she may seek help in social relationships (Rickwood et al., 2005). Rickwood and her colleagues describe the counselor help-seeking process as a model which begins when the individual is aware of and experiences concerns or distress. Next, the individual will then express a need for support and will assess the availability of counseling. Finally, the individual will seek out a counselor and must self-disclose to that counselor.

Those with different types of insecure attachment, those high in attachment avoidance and/or high attachment anxiety, report different levels of help-seeking behavior. Vogel and Wei (2005) theorized that another explanation for the difference in help-seeking may be that those high in attachment anxiety "perceive that others are more capable to help me and I need to be cared for" and those high in attachment avoidance may think that "Others will not care about me" (p. 354). Help-seeking may also be based on the tendency to self-disclose. Individuals high in anxiety are apt to self-disclose. Those high in avoidance are not trusting and unwilling to self-disclose (Vogel & Wei, 2005). An unwillingness to self-disclose has been linked to less help-seeking (Vogel & Wester, 2003).

Empirical research has suggested that those low in both attachment anxiety and attachment avoidance use help-seeking as a means of coping (Seiffge-Krenke & Beyers, 2005). Vogel and Wei (2005) found evidence that perceived social support and psychological distress are mediators between attachment and the intent of professional help-seeking.

Those high in attachment anxiety are likely to seek professional help. According to Lopez et al. (1998), individuals high in attachment anxiety, are willing to seek counseling services. They are willing to seek professional help because they admit distress (Vogel & Wei, 2005). Despite a willingness to seek support, these individuals frequently find it difficult to make use of support that is offered them (Seiffge-Krenke & Beyers, 2005). Support may not be experienced as helpful because individuals high in attachment anxiety tend to have developed internal working models of themselves as unworthy to receive help and that others cannot be trusted to provide needed help (Fuendeling, 1989; Mikulincer & Shaver, 2003; Simpson & Rholes, 2003). In their survey of the literature, Mikulincer and Shaver (2003) also stated that those high in attachment anxiety are hypervigilant to signs of disapproval from their attachment figure. Thus, individuals high in attachment anxiety have difficulty being soothed by others.

Those high in attachment avoidance are unlikely to seek professional help (Vogel & Wei, 2005). According to Lopez et al. (1998), those high in attachment avoidance are not likely to seek counseling services. They are more likely than those high in attachment anxiety to downplay distress (Fuendeling, 1998). Since distress was downplayed they are less likely than those who express distress to seek help (Collins, 1996; Lopez et al., 1998; 2001; 2002; Wei et al., 2003). According to Mallinckrodt and

Wei (2005), the admitting of distress for those high in avoidance was mediated by perceptions of social support. Those high in attachment avoidance admitted deficits in social support which contributed to feeling helpless to form new support structures.

Attachment and Help-Seeking in Adolescents

The studies discussed previously have largely focused on attachment and help-seeking in adults. However, these studies have not included adolescents in high school. There are a few studies of adolescents that focused on attachment and psychological adjustment (e.g., Cooper et al., 1998) and attachment and coping (Howard & Medway, 2004); however, these studies did not include professional help-seeking. The present study will examine professional help-seeking intentions in adolescents. The addition of professional help-seeking intentions is important because it will allow examination of mechanisms that may serve as mediators of the documented link between attachment and professional help-seeking. Psychological distress and coping may serve as mechanisms linking attachment and intentions for professional help-seeking in adolescence. Exploration of potential mediating mechanisms will help to fill a gap in the current body of empirical knowledge about adolescents and most importantly, will provide practitioners with knowledge to help them intervene with adolescents experiencing distress.

Since this current investigation builds upon the work of Cooper et al. (1998), it is integral to provide a brief review of their study. Cooper et al. studied adolescents ranging in ages from 13-19 and investigated the relations of attachment style on psychological symptoms, self-concept, and risky behavior. The study consisted of 1,989 African-American and Caucasian adolescents. The authors found that those who scored low on

both attachment anxiety and attachment avoidance employed adaptive ways of coping and dealing with negative emotions. They took part in some at-risk behaviors, but the behavior was considered developmentally appropriate (Cooper et al., 1998).

Adolescents high in attachment anxiety were the least adjusted, reported the highest level of symptoms, poorest self-concept, and the highest levels of high risk behaviors (Cooper et al., 1998). Females high in attachment anxiety reported higher levels of depression, anxiety, and psychoticism, and higher levels of sexual activity than other females. Adolescents high in attachment avoidance were less hostile, less depressed, more academically able, less socially skilled, and less involved in delinquent behavior, sexual, or substance abuse behaviors than adolescents who scored high in attachment anxiety. The authors theorized that these students were more distressed but took part in less at-risk behaviors than those high in attachment anxiety because of poor social skills.

Current Study

This current study further builds on the work of Cooper et al. (1998) in the following ways. Specific ways of coping will be investigated, and help-seeking will be added to investigate whether adolescent attachment is related to a willingness to seek help from counselors in the schools. This study is important because there are very few studies that investigate attachment and coping with a high school age sample; so, this will add to the already available literature. No studies were identified that have used an adolescent sample to investigate attachment and professional help-seeking.

Research Hypotheses

The purpose of this investigation is to examine the potential mediating effects of coping and distress on the relation between attachment and professional help-seeking intentions. This section begins with a list of all hypotheses and literature to support each hypothesis. Finally, this section ends with a few research questions and the rationale for each question.

The first hypothesis is that, *there will be a positive direct link between attachment anxiety and counselor help-seeking intentions*. Vogel and Wei (2005) found a positive direct link between attachment anxiety and intentions to seek counseling in college students. Additionally, several authors have theorized that those high in attachment anxiety show distress to gain support (Fuendeling, 1998), ruminate on stress (Lopez & Brennan, 2000), and often believe that others are more competent in relieving distress (Vogel & Wei, 2005); therefore they are more likely to seek professional counseling services.

The second hypothesis is that, *there will be an indirect effect between attachment anxiety and counselor help-seeking intentions mediated by involuntarily engaged coping and distress*. According to research by Vogel and Wei (2005), there was an indirect effect between attachment anxiety, perceived social support (a way of coping), psychological distress, and then intentions to seek counseling in college students. Specifically, those high in attachment anxiety are likely to ruminate on their distress and this rumination is analogous to involuntarily engaged coping (Connors-Smith et al., 2000). Their rumination, however, leads to more distress, which increases their chances of seeking professional help.

The third hypothesis is that, *there will be an indirect effect between attachment anxiety and counselor help-seeking intentions mediated by primary control coping and distress*. As stated previously, Vogel and Wei (2005) found an indirect effect between attachment anxiety, perceived social support (a way of coping), psychological distress, and then intentions to seek counseling. Those high in attachment anxiety are likely to seek help and social support, which are types of primary control coping (Connor-Smith et al., 2000). Though individuals high in attachment anxiety are likely to seek support to relieve distress, this distress is rarely quelled by the support (Fuendeling, 1998; Seiffge-Krenke & Beyers, 2005). Therefore, this leads individuals high in attachment anxiety to seek professional help.

The fourth hypothesis is that, *there will be a negative direct link between attachment avoidance and counselor help-seeking intentions*. Vogel and Wei (2005) found a negative direct link between attachment avoidance and intentions to seek counseling. This may be because individuals high in attachment avoidance are much more uncomfortable admitting distress and they experience more risk in self-disclosure (Fuendeling, 1998; Shaffer et al., 2006). Additionally, individuals high in attachment avoidance seem to devalue the importance of others and believe that they must rely on themselves (Mikulincer, 1998).

The fifth hypothesis is that, *there will be an indirect effect between avoidance and counselor help-seeking intentions mediated by involuntary disengaged coping (e.g., numbing) and then distress*. Previous research has found that those individuals who used involuntary disengaged coping experience numbing and cognitive inactivity to avoid dealing with or acknowledging distress (Connor-Smith et al., 2000). Consistent with

attachment theory; individuals high in attachment avoidance use deactivating strategies such as numbing and cognitive activity to deny and downplay distress (Mikulincer et al., 2003) and these deactivating strategies may be acted out without a conscious decision (Fraley & Shaver, 1997). Since experiencing and acknowledging distress is usually necessary to initiate counselor help-seeking (Vogel & Wei, 2005; Vogel & Wester, 2003), it is likely that those who involuntarily disengage will not have intentions to seek counseling services.

The sixth hypothesis is that, *there will be an indirect effect between avoidance and counselor help-seeking intentions mediated by voluntary disengaged coping (e.g., distracting) and distress*. Shaver and Mikulincer (2002) theorized individuals high in attachment avoidance use deactivating strategies to cope with distress. This deactivating involves an inattention to threatening events, avoidance of personal vulnerabilities and suppression of cognitions and memories that evoke distress (Shaver & Mikulincer, 2002). Thus, the deactivation observed in those high in attachment avoidance is almost identical to voluntary disengaged coping strategies; strategies such as wishful thinking, denial, and avoidance. As stated previously, those high in attachment avoidance use deactivating strategies to deny distress at the unconscious level. Additionally, Fraley & Shaver (1997) also found that at times those high in attachment avoidance will be consciously aware of deactivating strategies. Since this study uses a self-report measure of coping, adolescents high in attachment avoidance may report using strategies such as wishful thinking and denial of stressors. These individuals will deny distress and, thus, it is unlikely they will intend to seek counseling services.

The seventh hypothesis is that, *there will be a positive direct link between attachment anxiety and psychological distress*. Individuals high in attachment anxiety are preoccupied with distress and dependent on relationships (see Fuendeling, 1998).

According to research by Vogel and Wei (2005), there was a positive direct link between attachment anxiety and psychological distress; those high in attachment anxiety are likely to admit their distress which increases their likelihood of seeking help. Even though individuals high in attachment anxiety are likely to seek support to relieve distress, this distress is not necessarily quelled by the support (Fuendeling, 1998; Seiffge-Krenke & Beyers, 2005).

The eighth hypothesis is that, *there will be a positive direct link between attachment anxiety and involuntary engaged coping (e.g., rumination)*. This hypothesis is supported by the findings that individuals high in attachment anxiety have a tendency to ruminate on stress and stressful situations (Vogel & Wei, 2005), and Fuendeling (1998) has theorized that individuals high in attachment anxiety ruminate to show distress to gain support. According to Connor-Smith et al. (2000) ruminating on problems and having involuntary intrusive thoughts are types of involuntary engagement coping.

The ninth hypothesis is that, *there will be a direct positive link between attachment anxiety and primary control coping (e.g., problem-solving)*. Individuals high in attachment anxiety are willing to seek support to relieve their distress (Fuendeling, 1998; Seiffge-Krenke & Beyers, 2005) and help-seeking is a form of primary control coping (Connors-Smith et al. 2000).

The tenth hypothesis is that, *there will be a negative direct link between secondary control coping (e.g., acceptance, positive thinking) and distress*. Secondary

coping is considered an adaptive and positive way of coping, therefore, as secondary coping increases, distress should be lessened (Connor-Smith et al., 2000).

The final hypothesis is that, *there will be a positive direct link between distress and counselor help-seeking intentions*. The relationship between distress and counselor help-seeking has been firmly established (Cepeda-Benito & Short, 1998; Cramer, 1999; Vogel & Wei, 2005); thus individuals experiencing distress are the most likely to seek counseling services. Additionally, a study of a high school age population, Tatar (2001) found that students would self refer to counseling if they were to experience high distress.

Research Questions

In addition to the previous hypotheses, this study also contains several exploratory research questions. The first research question is, *is there an interaction between attachment anxiety and attachment avoidance in predicting counselor help-seeking*. Specifically, this question will look at individuals who score high on both dimensions of attachment anxiety and attachment avoidance. Scoring high on both dimensions is analogous to fearful-avoidance. Previous research on college students has found that those high in attachment anxiety tend to be willing to seek professional counseling (Seiffge-Krenke & Beyers, 2005; Shaffer et al., 2006; Vogel & Wei, 2005) and those high in attachment avoidance are less likely to be willing to seek counseling (Shaffer et al., 2006; Vogel & Wei, 2005). For individuals high on both attachment dimensions (i.e., fearful-avoidance) the picture is more complex because these individuals may use both hyperactivating and deactivating strategies (Mikulincer & Shaver, 2003; Simpson & Rholes, 2002). According to their review of the literature, Simpson and Rholes theorized that those high on both attachment anxiety and avoidance (fearful-avoidant individuals)

are apt to act in confused, incongruent, and haphazard patterns, especially under distress. This question will be used to investigate how differing combinations of attachment avoidance and attachment anxiety are related to help-seeking.

The second research question is, *what is the relation between attachment avoidance and distress*. As stated previously, the research on attachment avoidance and distress is mixed. Researchers such as Lopez et al. (2001) and Vogel and Wei (2005) have found no direct relation between attachment avoidance and distress. Lopez et al. (1998), found that individuals high in attachment avoidance reported levels of distress that were no higher than that of secure individuals. Wei et al. (2003), however, found a direct link between attachment avoidance and distress. Mikulincer and Florian (1998) theorized that if those high in avoidance experience high levels of stress for a long period of time, those individuals may report distress.

The final research question is, *what is the relation between primary control coping and counselor help-seeking*. A major component of primary control coping is that of seeking social support (Connor-Smith et al., 2000). However, other research has shown that adolescents use family and friends as a component of social support before they seek the help of professionals (Boldero & Fallon, 1995). Therefore, it may be that those who use primary engaged coping have the requisite skills and resources to handle stressors with their own resources and do not have to use professional counselors. On the other hand, it may be that those who are willing to seek support in general as a coping strategy will also have a willingness to seek counseling.

Chapter 3

Methods

Participants

A sample of 342 adolescent participants [196 (57 %) female, 141 (41 %) male] from six high schools in Western and Central New York was utilized. Mean age of the participants was 16.39 years ($SD = .96$; range = 14 to 19). There were 295 (86 %) Caucasian, 22 (6 %) African-American, 5 (1.5 %) Asian/Asian-American, 4 (1.2%) Hispanic/Latino/a, 4 (1.2%) Native American, 2 (.6 %) Middle Eastern, 4 (1.2%) other, and 25 (7 %) Multi-racial students. Participants categorized as multi-racial indicated more than one category, therefore, the total is more than 100%. The grade level of the participants was 14 (4 %) freshman, 70 (20.5 %) sophomore, 126 (37 %) junior, 120 (35 %) senior, and 2 (.6 %) marked other. Regarding their relationship history, 37 (11 %) had never been in a romantic relationship, 144 (42 %) were not currently in a relationship but had previously had relationships, 71 (21 %) were currently in a first time relationship, 80 (23 %) were currently in a relationship and had had one previously. Students indicated their parental marital status as 147 (43 %) married, 8 (2 %) separated, 53 (15.5 %) divorced, 84 (25%) never married, and 36 (10.5 %) other.

In order to provide a clearer description of the participants it is important to include a short description of the six schools that participated. One of the schools that participated is an alternative high school consisting of approximately 150 students with two high school counselors and a social worker. The second school that participated in this study was another alternative high school with approximately 120 students and one school counselor. Students from both of these programs can choose to attend based on the

recommendation or strong encouragement of the student's public school district. Students are often encouraged to attend an alternative program because of their poor academic performance and attendance, likelihood of benefiting from smaller classes, and behavioral problems and concerns. The students' public school district pays for any additional costs of this program and provides school bus transportation. The next school described is a public suburban high school with approximately 867 students with three school counselors and one school psychologist. The fourth school discussed is another public high school with 751 students with four school counselors and one school psychologist. The next school discussed is a public high school in a rural setting. This school consists of 204 students with one full-time school counselor and a school counselor and school psychologist who also work with elementary and middle school students. A unique component of this rural high school is that all grades from K through 12 are housed in one school building. Finally, the last school to be discussed is a private co-educational high school. This private high school has about 500 students and four school counselors. Demographic data for participants in this study by school are provided in Table 1. Since the schools could also be placed into categories by school type; means and standard deviations are also included in Table 2 for the categories of alternative high schools, regular education, and private high school.

Participants who were missing items for a particular measure had the mean of the remaining items on that scale substituted for their missing values (Tabachnik & Fidell, 2007). If participants were missing more than half of the items for any one measure (Experiences in Close Relationships, Response to Stress Questionnaire, Brief Stress Inventory, and Intentions to Seek Counseling Inventory), they were deleted from the

analysis. Nineteen participants were removed from the analysis. Of the 19 surveys that were removed for missing information, 13 of them were from two alternative high schools. Many students who attend alternative high schools do not follow through or complete assignments; therefore, this pattern of missing data was not unexpected.

The required sample size for this study was estimated using a number of guidelines. Klem (1994) suggests that most path models will require between 200 and 300 participants. As a general rule, path analyses with a sample of 100 participants or fewer is considered small, between 100-200 participants is a medium sample and a sample that exceeds 200 participants is considered large (Kline, 2005). Through a review of over 72 studies, Breckler found the median sample size to be 200 participants (as cited in Kline, 2005). The size of the sample is also based on the complexity of the model (MacCallum & Austin, 2000). Additionally, Bentler and Chou recommended five to ten participants for every parameter estimate and added that ten participants per parameter would be needed if the data were significantly not a multivariate normal distribution (as cited in Klem, 2000). Based on the description of identifying parameters by Kline (2005) and Norman and Streiner (2003), this model has approximately 34 parameters requiring a sample size of at least 170-340 participants.

Measures

Demographic Questionnaire. This measure was created for this investigation and was created to be able to describe the participants. The questionnaire includes items about participants' age, gender, year in school and race and ethnicity. Additional items ask participants about their relationship status and relationship history. Finally, the

questionnaire ends with items about parental marital status, parental education and parental employment.

MacArthur Scale of Subjective Social Status-Youth Version (SSS-YV; Goodman, Adler, Kawachi, Frazier, Huang, & Colditz, 2001). This scale is a measure of youth reported subjective socioeconomic status containing two items asking about an adolescent's subjective place in society and in his or her school. The adolescent is shown a picture of a ten-rung ladder that is said to represent American society. The statement referring to the top of the ladder reads "...are the people who are best off—they have the most money, the highest amount of schooling, and the jobs that bring the most respect." The statement referring to the bottom reads "...are the people who are the worst off—they have the least money, little or no education, no job or jobs that no one wants or respects." The adolescent is then prompted to mark the circle that corresponds to where his or her family would be on this ten-rung ladder. Adolescents are then also asked to mark an identical ladder but instead of society, the ladder represents the adolescent's school. The top of the ladder represents those students with the highest grades and the most respect and standing in school. The bottom of the ladder represents those with little respect, low grades, and someone no one wants to hang around with. The score for each ladder is the number of the rung chosen counting from the bottom of the ladder. Higher scores represent higher subjective social status. Goodman et al. (2001) reported test-retest reliability estimates of .73 (society) and .79 (school) on an adolescent sample. On the Scale of Subjective Social Status, students across the full sample indicated a mean society subjective status of 5.83 ($SD = 1.73$) and mean subjective school status of 7.18 ($SD = 1.83$). Students from the two alternative high schools indicated a mean society subjective

status of 5.53 ($SD = 2.25$) and mean subjective school status of 6.94 ($SD = 2.16$).

Students from the three public high schools indicated a mean society subjective status of 5.75 ($SD = 1.49$) and mean subjective school status of 7.27 ($SD = 1.68$) and those from the one private high school indicated a mean society subjective status of 6.86 ($SD = 1.17$) and mean subjective school status of 7.24 ($SD = 1.78$).

Support for construct validity of the SSS-YV was established through relations with depressive symptoms (Goodman et al., 2001), adolescent obesity, parental education, and household income (Goodman, Adler, Daniels, Morrison, Slap, & Dolan, 2003), smoking (Finkelstein, Kubzansky, & Goodman, 2006), and self-rated health (Goodman, Huang, Schafer-Kalkhoff, & Adler, 2007) in the theorized directions. The significant relations of the SSS-YV to health related measures are important because there is a long history of research that has established strong relations between SES and health related constructs (Goodman et al., 2001; Goodman et al., 2003).

Brief Symptom Inventory (BSI; Derogatis, 1993). The BSI is a 53-item self-report measure of distress. The BSI was created to be a brief version of the Symptom Checklist Revised (SCL-90-R; Derogatis, 1977, 1993). Participants rate their level of distress on a 5-point Likert-type scale ranging from 0 (*not at all*) to 4 (*extremely*). The BSI has nine subscales: Somatization, Obsessive-compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism.

The BSI is correlated highly with the SCL-90-R ($r = .90$), a measure which has a history of established reliability and validity in assessing psychological distress. The BSI was normed for adolescents using a community sample of 2,408 high school students ranging in ages from 13-19 (Derogatis & Fitzpatrick, 2004). Support for the construct

validity of the BSI for adults and adolescents using community and psychiatric populations have been established by numerous studies (see Derogatis & Fitzpatrick, 2004). Boulet and Boss (1991) provided support for convergent validity of the BSI with the MMPI. The authors, however, warned that the BSI may be a good measure of general distress but that the subscales are not valid to discriminate between different types of distress, and they suggest that little emphasis should be placed on the subscales.

This study used the Global Severity Index (GSI). The GSI is an average score reflecting overall psychological distress. Scores on the GSI range from 0 to 4 with higher scores indicating higher levels of psychological distress. Derogatis and Fitzpatrick (2004) reviewed evidence that the GSI is a valid quantitative predictor of a participant's overall psychological distress and state that it provides information on the number of symptoms and the intensity of the distress. Based on a sample of 60 individuals, the GSI yielded a two week test-retest reliability coefficient of .90 (Derogatis & Fitzpatrick, 2004). Previous studies have reported internal consistency coefficient alphas of .96 with female adults seeking counseling (Moradi & Funderburk, 2006), .97 with female college students (Moradi & Subich, 2004) and .97 with young men receiving counseling (Skeem et al., 2006) for the 53 GSI items. For this study, the GSI will only contain 52 items. The question that inquired about, "thoughts of ending your life" will be deleted based on concerns expressed by school officials. The internal consistency coefficient alpha for the current sample is .96.

Support for validity of the GSI was established through relations with community violence with a sample of young men in counseling (Skeem et al., 2006), childhood sexual abuse for university counseling center clients (Braver, Bumberry, Green, &

Rawson, 1992), MMPI subscales on a sample adult in- and out-patients (Boulet & Boss, 1991), and adolescent high-risk asthma (Gillaspy, Hoff, Mullins, Van Pelt, & Chaney, 2002) in the theorized directions. Additionally, further support for validity of the GSI was provided through the relation of parental GSI and perceived sexist events (Moradi & Funderburk, 2006) in the theorized directions.

Intentions to Seek Counseling Inventory (ISCI; Cash, Begley, McCown, & Weise, 1975; Cepeda-Benito & Short, 1998). The ISCI is a 17-item measure that assesses whether participants would be willing to obtain help from a counselor if the participant had any of a variety of concerns. The ISCI consists of three subscales: Interpersonal Concerns, Academic Concerns, and Drug Problems. The scales range from 1 (*very unlikely*) to 6 (*very likely*) that the participant would seek counseling if the participant had that type of concern. This study will only utilize the ten item Interpersonal Concerns subscale score, ranging from 10-60, with higher scores indicating a willingness to seek counseling for interpersonal concerns. Cronbach's alpha for the Interpersonal Concerns subscale has been previously computed at .87 (Vogel et al., 2007) and .86 (Pederson & Vogel, 2007). The internal consistency coefficient alpha for the Interpersonal Concerns subscale with the current sample is .92.

Evidence for construct validity for the Interpersonal subscale includes a significant relation in the hypothesized direction with perceived public stigma for seeking counseling (Vogel et al., 2007), self stigma (Vogel, Wade, & Haake, 2006) and male gender role conflict (Pederson & Vogel, 2007).

Support for construct validity for the entire ISCI was established through relations with the significance of the current problem (Lopez et al., 1998), outcome expectations

(Vogel et al., 2005), self-concealment (Cepeda-Benito & Short, 1998) and attachment (Vogel & Wei, 2005) in the theorized directions.

Response to Stress Questionnaire (RSQ; Connor-Smith et al., 2000). The RSQ is a 57-item measure of voluntary coping and involuntary reactions to stress. The RSQ uses a 4-point rating scale (0 = *never*, 3 = *always*). The RSQ contains five factor-analytically derived scales, which include Primary Control Coping (problem solving, emotion regulation, emotional expression), Secondary Control Coping (distraction, positive thinking, acceptance), Disengagement Coping (avoidance, denial), Involuntary Engagement Coping (emotional arousal, impulsive action, intrusive thoughts, rumination), and Involuntary Disengagement Coping (emotional numbing, inaction). Sample items for each subscale include items such as “I do something to try to fix the problem or take action to change things” (Primary Control Coping), “I tell myself everything is going to be alright” (Secondary Control Coping), “I wish someone would just come and get me out of this mess” (Disengaged Coping), “When I have problems with other kids I can’t stop thinking about what I did or said” (Involuntary Engaged Coping), and “When I am having problems with other kids I end up lying around or sleeping a lot” (Involuntary Disengagement). On each self report scale, higher scores indicate a greater usage of this type of coping.

Confirmatory factor analysis has validated the 5-factor structure using three samples which consisted of 437 older adolescents (16-19), 364 high school age adolescents, and 82 adolescents and parents participating in a study on coping in adolescents (Connor-Smith et al., 2000). The RSQ has demonstrated reliability with acceptable internal consistency scores for primary coping (.82), secondary coping (.80),

disengaged coping (.73), involuntary engaged coping (.89), and involuntary disengagement (.81) (Connor-Smith et al., 2000). The internal consistency coefficients for this sample are primary coping (.83), secondary coping (.80), disengaged coping (.75), involuntary engaged coping (.91), and involuntary disengagement (.82).

Connor-Smith et al. (2000) established validity for the RSQ through correlations in the theorized direction with coping (as measured by the COPE; Carver, Scheier, & Weintraub, 1989), self-reported internalizing and externalizing behavior (as measured by the Youth Self Report; Achenbach, 1991), parent reported internalizing and externalizing behavior (as measured by the Child Behavior Checklist (CBCL; Achenbach, 1991), and symptoms of abdominal pain (as measured by the RAP; Thomsen, Compas, Colletti, & Stanger, 1999). Recent studies have also demonstrated validity for the RSQ through correlations in the theorized direction with heart rate reactivity (Connor-Smith & Compas, 2004), coping with family stress (Wadsworth & Berger, 2006), coping in Navajo adolescents (Wadsworth, Rieckmann, Benson, & Compas, 2004), coping with terrorism (Wadsworth, Gudmundsen, et al., 2004) and attachment and inter-parental conflict (Rodrigues & Kitzmann, 2007).

The Experiences in Close Relationships Scale (ECR; Brennan et al., 1998). The ECR is a 36-item measure of attachment containing two subscales, Anxiety and Avoidance. The ECR was created through a principal component analysis of all existing self-report measures of attachment. The measure uses a 7-point rating scale (1 = *disagree strongly*; 7 = *agree strongly*) and asks participants to rate their feelings and thoughts in romantic relationships. Instructions ask participants to report how they “generally experience relationships, not just what is happening in a current relationship” (Brennan et

al., 1998, p.69). The Anxiety subscale contains 18-items and measures participants' intense desire to be close to others and the fear that they will be rejected. Sample items are "I need a lot of reassurance that I am loved by my partner" and "I worry about being abandoned." The Avoidance subscale has 18-items and measures participants' dislike of relying on and trusting romantic partners. Sample items are "I don't feel comfortable opening up to romantic partners" and "I prefer not to show a partner how I feel deep down." Brennan et al. reported Cronbach alphas of .94 (Avoidance) and .91 (Anxiety). Dykas, Woodhouse, Cassidy, and Waters (2006) found Cronbach alphas of .92 for the avoidance subscale and .86 for the anxiety subscale on an adolescent sample. For this sample, reliability coefficients are .90 for the avoidance subscale and .91 for the anxiety subscale.

Support for construct validity of the ECR was established through relations with coping and distress (Lopez & Gormley, 2002), psychological distress and social support (Mallinckrodt & Wei, 2005), self-disclosure and loneliness (Wei et al., 2005), differentiation of self (Skowron & Dendy, 2004), anxiety sensitivity (Weems, Berman, Silverman, & Rodriguez, 2002), identity status (Berman, Weems, Rodriguez, & Zamora, 2006) coping and interparental conflict (Rodrigues & Kitzmann, 2007) and secure base scripts with an adolescent sample (Dykas et al., 2006) in the theorized directions.

General Help-Seeking Questionnaire (GHSQ; Ciarrochi & Deane, 2001; Rickwood et al., 2005; Wilson, Deane, Ciarrochi, & Rickwood, 2005). The GHSQ was used to rate the likelihood that the participants would seek help for personal-emotional problems from a range of potential help sources, such as: partner, friend, parent, other relative, mental health professional, phone help line, family doctor, teacher, someone else

not listed, and would not seek help from anyone. Participants are asked, “If you are having a personal-emotional problem, how likely is it that you will seek help from the following people?” For all help sources, intentions to seek help were rated on a 7-point Likert type scale ranging from 1 (*extremely unlikely*) to 7 (*extremely likely*). Higher scores indicate greater intentions to seek help. According to Rickwood et al. (2005), help-seeking intentions can be reported as a total score or as a score for each specific help source. The GHSQ has been validated on an adolescent sample. Therefore, the primary purpose of this measure is to further establish validity for the Intentions to Seek Counseling Inventory using an adolescent sample.

Cronbach’s alpha for the GHSQ total score was .70 and test-retest reliability assessed over a three-week period was .86 (Wilson, Deane, Ciarrochi et al., 2005). For this sample, Cronbach’s alpha was .73. Support for construct validity of the GHSQ total score was established through relations with past help-seeking experiences (Carlton & Deane, 2000; Ciarrochi & Deane, 2001), attitudes toward help-seeking (Carlton & Deane, 2000) and for specific help sources through relations with hopelessness, suicidal ideation (Wilson, Deane, & Ciarrochi, 2005), and actual help-seeking behaviors (Wilson, Deane, Ciarrochi et al., 2005) in the theorized directions.

A major help source of interest in this study is “mental health professional”, consisting of school counselors, psychologists, or psychiatrists. The single source of “mental health professional” was found to be significantly related to perceptions of treatment helpfulness and the bond in therapy (Cusack, Deane, Wilson, & Ciarrochi, 2006), emotional competence (Ciarrochi et al., 2003), favorable previous psychological

health care, and actually seeking-help from a mental health professional (Wilson, Deane, Ciarrochi et al., 2005).

The supplementary section of this measure consists of asking whether professional help has been sought in the past (Carlton & Deane, 2000; Wilson, Deane, Ciarrochi et al., 2005). If help had been sought, the frequency and who provided these services was assessed. The usefulness of the help source was evaluated on a 5-point scale. Higher scores indicate ratings of services being more helpful. According to Wilson, Deane, Ciarrochi, and Rickwood (2005), previous counseling experience can be reported as either a dichotomy (help sought or not), a scale indicating the amount of counseling received, or as a weighted scale in which the amount of counseling received is multiplied by its perceived usefulness. Support for construct validity of the GHSQ past help-seeking supplement was established through relations with help-seeking intentions in the theorized directions (Carlton & Deane, 2000; Ciarrochi & Deane, 2001; Wilson, Deane, Ciarrochi et al., 2005).

Procedure

Schools were sent letters to ask if they were interested in participating in a dissertation research study and willing to allow data to be collected from their high school students. Letters were sent to 250 high schools in western and central New York State. Nineteen schools (8%) responded that they had some interest in participation and wanted more information. Thirteen of the nineteen schools decided not to participate after discussing this study with the author. The schools who decided not to participate usually cited that they could not spare instructional time. Six schools decided to participate. Schools that opted to participate were given the choice of allowing as many or as few

students as desired the opportunity to participate. School administrators had the choice of two different consenting processes. Schools could choose to have students' parents/guardians sign an opt-out form, if they did not allow their son or daughter to participate or do nothing, if they consented to their child's participation in the research. Alternatively, schools could choose to have parents sign consent forms to give permission for their child to participate. If the consent form option was selected by the school, any student who did not have the consent form signed and brought back to school could not participate. Four schools decided to use opt-out consenting and two schools required parent signed consents. Consent forms were given to students to take home to have their parents read and sign. Opt-out consent forms were mailed to students' homes to insure that the form made it home. Students completed questionnaires during class time and completion was considered their assent. Students (participants) whose parents did not object to their participation or who had signed permission were given a packet of surveys in one of their classes. Students were assured confidentiality. Students were informed that their teachers, school administrators, and parents would not see their responses. Students whose parents objected or who decided not to participate were given this class time to read or do work. The packets all contained the same measures with measures in a counterbalanced order. Each packet ended with the demographic questionnaire. It took participants less than one class period to fill out the measures.

Table 1

Demographic Variables for Each School.

Demographic Variables	Alternative High School 1	Alternative High School 2	Private High School	Regular High School 1	Regular High School 2	Regular High School 3
Participants (N)	71	49	38	53	88	43
Gender						
Male	30 (42.3%)	21 (42.9%)	22 (57.9%)	15 (28.3%)	39 (44.3%)	14 (32.6%)
Female	40 (56.3%)	25 (51.0%)	16 (42.1%)	37 (69.8%)	49 (55.7%)	29 (67.4%)
Mean Age	16.44 (SD = 1.03)	16.64 (SD = .97)	16.24 (SD = .49)	16.79 (SD = .70)	15.62 (SD = .74)	17.26 (SD = .59)
Race and Ethnicity						
Caucasian	49 (69.0%)	38 (77.6%)	32 (84.2%)	49 (92.5%)	86 (97.7%)	41 (95.3%)
African-American	11 (15.5%)	4 (8.2%)	3 (7.9%)	2 (3.8%)	1 (1.1%)	1 (2.3%)
Asian/Asian-American	2 (2.8%)	1 (2.0%)	1 (2.6%)	1 (1.9%)	0 (0%)	0 (0%)
Hispanic/Latino/a	2 (2.8%)	1 (2.0%)	1 (2.6%)	0 (0%)	0 (0%)	0 (0%)
Native American	3 (4.2%)	1 (2.0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Middle Eastern	1 (1.4%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	1 (2.3%)
Other	1 (1.4%)	1 (2.0%)	1 (2.6%)	0 (0%)	1 (1.1%)	0 (0%)
Multi-racial	15 (21.1%)	2 (4.1%)	0 (0%)	1 (.02%)	7 (8.6%)	0 (0%)
Grade level						
Freshman	10 (14.1%)	4 (8.2%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Sophomore	20 (28.2%)	6 (12.2%)	0 (0%)	0 (0%)	44 (50.0%)	0 (0%)
Junior	21 (29.6%)	14 (28.6%)	29 (76.3%)	15 (28.3%)	43 (48.9%)	4 (9.3%)
Senior	18 (25.4%)	18 (36.7%)	9 (23.7%)	35 (66.0%)	1 (1.1%)	39 (90.7%)
Other	0 (0%)	2 (4.1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Relationship Status						
Never	0 (0%)	4 (8.2%)	7 (18.4%)	5 (9.4%)	17 (19.3%)	4 (9.3%)
Previous relationship,	24 (33.8%)	21 (42.9%)	19 (50.0%)	26 (49.1%)	40 (45.5%)	14 (32.6%)

not currently						
Current first	32 (45.1%)	3 (6.1%)	3 (7.9%)	11 (20.8%)	10 (11.4%)	12 (27.9%)
relationship						
Current and previous	10 (14.1%)	17 (34.7%)	9 (23.7%)	10 (18.9%)	21 (23.9%)	13 (30.2%)
Parental Marital						
Status						
Married	20 (28.2%)	9 (18.4%)	24 (63.2%)	25 (47.2%)	51 (58.0%)	18 (41.9%)
Separated	4 (5.6%)	1 (2.0%)	0 (0%)	2 (3.8%)	1 (1.1%)	0 (0%)
Divorced	14 (19.7%)	7 (14.3%)	5 (13.2%)	5 (9.4%)	12 (13.6%)	10 (23.3%)
Never married	25 (35.2%)	14 (28.6%)	9 (23.7%)	12 (22.6%)	15 (17.0%)	9 (20.9%)
Other	6 (8.5%)	13 (26.5%)	0 (0%)	5 (9.4%)	8 (9.1%)	4 (9.3%)
Subjective Social	N = 46	N = 24	N = 34	N = 45	N = 80	N = 42
Status (SSS)						
SSS- Society	5.70 (SD = 2.20)	5.13 (SD = 2.42)	6.85 (SD = 1.18)	5.80 (SD = 1.70)	6.01 (SD = 1.37)	5.21 (SD = 1.39)
SSS- School	6.93 (SD = 2.05)	6.80 (SD = 2.38)	7.24 (SD = 1.78)	7.07 (SD = 1.64)	7.11 (SD = 1.75)	7.69 (SD = 1.52)

Note. SSS- Society: Scale of Subjective Social Status – Society; SSS - School: Scale of Subjective Social Status – School.

Percentages may not add up to 100% because some were left blank.

Table 2

Demographic Variables Across Types of Schools.

Demographic Variables	Alternative High School	Regular Education	Private High School
Participants (N)	120	184	38
Gender			
Male	51 (42.5%)	68 (37.0%)	22 (57.9%)
Female	65 (54.2%)	115 (62.5%)	16 (42.1%)
Mean Age	16.52 (SD = 1.01)	16.34 (SD = .99)	16.24 (SD = .49)
Race and Ethnicity			
Caucasian	87 (72.5%)	176 (95.7%)	32 (84.2%)
African-American	15 (12.5%)	4 (2.2%)	3 (7.9%)
Asian/Asian-American	3 (2.5%)	1 (.5%)	1 (2.6%)
Hispanic/Latino/a	3 (2.5%)	0 (0%)	1 (2.6%)
Native American	4 (3.3%)	0 (0%)	0 (0%)
Middle Eastern	1 (.8%)	1 (.5%)	0 (0%)
Other	2 (1.7%)	1 (.5%)	1 (2.6%)
Multi-racial	17 (14.2%)	8 (4.3%)	0 (0%)
Grade level			
Freshman	14 (11.7%)	0 (0%)	0 (0%)
Sophomore	26 (21.7%)	44 (23.9%)	0 (0%)
Junior	35 (29.2%)	62 (33.7%)	29 (76.3%)

Senior	36 (30.0%)	75 (40.8%)	9 (23.7%)
Other	2 (1.7%)	0 (0%)	0 (0%)
Relationship Status			
Never	4 (3.3%)	26 (14.1%)	7 (18.4%)
Previous relationship, not now	45 (37.5%)	80 (43.5%)	19 (50.0%)
Current first relationship	35 (29.2%)	33 (17.9%)	3 (7.9%)
Current and previous	27 (22.5%)	44 (23.9%)	9 (23.7%)
Parental Marital Status			
Married	29 (24.2%)	94 (51.1%)	24 (63.2%)
Separated	5 (4.2%)	3 (1.6%)	0 (0%)
Divorced	21 (17.5%)	27 (14.7%)	5 (13.2%)
Never married	39 (32.5%)	36 (19.6%)	9 (23.7%)
Other	19 (15.8%)	17 (9.2%)	0 (0%)
Subjective Social Status	N = 70	N = 167	N = 34
(SSS)			
SSS - Society	5.50 (SD = 2.28)	5.75 (SD = 1.50)	6.85 (SD = 1.18)
SSS - School	6.89 (SD = 2.15)	7.25 (SD = 1.68)	7.24 (SD = 1.78)

Note. SSS- Society: Scale of Subjective Social Status – Society; SSS - School: Scale of Subjective Social Status – School.

Percentages may not add up to 100% because some were left blank.

Chapter 4

Results

Preliminary Analysis

SEM and path analysis can be adversely impacted by multicollinearity and extremely high correlations between variables (Ullman, 2007). Table 3 shows all zero-order correlations between variables. Tabachnik and Fidell (2007) indicated that problems occur with correlations above .95. There were no correlations this high between variables. Tabachnik and Fidell, however, also warned that problems in data analysis can occur with a correlation above .70 and researchers should be cautious about using both variables. In this study, Involuntary Engagement Coping was correlated with Involuntary Disengagement Coping ($r = .80$). Generally, a high correlation such as this is a possible candidate for combining variables but the decision was made to leave these as separate variables. This decision was partially supported by the initial validation study of the RSQ. According to Connor-Smith et al. (2000), Involuntary Engagement coping and Involuntary Disengagement coping correlated highly ($r = .76$), therefore a single factor model was tested along with the two-factor model. The results of the two-factor model were $\chi^2(26, N = 429) = 121.0, p < .001, CFI = .95, RMSEA = .09$ and the results of the one-factor model were $\chi^2(26, N = 429) = 173.3, p < .001, CFI = .92, RMSEA = .11$. According to Connor-Smith et al. (2000), both of these models provided an adequate fit but the two-factor model provided a superior fit and preserved a theoretical distinction about different types of involuntary coping. Further support for the two factor model was provided by Wadsworth et al. (2004), who conducted a confirmatory factor analysis of

the RSQ using a two-factor structure of Involuntary Engagement and Involuntary Disengagement with a sample of Navajo adolescents and found a good fit [$\chi^2(127) = 294.32, p > .05, CFI = .95, RMSEA = .06$] between the hypothesized model and the data. Based on these findings from previous research, involuntary engaged and disengaged coping were evaluated as two variables.

Additionally, Table 3 shows zero-order correlations for the exogenous and endogenous variables. As expected, the correlations showed that attachment anxiety was significantly related to involuntary engaged coping, distress and intentions to seek counseling. Attachment avoidance was significantly related to voluntary disengaged coping, involuntary disengaged coping, and distress. Finally, distress was significantly related to intentions to seek counseling

This study consisted of data from six different high schools: two were public alternative high schools, three were regular education public high schools, and one was a private high school. The two alternative high schools were combined to form an alternative schools category and the three regular education high schools were combined to form a regular education category. Tests of mean differences between the three school categories, alternative schools, regular education, and private high school, were conducted on the main variables of attachment anxiety, attachment avoidance, primary control coping, secondary control coping, involuntary disengaged coping, involuntary engaged coping, voluntary disengaged coping, distress, help-seeking intentions, and a willingness to seek help from professional counselors. There were no significant mean differences between the regular education and the private high school categories on the main variables. There was, however, a mean differences between the regular education

and private schools on the variable of subjective social status compared with society, $F(2, 271) = 7.62, p < .001$, indicating that there are differences in perceptions of social status as compared to society between regular education students and private high school students. Students' in the private high school believed their social status in society was higher compared to regular education students. The only mean difference between private high school and regular education students was on subjective social status compared to society but it was not one of the main variables, therefore, these schools were combined and the combination was compared with the alternative schools. Comparing the mean differences between the alternative high schools and the combined regular and private high schools led to a few significant mean differences (see Table 4). There were differences on the variables of primary control coping, secondary control coping, and voluntary disengaged coping, indicating that students from regular education and private schools, on average, used these three types of coping more than students from alternative high schools. There was also a difference on distress which indicated that alternative high school students, on average, reported more distress than students from regular and private high schools. Additionally, the main variables in this analysis were also compared by gender (see Table 5). Significant mean differences suggest, that on average, female high school students had higher levels of attachment anxiety, used more primary control, secondary control, and involuntary engaged coping strategies, reported more distress, and indicated a greater willingness to seek professional help than did male high school students. Though some mean differences exist within the data; all data were combined for the following path analyses because the sample size was too small to attempt to analyze separately depending on gender or school type.

Analytic Approach

The study consisted of two separate path models that were evaluated. According to the suggestions of Martens (2005), McDonald and Ho (2002), and Weston and Gore (2006), alternative models should be decided upon a priori and then tested. Therefore, two hypothesized models were tested. These a priori models were based on the hypotheses and research questions presented earlier and which were based on previous literature. Both models were estimated with path analysis using maximum likelihood estimation in AMOS 6.0. Based on results of these analyses, both of these models were modified but the specific paths and indirect effects were further analyzed for only one of these models. The first model (Model A) as shown in Figure 1 involved the exogenous variables of attachment anxiety (centered on the mean), attachment avoidance (centered on the mean), secondary coping, and an attachment anxiety and avoidance interaction term (attachment anxiety centered X attachment avoidance centered). Steps were taken to create an interaction term of attachment anxiety and avoidance. Based on the suggestions of Aiken and West (1991), variables that are going to be combined should be centered (subtracting the mean of the distribution from each score) and then the centered variables should be multiplied to create the interaction term. The first endogenous variables were mediators including the four coping variables of primary coping, involuntary engaged coping, involuntary disengaged coping, disengaged coping, as well as distress. The final endogenous variable, which is the dependent variable, was help-seeking intentions for interpersonal problems. The primary purpose of this first model was to test the research question examining the effect of an interaction of attachment anxiety and attachment avoidance on help-seeking intentions. The second model (Model B) also shown in Figure

3 consisted of the exogenous variables of attachment anxiety, attachment avoidance, and secondary coping. The endogenous variables included the four coping variables of primary coping, involuntary engaged coping, involuntary disengaged coping, disengaged coping, as well as distress. The final endogenous variable was help-seeking for interpersonal problems. The main difference between model A and B was that model B does not include an interaction term of anxiety and avoidance; therefore, the exogenous variables of attachment anxiety and attachment avoidance were not centered. Finally, all indirect effects were analyzed using bootstrapping in Mplus (Muthén & Muthén, 1998-2008) as suggested by Preacher and Hayes (2008) and Mallinckrodt, Abraham, Wei, and Russell (2005). Using Mplus for bootstrapping is ideal for testing the significance of three-chain indirect effects that were proposed for this study. Mplus provided a single standardized path estimate, unstandardized path estimate, and bias corrected confidence interval for each indirect effect. Estimates in path analysis are interpreted as they would be in regression. Unstandardized estimates provide an indicator of the relation between variables but this value is usually hard to interpret. The standardized coefficient is interpreted as an effect-size, in which an effect-size of .50 between two variables, for example, indicates that an increase in one SD in the predictor variable accounts for an increase of .5 SD for the outcome variable (Kline, 2005; Tabachnik & Fidell, 2007). Standardized coefficients are usually used to investigate the magnitude of a relationship. Kline suggests that standardized estimates should be interpreted along the guidelines that Cohen (1988) provided for effect-size. Kline suggests that a small effect would be about .10, a medium effect would be about .30, and a large effect would be about .50. Kline warned that this should be a guideline and should not be interpreted rigidly.

One of the benefits of using bootstrapping is that bias corrected confidence intervals are created which allows for an assessment of the significance of the standardized values. For most analyses, the significance of the standardized estimate is assumed based on the significance of the unstandardized estimate because a significance level or confidence interval cannot be created. It is usually assumed that if the unstandardized estimate is significant, so is the standardized estimate. However, according to Kline (2005) it is not always the case that the standardized estimate is significant. With many SEM programs that now use bootstrapping, standard errors can be created which allows for bias corrected confidence intervals to be created. Unless bootstrapping is used to create standard errors and confidence intervals, the significance of standardized estimates cannot be evaluated (Kline, 2005). According to Shrout and Bolger (2002), if the confidence interval does not include zero it is significant.

An additional caveat is also important to note. Not all indirect effects are significant just because each path in the chain was significant. Often, when the paths are combined they are no longer significant, indicating that although the individual paths are significant, that the full mediational path is not significant. Mplus was used to evaluate indirect effects if the analysis using AMOS indicated that the individual paths were significant.

Path Model Fit

Models were evaluated with the chi-square statistic but since the chi-square may be biased to reject a well fitting model with large sample sizes additional fit indices were used (Hu & Bentler, 1999). Based on recommendations by Hu and Bentler (1998; 1999), Bentler (2007), and Martens (2005), all models were evaluated using a two-index

strategy, the standardized root mean squared residual (SRMR; good fit < .08) and the comparative fit index (CFI; good fit > .95). The root mean squared error of approximation (RMSEA; good fit <.06, >.10 poor-fit) is another model fit index that was also included because it and the CFI are often-cited indexes (Ullman, 2007). McDonald and Ho (2002) report that an RMSEA <.08 indicates an adequate fit to the data.

According to Hu and Bentler (1999) the RMSEA may over-reject true models, especially with large samples. Weston and Gore (2006) suggest considering cutoff values for the CFI between .90 and .95 and the RMSEA between .05 and .10 for samples with fewer than 500 participants. Since the Chi-square is susceptible to sample size the χ^2/df ratio test was used as an additional way to assess model fit. χ^2/df scores < 3 indicate an acceptable fitting model (Kline, 1998). Additionally, the Bollen-Stine chi-square corrected bootstrap was used to evaluate fit for non-normal data. The Bollen-Stine controls for non-normality but since it is still based on the chi-square it is susceptible to inflated results because of large sample sizes (Byrne, 2001). Several authors have cautioned against using fit indices cutoffs as rules that need to be strictly followed but suggest that fit indices should be used as pieces to be considered in overall model fit (Bentler, 2007; McIntosh, 2007; Quintana & Maxwell, 1999).

SEM is susceptible to the influence of non-normality (Kline, 2005). Data were screened for outliers and normality. Since each of the models tested used a different number of variables, (i.e. model A used an interaction term), preliminary analysis for non-normality was conducted separately for both models.

Normality was assessed by analyzing the skew and kurtosis of all the variables in the models. According to the recommendations in Tabachnik and Fidell (2007),

univariate outliers have a z -score above 3.29. Based on studies investigating the impact of non-normality on maximum likelihood estimation (Finney & DiStefano, 2006; West, Finch, & Curran, 1995) and guidelines by Chou and Bentler (1995) and Curran, West, and Finch (1996), skew should not be above 2 and kurtosis should not be above 7. In AMOS multivariate non-normality is assessed using Mardia's coefficient (Byrne, 2001). Finney and DiStefano (2006) suggested that Mardia scores greater than 3 can cause inaccurate results. Specific multivariate outliers were investigated using Mahalanobis distance (Byrne, 2001; Tabachnik & Fidell, 2007). As described in the following sections pertaining to each model, non-normality was of concern in each model.

Model A. Data were initially assessed for univariate and multivariate outliers. Five univariate outliers were detected, one in the variable attachment avoidance ($z = 3.51$) and two in the distress ($z = 3.79, z = 3.83$) variable. In a first attempt to analyze the data, both variables were transformed using square-root transformations and the transformation eliminated the outliers. The interaction term of avoidance and anxiety also had two univariate outliers ($z = 3.39, z = 3.60$). Based on the recommendations of Ullman (2007) and Kline (2005), square-root, logarithm, inverse, odd-root polynomial, and odd-power polynomial transformations were tried and none eliminated the outliers. According to Tabachnik and Fidell (2007), transformations are not successful for some variables. Therefore the interaction term of avoidance and anxiety was not transformed (skew = .204, kurtosis = 1.827). Multivariate normality was assessed with Mardia's coefficient (15.301, $p < .05$) indicating significant non-normality. Mahalanobis distance was used to locate multivariate outliers. Five cases were found to be multivariate outliers ($p < .001$, Mahalanobis distance > 27.88). There was no discernable pattern that helped to explain

why these data were multivariate outliers. If these five cases would have been removed the remaining data would have still been significantly non-normal (Mardia = 11.652, $p < .05$). Since the remaining data were still significantly non-normal, bootstrapping was appropriate to use to correct for the non-normality found in the original sample. A review of recent articles in the *Journal of Counseling Psychology* that employed structural equation modeling or path analysis (Pederson & Vogel, 2007; Shaffer et al., 2006; Utsey, Giesbrecht, Hook, & Stanard, 2008; Wei, Heppner, Russell, & Young, 2006; Wei & Ku, 2007; Wu & Wei, 2008), revealed that studies with non-normal data which used a chi-square correction or bootstrapping did not remove outliers or transform their original data. Therefore, multivariate outliers and untransformed data were used for the analysis (Mardia = 17.833, $p < .05$).

Since data are non-normal there are procedures that can be used to limit or control for non-normality in maximum likelihood estimation. According to Finney and DiStefano (2006), bootstrapping is appropriate and the suggested method to handle non-normality. Bootstrapping is a procedure that is used to analyze non-normal data where multiple subsamples are pulled out of the original sample randomly and evaluated with statistically derived replacements. Following the bootstrapping method, 1000 samples were computed with replacements and a mean was generated of all estimates along with bias corrected confidence intervals (see Byrne, 2001 and Kline, 2005). Standardized bootstrap mean estimates are reported throughout the text.

The hypothesized model A (see Figure 1) provided a poor fit to the data, $\chi^2(24, N = 342) = 527.000$, $p < .001$, $\chi^2/df = 21.96$, SRMR = .1820, CFI = .603, RMSEA = .248 90% Confidence Interval (CI = .230, .269). The Bollen-Stine bootstrap ($p = .002$) also

indicated a poor fitting model. Because the model was a poor fit to the data, modifications were made based on Modification Indexes (MI) generated in Amos (Byrne, 2001). Only MI that made sense based on previous research and theory were added. The following path estimate and correlations were added one at a time based on MI, such as: primary coping with secondary coping [MI = 128.846, $\chi^2(23, N = 342) = 365.166, p < .001$], attachment anxiety to voluntary disengaged coping [MI = 35.404, $\chi^2(22, N = 342) = 304.252, p < .001$], attachment anxiety to involuntary disengaged coping [MI = 31.343, $\chi^2(21, N = 342) = 215.731, p < .001$], voluntary disengaged coping with involuntary engaged coping [MI = 30.784, $\chi^2(20, N = 342) = 129.325, p < .001$], voluntary disengaged coping with secondary coping [MI = 31.730, $\chi^2(19, N = 342) = 95.211, p < .001$], involuntary engaged coping with primary coping [MI = 23.312, and $\chi^2(18, N = 342) = 67.199, p < .001$], and one last path was added from attachment avoidance to primary control coping [MI = 18.024, $\chi^2(17, N = 342) = 46.351, p < .001$]. This respecified model (see Figure 2) provided a reasonably good fit to the data, $\chi^2(17, N = 342) = 46.351, p < .001, \chi^2/df = 2.73, SRMR = .0513, CFI = .977, RMSEA = .071$ (90% CI = .047, .096). This model appears to be a reasonably good fit to the data. The path from the interaction of attachment anxiety and attachment avoidance to help-seeking intentions was non-significant, $\beta = -.328, p = .431$, (95% bias corrected confidence interval) 95% CI = -1.366, .612. There was no relation between the interaction of attachment anxiety and attachment avoidance and professional help-seeking. Because the interaction of attachment anxiety and avoidance to help-seeking intentions was not significant and there were no relations between the interaction of attachment anxiety and

attachment avoidance with other variables in the model it was appropriate to remove the interaction variable. A new model was run without the interaction variable.

Model B. Three outliers were detected, one in the variable attachment avoidance ($z = 3.51$) and two in the distress ($z = 3.79, z = 3.83$) variable. According to the recommendation of Tabachnik and Fidell (2007), these variables were transformed to limit the impact of outliers. Both variables were initially transformed using square-root transformations and the transformation eliminated the outliers. Means, standard deviations, skew, and kurtosis are listed in Table 6. There were no univariate variables with scores above acceptable limits. Three cases were found to be multivariate outliers ($p < .001$, Mahalanobis distance > 26.13) and were initially removed from the analysis. The three participants who were removed were all females from one of the alternative high schools. One participant in particular had high scores on the distress measure and high scores on all other measures. These scores seemed extreme but because the scores were from a student in an alternative high school, it is very likely that the one student in particular may be experiencing a lot of distress, is part of the population and should not be removed. In re-including this one outlier the data were now once again non-normal (Mardia > 3 , $p > .05$). Therefore, as with model A, the final analysis was conducted using bootstrapping with untransformed data and included all multivariate outliers ($N = 442$; Mardia = 7.759, $p > .05$).

The hypothesized model B (see Figure 3) provided a poor fit to the data, $\chi^2(18, N = 442) = 510.286, p < .001, \chi^2/df = 28.35, SRMR = .1996, CFI = .608, RMSEA = .283, 90\% CI = .262, .305$. The Bollen-Stine bootstrap ($p = .001$) also indicated a poor fitting model. The hypothesized model was a poor fit, therefore, modification indexes (MI)

provided by AMOS were used to modify the model. Using modification indexes haphazardly without thought given to theory and previous research can lead to models that are a strong fit to the current data but cannot be replicated by further studies (Martens, 2005). Following the guidelines recommended by Byrne (2001), Kline (2005), and Martens (2005), all modifications made were congruent with existing theory and previous research. According to Kline (2005) and Ullman (2007) changes based on modification indexes should be done one at a time and all parameters should be added before non-significant paths are removed. According to Kline, if paths are removed, they should be removed with caution if they were initially included based theory and research. Changes should only be made until the model fits in order to create the most parsimonious model with the fewest modifications. The following path estimate and correlations were added one at a time based on MI: primary coping with secondary coping [MI = 128.846, $\chi^2(17, N = 442) = 348.453, p < .001$], attachment anxiety to voluntary disengaged coping [MI = 35.404, $\chi^2(16, N = 442) = 287.538, p < .001$], attachment anxiety to involuntary disengaged coping [MI = 31.343, $\chi^2(15, N = 442) = 199.017, p < .001$], voluntary disengaged coping with involuntary engaged coping [MI = 30.784, $\chi^2(14, N = 442) = 112.612, p < .001$], and voluntary disengaged coping with secondary coping [MI = 31.730, $\chi^2(13, N = 442) = 78.498, p < .001$], involuntary engaged coping with primary coping [MI = 23.312, $\chi^2(12, N = 442) = 50.486, p < .001$] and finally a path from attachment avoidance to primary control coping [MI = 18.024, $\chi^2(11, N = 442) = 29.638, p < .001$]. The respecified model (see Figure 4) provided a reasonably good fit to the data, $\chi^2(11, N = 442) = 29.638, p < .001, \chi^2/df = 2.69$, SRMR = .0502, CFI = .985, RMSEA = .070, 90% CI = .040, .102. The Bollen-Stine bootstrap (p

= .007) did not support a good fitting model but this again may be due to a large sample size. This model appeared to be a reasonably good fit to the data using Weston and Gore's (2006) guide of RMSEA as less than .10 for fewer than 500 participants.

According to the suggestions of Ullman (2007), when modifications are made it is always best to test the modified model with a new sample of participants. Since a new sample was not available, it was appropriate to correlate the paths common to both the hypothesized (Figure 3) and final modified model (Figure 4). This comparison is made to investigate whether path estimates changed a great deal from the hypothesized to the respecified model. If the estimates have changed considerably, it may mean that the model cannot be replicated and is only fitting to this current data by chance. According to Tanaka and Huba, a correlation above .90 is needed to suggest that the relations within the model are similar after modifications (as cited in Ullman, 2007). The correlation between paths of the hypothesized and modified model was $r(18) = .99, p < .01$, suggesting that relations had been preserved and the estimates did not change substantially from the hypothesized to the modified model. This indicates that the model has an adequate chance of being replicated.

More than half (54%) of the variance in distress was accounted for by attachment anxiety, attachment avoidance, primary coping, secondary coping, involuntary disengaged coping, involuntary engaged coping, and disengaged coping. Approximately 14% of the variance in help-seeking intentions was accounted for by distress, attachment anxiety, attachment avoidance, primary coping, secondary coping, involuntary disengaged coping, involuntary engaged coping, and disengaged coping. About 23% of the variance on involuntary disengaged coping and 29% of the variance on voluntary

disengaged coping was accounted for by attachment anxiety and attachment avoidance. Attachment anxiety accounted for 25% of the variance in involuntary engaged coping. Finally, attachment avoidance accounted for 5% of the variance in primary coping.

All of the following hypotheses regarding direct and indirect effects were evaluated using the final model (see Figure 4). The significance of the hypothesized direct effects was tested with 1000 bootstrap samples. In the text, bootstrap standardized mean estimates are reported. All direct effects, both unstandardized and standardized are reported in Table 7. All indirect effects are listed in table 8 but significant and noteworthy effects will be discussed. Because bootstrapping was used, bias corrected confidence intervals of the unstandardized estimates were also generated and are reported in Tables 7 and 8. Additionally, to aid in following the hypotheses and research questions, all direct paths with mean bootstrap standardized estimates are illustrated in Figure 5.

Hypotheses and Research Questions

The results of hypotheses, research questions, and post hoc analyses are reported and grouped in the same order the topics were presented in the introduction and the literature review. First, results will be presented for attachment and professional help-seeking. Second, all findings for attachment and psychological distress will be discussed. Third, the relations between attachment and coping will be reported. Fourth, the association of coping and professional help-seeking will be discussed. Finally, the relations of psychological distress and professional help-seeking will be elaborated upon. In addition, the validity of the Intentions to Seek Counseling Inventory Interpersonal Concerns subscale (ISCI) with adolescents will be presented.

Attachment and Professional Help-Seeking Intentions

The first hypothesis was not supported. There was not a significant positive direct link between attachment anxiety and help-seeking intentions, $\beta = .113, p = .061$. The second hypothesis, that there would be an indirect effect between attachment anxiety and help-seeking intentions mediated by involuntary engaged coping (emotional arousal, impulsive action, intrusive thoughts, and rumination) and distress was not supported ($\beta = .01, p > .05$). The third hypothesis was not supported. There was no indirect effect between attachment anxiety and counselor help-seeking through primary control coping (problem solving, emotion regulation, and emotional expression) and distress ($\beta = .00, p > .05$). In addition to the proposed hypotheses, other indirect effects were investigated. There was a significant indirect effect between attachment anxiety and help-seeking intentions through involuntary disengaged coping (emotional numbing and inaction) and distress, $\beta = .03, p < .05$. There was also an indirect effect between attachment anxiety and help-seeking through distress, $\beta = .07, p < .05$.

The fourth hypothesis was not supported. There was no direct, significant association between attachment avoidance and help-seeking intentions ($\beta = .05, p > .05$). The fifth hypothesis, however, that there would be an indirect effect between attachment avoidance and counselor help-seeking through involuntary disengaged coping (emotional numbing and inaction) and then distress was supported through a significant path estimate ($B = .083, p < .05, 95\% \text{ CI} = .026, .203$); nevertheless the standardized effect was not significant ($\beta = .008, p > .05, 95\% \text{ CI} = .000, .015$). According to Shrout and Bolger (2002), if the confidence interval includes zero it is not significant. The sixth hypothesis, that there would be an indirect effect between attachment avoidance and

counselor help-seeking through voluntary disengaged coping and then distress was not supported ($\beta = .00, p > .05$). In addition to the hypothesized indirect effects, there was also a significant indirect effect from attachment avoidance to help-seeking through distress, but again the path estimate was significant ($B = .200, p < .05, 95\% \text{ CI} = .026, .574$) but the standardized estimate was not significant ($\beta = .0192, p > .05, 95\% \text{ CI} = -.006, .044$). In contrast, the indirect effect from attachment avoidance to help-seeking through primary coping (problem solving, emotional expression, and emotion regulation) was significant, $\beta = -.05, p < .05$. This indicates that those high in avoidance are unlikely to use primary coping which is then associated with less of a willingness to seek help.

The first research question was tested using Model A. As reported above, there was no association between the interaction of attachment anxiety and attachment avoidance to help-seeking intentions, $\beta = -.04, p = .485, 95\% \text{ CI} = -.143, .074$.

Attachment and Psychological Distress

The seventh hypothesis that there would be a direct link between attachment anxiety and distress was supported ($\beta = .33, p < .05$). Levels of attachment anxiety were positively associated with levels of psychological distress. The second research question asked whether there was a direct relation between attachment avoidance and distress. In fact, there was a significant relation between attachment avoidance and distress ($\beta = .10, p < .05$).

There were additional significant indirect effects between attachment anxiety and attachment avoidance and distress. There was an indirect effect between attachment anxiety and distress through involuntary disengaged coping (emotional numbing and inaction), $\beta = .14, p < .05$. There was also a significant indirect effect between attachment

avoidance and distress through involuntary disengaged coping, $\beta = .04$, $p < .05$. Thus, both attachment anxiety and avoidance were linked to distress through involuntary disengaged coping.

Attachment and Coping

The eighth hypothesis was supported. As expected, there was a direct link between attachment anxiety and involuntary engaged coping (emotional arousal, impulsive action, intrusive thoughts, and rumination; $\beta = .50$, $p < .05$). Levels of attachment anxiety were positively related to levels of involuntary engaged coping strategies. The ninth hypothesis that there would be a direct link between attachment anxiety and primary control coping (problem solving, emotion regulation, and emotional expression) was not supported ($\beta = .03$, $p > .05$). Contrary to expectation, there was no relation between attachment anxiety and primary control coping.

Besides the planned hypotheses there were additional findings that may be useful to report. There was a significant direct effect between attachment anxiety and voluntary disengaged coping (denial and avoidance; $\beta = .51$, $p < .001$), such that an increase of one standard deviation on attachment anxiety accounted for half a standard deviation increase in voluntary disengaged coping. There was also a significant direct effect between attachment anxiety and involuntary disengaged coping (involuntary avoidance, emotional numbing, and inaction; $\beta = .44$, $p < .001$). There was a strong effect-size for this link, such that an increase in attachment anxiety of one standard deviation accounted for almost a half a standard deviation difference in involuntary disengaged coping. There were also significant relations between attachment avoidance and (a) voluntary disengaged coping (avoidance and denial; $\beta = .14$, $p < .05$), (b) involuntary disengaged

coping (emotional numbing and inaction; $\beta = .12, p < .05$), and primary control coping (problem solving, emotion regulation, and emotion expression; $\beta = -.20, p < .05$). Higher levels of attachment avoidance were associated with reporting significantly greater use of voluntary and involuntary disengaged coping strategies and significantly less use of primary coping strategies.

Coping and Psychological Distress

The tenth hypothesis, that there would be a negative direct link from secondary coping (distraction, positive thinking and acceptance) to distress was not supported ($\beta = -.00, p > .05$), suggesting that there is not a relation, positive or negative, between secondary coping (acceptance, positive thinking, and distraction) and distress. In addition to the hypothesized links, there were several additional paths that were investigated. Involuntary disengaged coping (emotional numbing and inaction) was significantly associated with distress, $\beta = .33, p < .05$. Voluntary disengaged coping (avoidance and denial) was not significantly related to distress ($\beta = .06, p > .05$). There was no significant relation between involuntary engaged coping (emotional arousal, impulsive action, intrusive thoughts, and rumination) and distress ($\beta = .13, p > .05$), nor was there a significant relation between primary control coping (problem solving, emotion regulation, and emotional expression) and distress, $\beta = -.05, p > .05$.

Coping and Professional Help-Seeking Intentions

The third research question concerned the relation between primary control coping and counselor help-seeking intentions. Results indicated that there was a positive relation between primary control coping (problem solving, emotion regulation and emotion expression) and help-seeking intentions ($\beta = .24, p < .05$). Those who were more

likely to use primary control coping strategies were more apt to be willing to seek counseling. Additionally, there was a significant indirect effect between involuntary disengaged coping (emotional numbing and inaction) and help-seeking intentions through distress, $\beta = .06, p < .05$.

Psychological Distress and Professional Help-Seeking

The eleventh hypotheses that there would be a direct link between distress and help-seeking was supported ($\beta = .20, p < .05$). Distress was associated with intentions of seeking help. Those adolescents who indicated more distress also indicated a willingness to seek help.

Post Hoc Analysis

Post hoc analyses were conducted in order to investigate relations between specific subscales of the Brief Stress Inventory (BSI), specific items on the Intentions to Seek Counseling Questionnaire (ISCI), General Help-Seeking Questionnaire (GHSQ), and the attachment avoidance and attachment anxiety subscales. Specifically, the depression subscale of the BSI and the willingness to seek help for depression item of the ISCI was $r = .243, p < .01$. Depression symptoms were related to the willingness to seek help for depression. Attachment avoidance was significantly related to the somatization subscale of the BSI, $r = .166, p < .01$. Although it was a small correlation, attachment avoidance was associated with the reporting of somatization symptoms.

Investigating individual items on the GHSQ uncovered patterns of help-seeking. Those adolescents who were willing to seek help from a boyfriend or girlfriend were also willing to seek help from friends ($r = .54, p < .01$) but much less willing to seek help from a parent ($r = .18, p < .01$), other family member ($r = .24, p < .01$), or a counseling

professional ($r = .13, p < .05$). Those adolescents who reported a willingness to seek help from a parent were more willing to seek help from another family member ($r = .49, p < .01$) or a professional counselor ($r = .28, p < .01$). While these relations were not large, they suggested that some adolescents were more comfortable seeking help from peers whereas others preferred adults, either within the family or professionals.

Attachment anxiety was positively associated with a willingness to seek help from friends ($r = .12, p < .05$) but was negatively associated with seeking help from parents ($r = -.16, p < .05$) and other family members ($r = -.14, p < .05$). Attachment anxiety was unrelated to seeking help from a partner ($r = .04, p > .05$) or a counselor ($r = .06, p > .05$). Those high in attachment anxiety appeared willing to seek help from friends but not parents and family. Attachment avoidance was related to the GHSQ items endorsing an unwillingness to seek help from a boyfriend or girlfriend ($r = -.48, p < .01$) and to not seek help from friends ($r = -.24, p < .01$) but there was no relation to willingness to seek help from a parent ($r = -.10, p > .05$), other family member ($r = -.08, p > .05$), or a counseling professional ($r = .04, p > .05$). This finding suggests that attachment avoidance was negatively related to the likelihood of seeking help from peers but it is unrelated to seeking help from parents or professionals. Attachment avoidance was also significantly related to the GHSQ item indicating an unwillingness to seek help from anyone ($r = .30, p < .05$), which indicated that attachment avoidance was associated with the likelihood of not seeking help from anyone.

*Validity of the Intentions to Seek Counseling Inventory- Interpersonal Concerns
Subscale (ISCI)*

The ISCI has been used in numerous studies with college age students. Since it had not been used with adolescents it needed to be validated for use with this population. When using a measure with a new population it is important to validate that measure in two equally important ways. First, the measure should be correlated with an existing measure already validated for that population. The ISCI interpersonal concerns subscale was correlated with an existing measure of help-seeking that has been used with adolescents. The ISCI interpersonal concerns subscale was significantly related to the GHSQ help-seeking scale ($r = .30, p < .01$) and the help-seeking from professional counselors item ($r = .32, p < .01$). Second, evidence for instrument validity can be found through theoretically-predicted relations of that instrument with other constructs. As presented earlier in this chapter, the Interpersonal Problems Subscale of the ISCI was significantly related to psychological distress in the hypothesized directions. Additional support for the validity of the ISCI subscale with adolescents was provided by a theoretically-expected relation with primary control coping ($r = .23, p < .01$) and attachment anxiety ($r = .24, p < .01$). The final piece of evidence in support of using the ISCI interpersonal concerns subscale with adolescents is the adequately fitting path model evaluated in this study.

Table 3

Correlations.

Variables	1	2	3	4	5	6	7	8	9	10	11
1. ANX	1.0	.09	.01	.01	.50**	.45**	.52**	.59**	.24**	.06	-.04
2. AVO		1.0	-.25**	-.12*	.09	.20**	.18**	.23**	.05	.04	-.07
3. PCope			1.0	.62**	.25**	.08	.13*	-.01	.23**	.15**	.06
4. SCope				1.0	.13*	.09	.27**	.02	.10	.11	-.03
5. InVolEng					1.0	.80**	.61**	.59**	.18**	.12*	.04
6. InVolDis						1.0	.65**	.64**	.14*	.14*	.05
7. VolDis							1.0	.54**	.18**	.18**	-.07
8. BSI								1.0	.27**	.18**	.10
9. Help									1.0	.32**	-.01
10. Help-Couns										1.0	.04
11. Anx* Avo											1.0

Note. ANX = attachment anxiety; AVO = attachment avoidance; Anx*Avo = attachment anxiety centered * attachment avoidance centered; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions (ISCI subscale); Help-Couns = help seeking from professionals item (GHSQ Item E)

**p<.01. *p<.05.

Table 4

Differences Between Alternative and Regular and Private High Schools.

Variables	Alternative Schools		Regular and Private Schools		F
	Mean	SD	Mean	SD	
ANX	3.601	1.317	3.600	1.226	.00
AVO	3.042	1.226	2.975	1.043	.29
PCope	12.261	6.123	15.610	5.627	25.92**
SCope	16.461	7.071	19.160	6.465	12.71**
InVolDis	11.121	7.283	10.630	6.655	.38
InVolEng	16.694	10.425	17.617	10.338	.62
VolDis	8.712	5.268	10.624	4.996	10.99**
BSI	1.230	.880	1.009	.655	6.91**
Help	25.282	12.460	24.470	11.343	.37
Help-Couns	2.320	1.727	2.410	1.607	.25
SSS - Society	5.50	2.77	5.94	1.51	3.34
SSS - School	6.89	2.15	7.24	1.69	2.01

Note. ANX = attachment anxiety; AVO = attachment avoidance; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions (ISCI subscale); Help-Couns = help seeking from professionals item (GHSQ Item E); SSS – Society = Scale of Subjective Social Status – Society; SSS – School = Scale of Subjective Social Status – School

** $p < .01$. * $p < .05$.

Table 5
Gender Differences Between Variables.

Variables	Females		Males		F
	Mean	SD	Mean	SD	
ANX	3.765	1.229	3.373	1.261	8.16**
AVO	2.942	1.168	3.083	1.026	1.33
PCope	15.957	5.753	12.433	5.758	30.75**
SCope	19.144	6.521	17.103	6.875	7.68**
InVolDis	11.303	7.169	10.254	6.445	1.91
InVolEng	18.728	10.738	15.577	9.533	7.75**
VolDis	10.432	5.282	9.371	4.942	3.49
BSI	1.198	.726	.928	.754	11.04**
Help	26.613	11.924	22.065	10.961	12.75**
Help-Couns	2.350	1.597	2.400	1.726	.05
SSS - Society	5.67	1.77	6.06	1.69	3.16
SSS - School	7.26	1.78	6.99	1.87	1.42

Note. ANX = attachment anxiety; AVO = attachment avoidance; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions (ISCI subscale); Help-Couns = help seeking from professionals item (GHSQ Item E); SSS – Society = Scale of Subjective Social Status – Society; SSS – School = Scale of Subjective Social Status – School

** $p < .01$. * $p < .05$.

Table 6

Variable List and Descriptive Data.

Variables	Mean	SD	Skew	Kurtosis
ANX	3.600	1.257	.170	-.589
AVO	2.998	1.109	.385	-.135
PCope	14.435	6.014	-.265	-.560
SCope	18.213	6.797	-.193	-.272
InVolDis	10.799	6.875	.673	.144
InVolEng	17.293	10.363	.424	-.438
VolDis	9.953	5.167	.298	-.516
BSI	1.087	.748	.863	.538
Help	24.758	11.735	.492	-.567
Anx*Avo	.126	1.331	.204	1.827
Help-Couns	2.38	1.648	1.124	.438

Note. ANX = attachment anxiety; AVO = attachment avoidance; Anx*Avo = attachment anxiety centered * attachment avoidance centered; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions (ISCI subscale); Help-Couns = help seeking from professionals item (GHSQ Item E)

Table 7

Direct Effects and Covariances for the Final Respecified Model.

Variable	Variable	Bootstrap			Bootstrap Mean
		Mean Estimate	SE	95% CI	Standardized Estimate
ANX to	InVolEng	4.058**	.397	3.21, 4.77	.496
ANX to	PCope	.138	.198	-.26, .50	.030
AVO to	VolDis	.637**	.183	.30, 1.02	.137
AVO to	InVolDis	.769**	.201	.365, 1.17	.124
AVO to	PCope	-1.064**	.233	-1.53, -.59	-.201
ANX to	VolDis	2.070**	.198	1.65, 2.42	.506
ANX to	InVolDis	2.423**	.283	1.82, 2.96	.444
ANX to	BSI	.197**	.031	.13, .25	.331
PCope to	BSI	-.006	.007	-.02, .01	-.050
Scope to	BSI	.000	.006	-.01, .01	-.003
InVolEn to	BSI	.009	.006	-.00, .02	.128
VolDis to	BSI	.009	.010	-.01, .03	.064
InVolDis to	BSI	.036**	.008	.02, .05	.327
AVO to	BSI	.065*	.032	.004, .13	.096
ANX to	Help	1.050	.578	-.02, 2.21	.113
PCope to	Help	.469**	.096	.29, .67	.236
BSI to	Help	3.089**	1.139	.77, 5.32	.197
AVO to	Help	.529	.585	-.61, 1.68	.050
ANX with	AVO	.093	.070	-.02, .27	.093

InVolEng with	InVolDis	39.847**	3.292	33.48, 46.47	.746
VolDis with	InVolDis	13.654**	1.573	10.91, 17.18	.525
VolDis with	SCope	5.833**	1.181	3.71, 8.22	.203
InVolEng with	VolDis	16.633**	.047	12.46, 21.09	.434
InVolEng with	PCope	8.446**	.031	5.49, 11.88	.166
PCope with	SCope	21.869**	.040	17.87, 26.59	.573

Note. ANX = attachment anxiety; AVO = attachment avoidance; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions (ISCI subscale)

** $p < .01$. * $p < .05$.

Table 8

Indirect Effects for the Final Respecified Model.

Indirect Effects	Bootstrap		95% CI	Bootstrap
	Indirect Effect	Bootstrap SE	Bootstrap Estimates	Standardized Estimates
Hypothesized Effects				
ANX → InVolEng →	.119	.092	-.002, .382	.013
BSI → Help				
ANX → PCope → BSI	-.003	.007	-.032, .003	.000
→ Help				
AVO → InVolDis → BSI	.083*	.041	.026, .203	.008
→ Help				
AVO → VolDis → BSI	.018	.023	-.009, .088	.002
→ Help				
Post-Hoc Effects				
ANX → VolDis → BSI	.057	.070	-.043, .245	.006
→ Help				
ANX → InVolDis → BSI	.262*	.117	.081, .577	.028
→ Help				
AVO → PCope → BSI	.022	.023	-.010, .083	.002
→ Help				
AVO → PCope → Help	-.495**	.150	-.841, -.237	-.047
ANX → VolDis → BSI	.019	.020	-.021, .061	.032
ANX → InVolDis → BSI	.086**	.022	.050, .138	.144

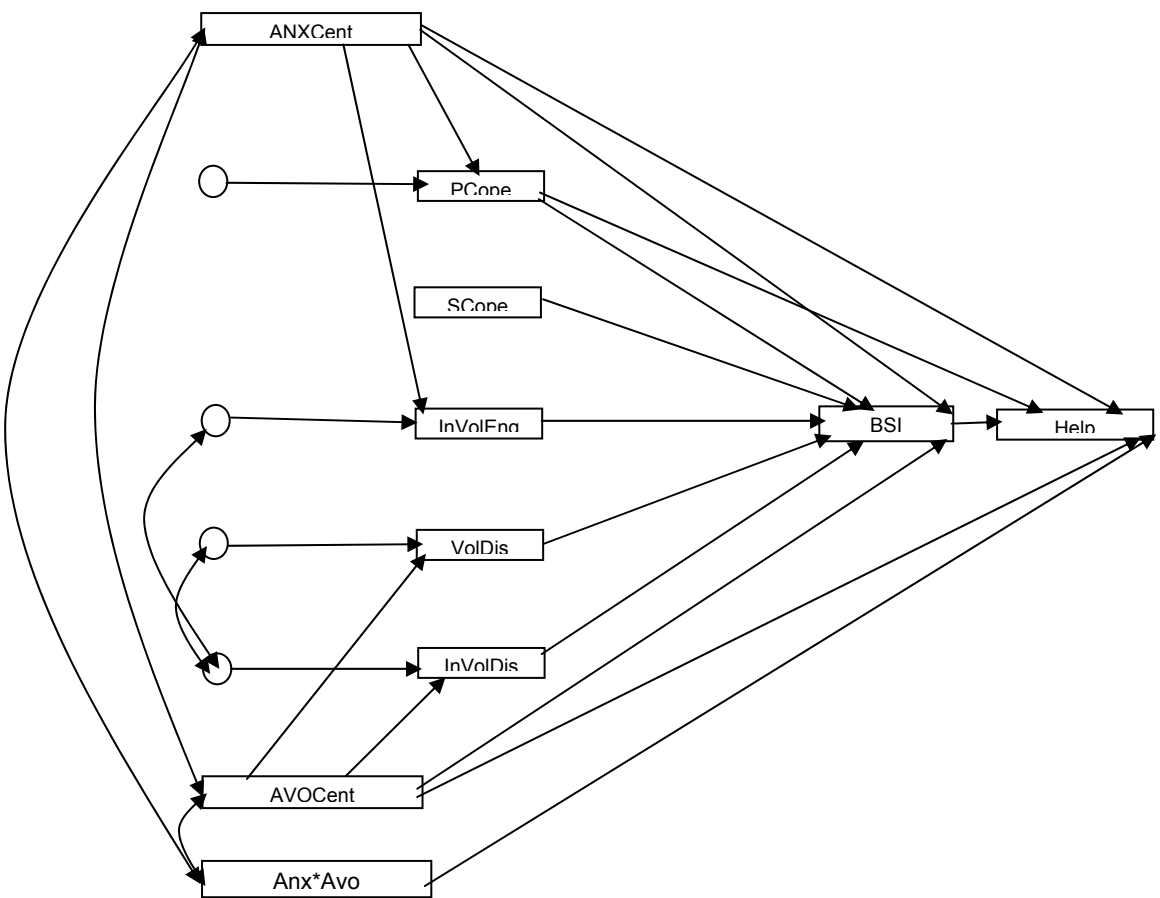
ANX → InVolEng →	.039	.022	-.004, .082	.065
BSI				
ANX → PCope →	-.001	.002	-.008, .001	-.002
BSI				
AVO → VolDis → BSI	.006	.007	-.005, .023	.009
AVO → InVolDis →	.027**	.010	.011, .052	.040
BSI				
AVO → PCope → BSI	.007	.007	-.005, .022	.010
AVO → BSI → Help	.200*	.133	.026, .574	.019
ANX → BSI → Help	.603*	.244	.169, 1.095	.065
PCope → BSI → Help	-.020	.021	-.072, .013	-.010
SCope → BSI → Help	.000	.019	-.042, .034	.000
InVolEng → BSI → Help	.029	.023	-.001, .097	.026
VolDis → BSI → Help	.028	.033	-.026, .108	.012
InVolDis → BSI →	.108**	.045	.030, .211	.063
Help				

Note. ANX = attachment anxiety; AVO = attachment avoidance; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions

** $p < .001$ * $p < .05$.

Figure 1

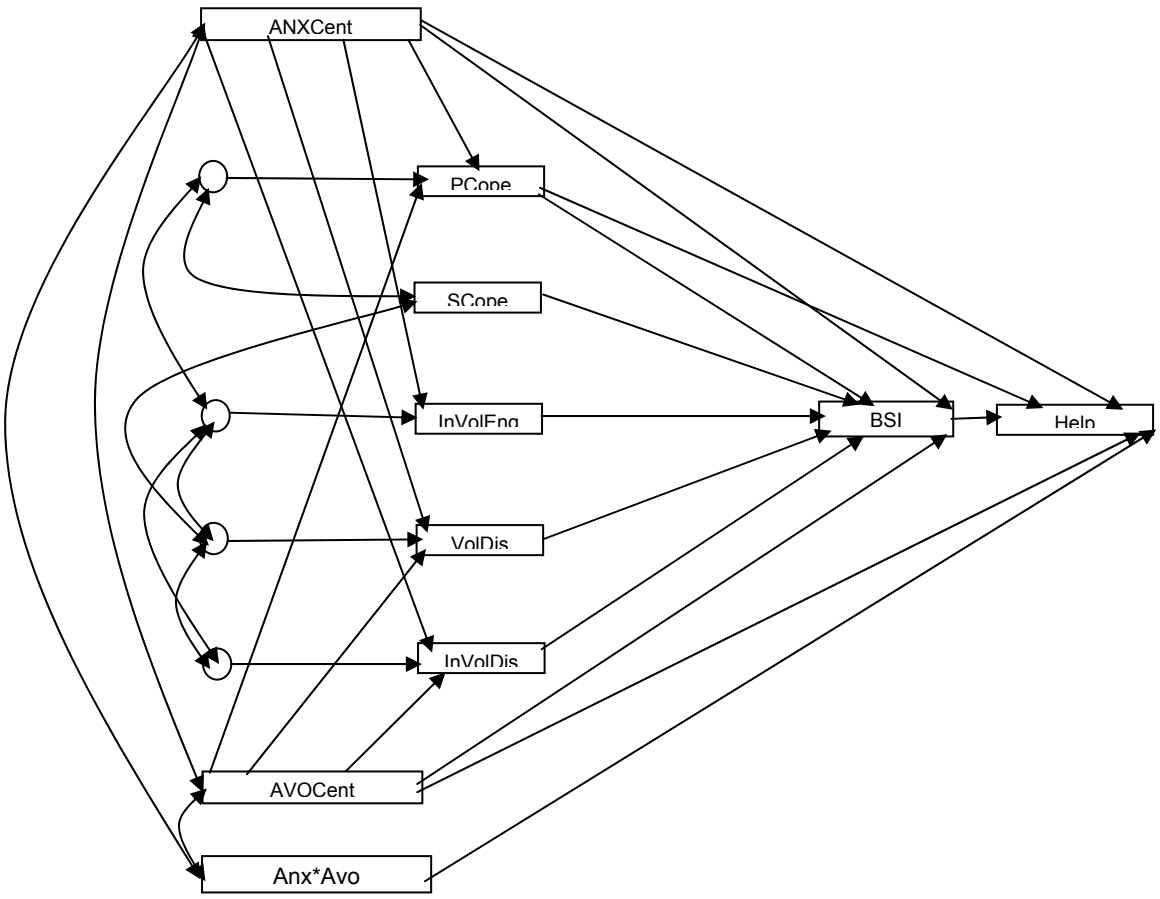
Hypothesized Model A.



Note. ANXCent = attachment anxiety centered; AVOCent = attachment avoidance centered; Anx*Avo = attachment anxiety centered * attachment avoidance centered; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intention

Figure 2

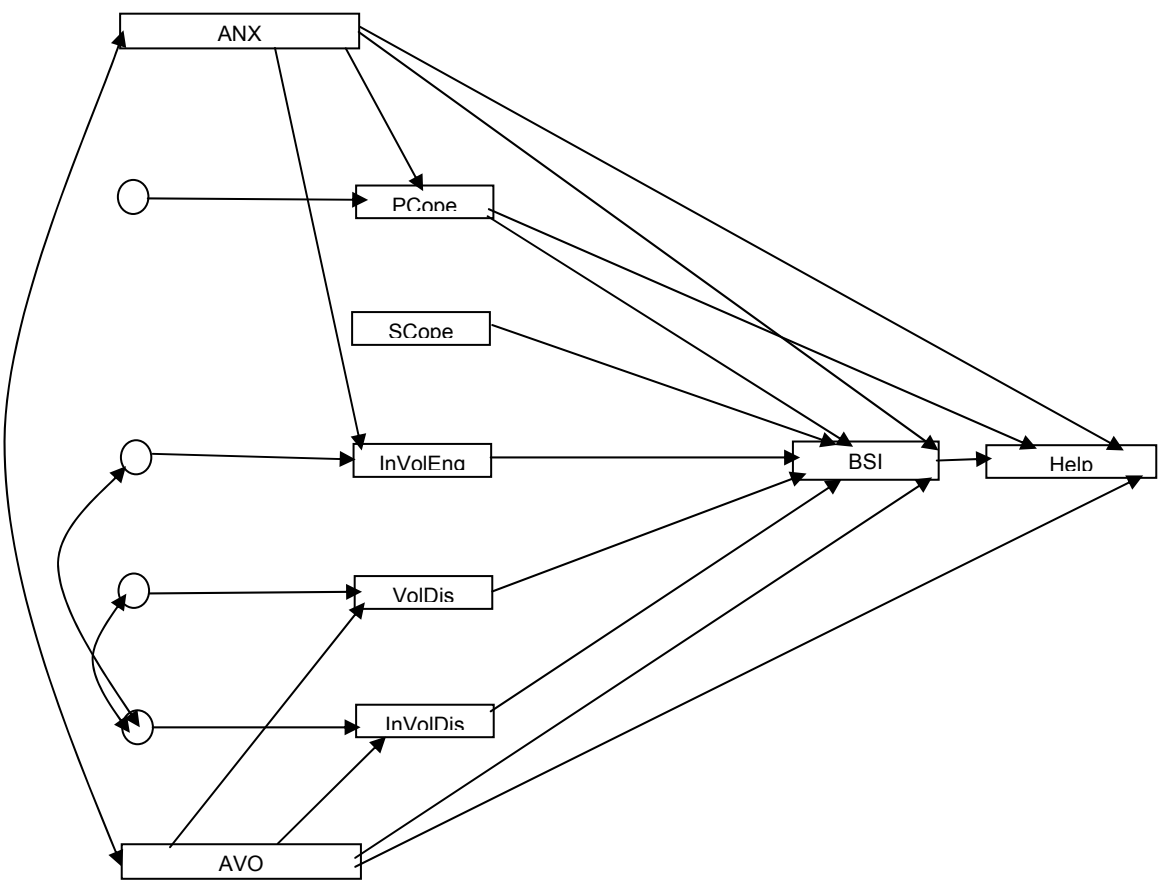
Respecified Model A.



Note. ANXCent = attachment anxiety centered; AVOCent = attachment avoidance centered; Anx*Avo = attachment anxiety centered * attachment avoidance centered; PCope = primary coping; SCoop = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions

Figure 3

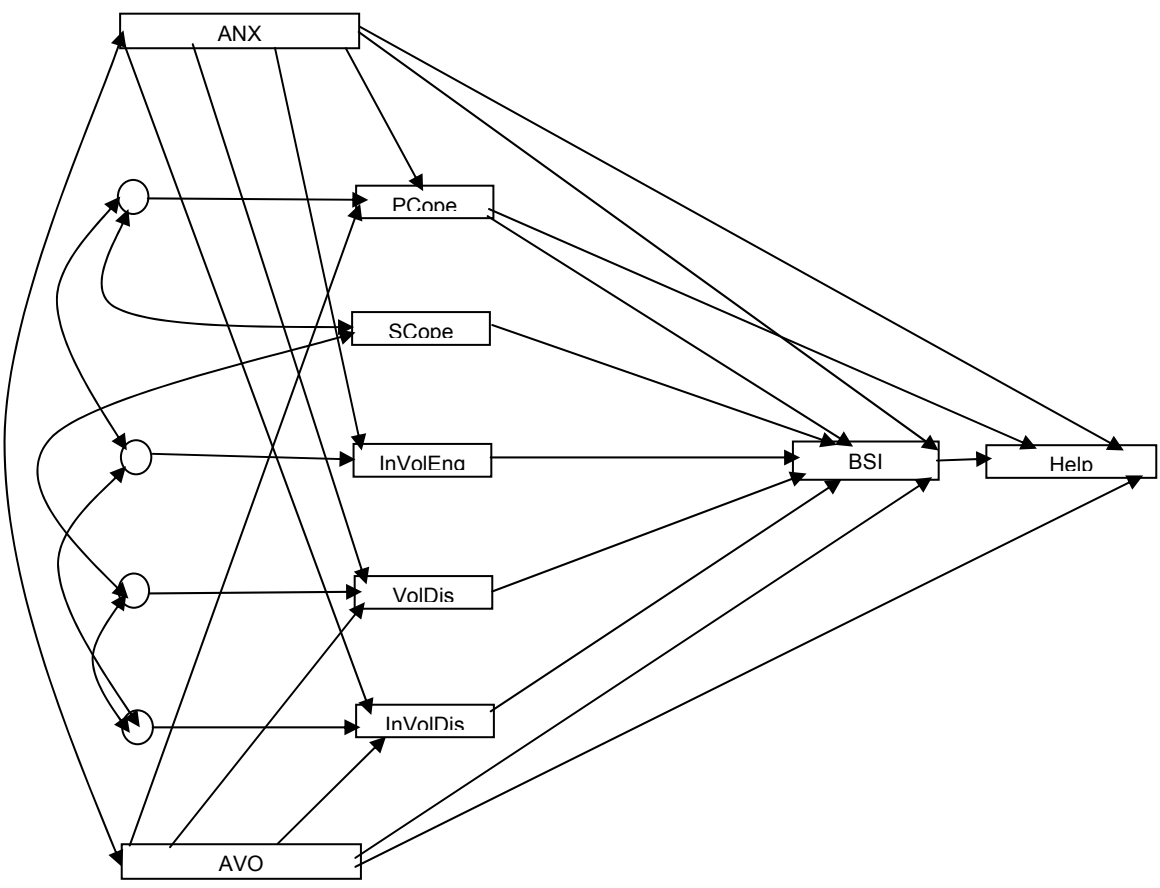
Hypothesized Model B.



Note. ANX = attachment anxiety; AVO = attachment avoidance; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions

Figure 4

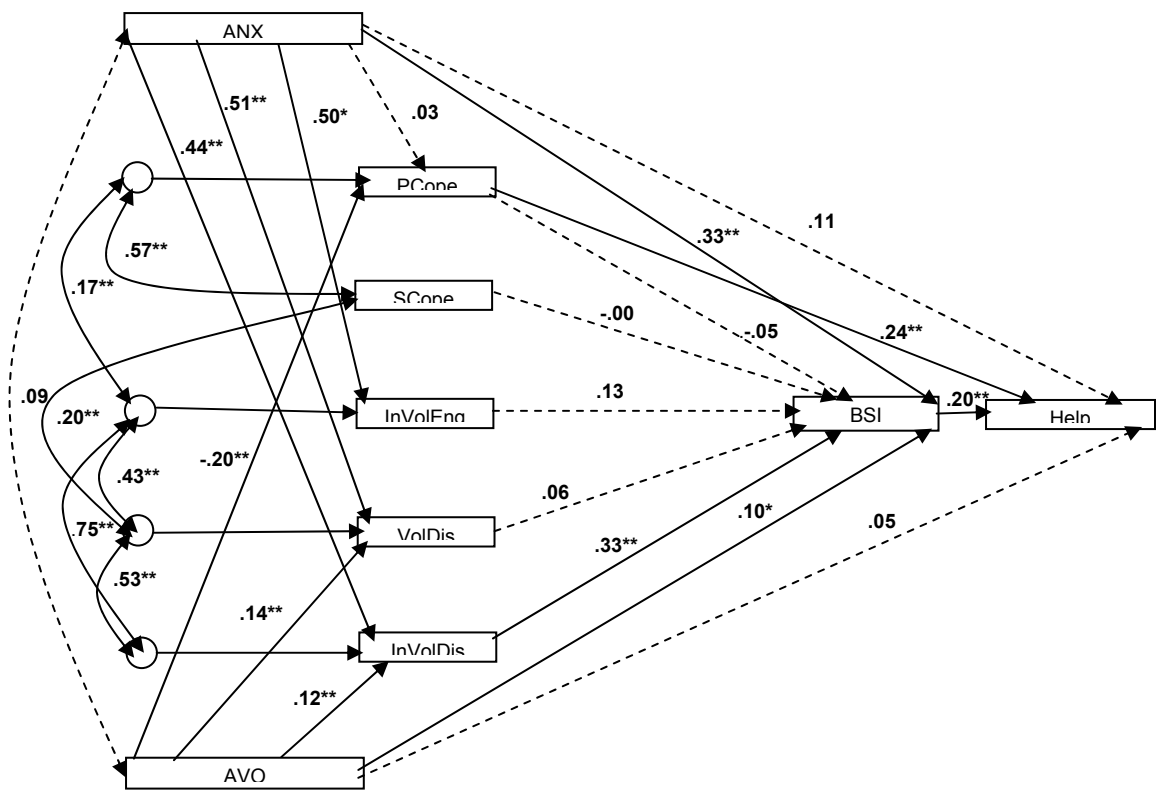
Respecified Model B.



Note. ANX = attachment anxiety; AVO = attachment avoidance; PCope = primary coping; SCope = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions

Figure 5

Respecified Model with Mean Bootstrap Standardized Path Estimates.



Note. ANX = attachment anxiety; AVO = attachment avoidance; PCope = primary coping; SCoPe = secondary coping; InVolDis = involuntary disengaged coping; InVolEng = involuntary engaged coping; VolDis = voluntary disengaged coping; BSI = BSI Global Severity Index; Help = help-seeking intentions

Significant paths are solid lines and non-significant paths are dotted lines.

** p < .01. * p < .05.

Chapter 5

Discussion

This chapter will discuss the significance and implications of the results that have been presented. Results will be discussed in the same order in which they were presented in the previous section. First, results will be discussed for attachment and professional help-seeking. Second, all findings for attachment and psychological distress will be considered. Third, the relations between attachment and coping will be interpreted. Fourth, the association between coping and professional help-seeking will be discussed. Fifth, the relations of psychological distress and professional help-seeking will be examined. Sixth, limitations of this study and future directions will be explained. Next, the significance and implications will be elaborated upon. Finally, the results and interesting findings will be summarized

Attachment and Professional Help-Seeking

One of the main goals of this study was to investigate the relation between attachment and professional help-seeking in adolescents. Contrary to previous research with adults, which found a direct path from attachment anxiety to help-seeking intentions in college students (Shaffer et al., 2006; Vogel & Wei, 2005), no direct path between attachment anxiety and help-seeking intentions was found in the present study. Theory on attachment anxiety suggests that those high in attachment anxiety are apt to seek help because they value the support of others and are not confident in their ability to soothe themselves (Fuendeling, 1998; Mikulincer et al., 2003), yet, the hypothesized link was not found in high school students in the present study. It is not clear whether there are developmental differences between high school and college students that may affect the

link between attachment and professional help seeking. It may also be that adolescents are seeking help, but not from professionals. Previous research has consistently found that adolescents prefer informal help sources, such as: friends, parents, and other family members (Rickwood et al., 2005; Sheffield, Fiorenza, and Sofronoff, 2004).

Significant indirect effects, through involuntary disengaged coping and distress, may also help explain the discrepancy between the findings of the present study and previous research with regard to attachment anxiety and help-seeking. Although these effects are small, the relation between attachment anxiety and help-seeking may be explained through the mediating roles of involuntary disengaged coping and distress. Adolescents high in attachment anxiety are likely to use involuntary disengaged coping strategies (emotional numbing and inaction), which tend to be associated with high levels of distress; high levels of distress, in turn, are associated with a higher likelihood of help-seeking intentions. Also, attachment anxiety is linked to distress which then is associated with help-seeking. Thus, high school students intending to seek help from counselors may be based on how much distress the adolescents are experiencing and not their overall level of attachment anxiety (although attachment anxiety is linked to distress). Previous research by Shaffer et al., (2006) and Vogel and Wei (2005) also found mediation between attachment anxiety and help-seeking intentions in adults. Specifically, Vogel and Wei found mediation through perceived social support and distress. Vogel and Wei, however, had not examined the specific ways of coping and distress as examined in the present study. The differences in these models may help to explain the discrepancy between the current study, which found no direct link between attachment anxiety and help-seeking and previous research, which found a direct link. Additionally, in the

present study, there was a significant positive correlation between level of attachment anxiety and seeking help from friends as measured by the general help-seeking questionnaire. It may be that those high in attachment anxiety are likely seeking help because of increased arousal, but from friends not professionals.

In an effort to explain the association between attachment anxiety and help seeking in adolescents, the two chains of indirect effects that mediate the relation between attachment anxiety and help-seeking intentions will be examined in more detail. One path, which went from attachment anxiety to distress to help-seeking, was small but consistent with the indirect effect found by Vogel and Wei (2005). Another path went from attachment anxiety to involuntary disengaged coping to distress then to help-seeking. These two indirect paths found in the present study provide evidence that the link between attachment anxiety and help-seeking intentions in adolescents can be explained through involuntary disengaged coping and distress. It may be that attachment anxiety does not provide a direct explanation for help-seeking but those high in attachment anxiety are apt to be distressed more easily and likely to use involuntary disengaged coping (emotional numbing and inaction), which is itself, associated with distress. It is the distress that is then directly linked to help-seeking intentions.

Contrary to expectation, no direct (inverse) association between attachment avoidance and help-seeking intentions was found. Even though this result was not expected theoretically, it is not unprecedented in the literature. This finding is consistent with the results of Shaffer et al. (2006), who did not find a direct link between attachment avoidance and help-seeking intentions. This finding of the present study, however, is contrary to those of Vogel and Wei (2005), who found a significant negative direct

relation between attachment avoidance and help-seeking intentions. Attachment theory suggests that those high in attachment avoidance are apt to devalue the importance of others and would tend to be uncomfortable admitting distress (Fuendeling, 1998; Mikulincer et al., 2003).

In this present study of high school age adolescents, however, being high in attachment avoidance was not linked with help-seeking intentions as theory and some previous research would suggest. It is likely that some adolescents high in attachment avoidance intended to seek help and others do not. This study did not investigate all the mechanisms for why some high in avoidance would intend to seek help and others would not, but it may be that there is something about school counselors being seen in the schools often and being known to the students that would allow those high in avoidance to report help-seeking intentions.

In the present study, indirect paths were hypothesized between attachment avoidance and help-seeking intentions and there was significant mediation through both involuntary disengaged coping and distress. Those adolescents high in attachment avoidance were likely to use involuntary disengaged coping strategies (emotional numbing and inaction), which was related to high levels of distress, which was then associated with intentions to seek help. Mediation was also found between attachment avoidance and help-seeking through distress. The direction of these indirect effects indicated a positive relation between attachment avoidance and help-seeking, which is contrary to previous research and theory. These indirect effects were significant, but the standardized effect-sizes were so small that they are unlikely to account for a great deal of the variability between attachment avoidance and help-seeking intentions. There was

also, however, another small negative effect between attachment avoidance and help-seeking through primary control coping (problem solving, emotion regulation, and emotional expression). Those high in attachment avoidance are unlikely to use primary coping strategies, and in turn may be less willing to seek help. Vogel and Wei (2005) found a positive indirect effect between attachment avoidance and help-seeking intentions through perceived social support and distress, but again, Vogel and Wei did not include specific ways of coping as mediating variables. As with those high in attachment anxiety; the path from attachment avoidance to help-seeking likely goes through distress but seems to hinge on the destructive ways in which those high in avoidance are likely to cope, namely being more likely to engage in involuntary disengaged coping (emotional numbing and inaction) and less likely to use primary control coping (problem solving, emotion regulation, and emotional expression).

Attachment and Psychological Distress

As hypothesized, there was a positive direct effect between attachment anxiety and psychological distress. This finding is consistent with theory and research. Studies of college students have shown that those high in attachment anxiety are likely to report high levels of distress (Lopez et al., 2001; Lopez et al., 2002; Mallinckrodt & Wei, 2005; Vogel & Wei, 2005; Wei et al., 2003). Those high in attachment anxiety are often preoccupied with distress, believe they are unable to handle these feelings (Fuendeling, 1998) and are willing to admit being distressed (Vogel & Wei, 2005). The finding of this study is also congruent with the work of Cooper et al. (1998), who found that adolescents high in attachment anxiety reported high levels of psychological distress.

There was also a small, but significant association between attachment avoidance and distress in the present study. Previous research on attachment avoidance and psychological distress is mixed. According to Lopez et al. (2001) and Vogel and Wei (2005) there was no relation between attachment avoidance and distress, while Mallinckrodt and Wei (2005) and Wei et al. (2003) found significant positive direct effects. In the current study, adolescents high in attachment avoidance tended to report higher distress than those not high in avoidance. These findings, from previous literature and this current study, are both consistent with attachment theory. Generally, those high in attachment avoidance are likely to use deactivating strategies to limit and control distress (Mikulincer et al., 2003), but at times, stressors may become overwhelming and they experience distress or their strategies to limit distress are overwhelmed (Fraley & Shaver, 1997; Mikulincer & Florian, 1998).

Additionally, there was significant mediation found between the attachment variables, involuntary disengaged coping and distress. Those high in attachment avoidance and/or high in attachment anxiety tended to use involuntary disengaged coping strategies, which were, in turn, related to distress. These findings are consistent with the literature on coping and distress which found that consistent and prolonged use of avoidant coping (of which involuntary disengaged coping is an example) is associated with increased distress and psychopathology (Herman-Stahl, Stemmler, & Peterson, 1995; Lopez & Brennan, 2000; Seiffge-Krenke & Klessinger, 2000).

Attachment appears to be related to distress; it seems that this relation is mediated, at least to some degree, by involuntary disengaged coping. Involuntary disengaged coping may be the link that helps to explain why those high in attachment

anxiety or attachment avoidance have poor psychological health. Since involuntary disengaged coping is likely out of the individual's awareness it seems like it would be hard to counteract this way of coping. Constantly shutting down and not dealing with stressors appears to only lead to continued distress.

Attachment and Coping

One of the major purposes of this study was to build on the previous work of Cooper et al. (1998). Cooper and her colleagues found that adolescents who were high in attachment anxiety were more apt to use maladaptive ways of coping. In this current study, those high in attachment anxiety were more likely to report coping in maladaptive ways, such as, involuntary engaged coping, involuntary disengaged coping, and voluntary disengaged coping. As hypothesized, there was a strong association between attachment anxiety and involuntary engaged coping. Specifically, those high in attachment anxiety reported that they are likely to use involuntary engaged coping strategies such as rumination to deal with stress. Rodrigues and Kitzmann (2007) also found a significant relation between attachment anxiety and involuntary engaged coping. Attachment theory also supports this relation because those high in attachment anxiety are likely to ruminate about stressful situations, especially those concerning interpersonal relationships (Vogel & Wei, 2005).

Although not a hypothesized association, there were relations between attachment anxiety and voluntary disengaged coping and between attachment anxiety and involuntary disengaged coping. Not only was attachment anxiety related to these types of disengaged coping strategies but the effects were large. These findings are contrary to the theoretical descriptions of attachment anxiety and coping. According to Connor-Smith et

al. (2000), both involuntary and voluntary disengaged coping consists of strategies such as emotional numbing, avoidance, and denial. These are not strategies that are typically thought to be used by those who engage hyperactivating strategies, as those high in attachment anxiety are theorized to do. Rodrigues and Kitzmann (2007), however, also found significant relations between attachment anxiety and voluntary and involuntary disengaged coping in a sample of 18-19 year olds. Howard and Medway (2004) and Seiffge-Krenke (2006) also have found that those adolescents who are high in attachment avoidance or high in attachment anxiety both use disengaged coping strategies. After considering the consistently strong associations between voluntary disengaged coping, involuntary disengaged coping, and involuntary engaged coping it is understandable that they are often used together. It may also be that those high in attachment anxiety are so activated and aroused by interpersonal stressors that they will try almost any way to cope to lessen their interpersonal fear. Using many coping styles may also be part of natural development in that adolescents are experimenting with different coping strategies and trying to find what will work (Compas et al., 2001).

Contrary to the hypothesis that there would be a significant positive relation between attachment anxiety and primary control coping, no relation was found. Initially, a direct link was hypothesized because a major strategy within primary control coping is general help-seeking and those who use hyperactivating strategies are likely to seek help from others. This discrepancy between the hypothesis and results may be explained by the fact that primary control coping also consists of coping strategies, such as, problem solving and emotion regulation. Those high in attachment anxiety may seek help, but may be unlikely to use problem solving or emotion regulation and this may result in a

non-significant relation. Though unexpected, this finding is consistent with Rodrigues and Kitzmann's (2007) finding of a non-significant relation between attachment anxiety and primary control coping.

There were significant positive relations between attachment avoidance and voluntary disengaged coping and involuntary disengaged coping. Additionally, there was a negative association between attachment avoidance and primary control coping. Based on attachment theory it is not surprising that those who use deactivating strategies to cope with interpersonal stress would use the strategies of avoidance, denial, and numbing and not use strategies such as problem solving and help-seeking (Mikulincer et al., 2003). Rodrigues and Kitzmann (2007) also found significant relations between attachment avoidance and disengaged coping and involuntary disengaged coping.

Coping and Psychological Distress

Although not hypothesized, there was an association between involuntary disengaged coping and distress. Wei, Vogel, Ku, and Zakalik (2005) and Seiffge-Krenke (2006) found that coping by emotional cutoff is often linked to higher levels of distress. Skinner et al. (2003) also established a link between disengaged types of coping, such as numbing and denial and higher levels of distress.

There was no direct relation between either primary control coping or secondary control coping to distress. These findings are somewhat contrary to coping theory and the descriptions of these types of coping (Connor-Smith et al., 2000). Theoretically, primary control coping strategies, such as, problem solving and emotional expression and secondary control coping strategies, such as acceptance and positive thinking should be useful in alleviating distress (Connor-Smith et al.), and thus, associated with less

distress. Although no previous studies have investigated this specific question, it may be that adolescents who use positive ways of coping, such as primary and secondary coping, are open to expressing emotions and acceptance of stressful situations. Therefore, these adolescents may be more willing to express even slight distress.

There were also no relations between voluntary disengaged coping and involuntary engaged coping with distress. These findings are also generally inconsistent with coping theory. Those who use involuntary engaged coping strategies, such as rumination and constantly thinking about the problem, are thought to have higher levels of distress (Skinner et al., 2003). For adolescents in this study, however, ruminating on the problem may prove effective enough to lessen symptoms of distress in some cases (though not others). Based on coping research (Compas et al. 2001; Skinner et al.), those adolescents who use voluntary disengaged coping strategies, such as denial and avoidance would be expected to be experiencing high levels of distress. It may be the case, however, that most adolescents are not exclusive in how they cope (Connor-Smith et al., 2000; Skinner et al.). Therefore, these same adolescents may also be using other more adaptive coping strategies which results in a non-significant relation with distress.

Coping and Professional Help-Seeking

Consistent with previous theory and research, there was a positive direct relation between primary control coping and help-seeking intentions. A major component of primary control coping is seeking help in order to receive either direct help or support to solve a particular problem (Connor-Smith et al., 2000). It appears that adolescents who actively engaged in positive coping strategies, such as, obtaining support and emotion regulation, are also willing to seek professional help (Rickwood et al., 2005).

Additionally, the relation between involuntary disengaged coping and help-seeking intention was mediated by distress. It is likely that those who use disengaged styles of coping have no intention of seeking help until they reach a level of distress that is uncomfortable enough to make seeking help a necessity.

Psychological Distress and Professional Help-Seeking

Consistent with previous research, there was a direct link between psychological distress and help-seeking intentions. This positive direct relation between distress and help-seeking intentions has been firmly established. Students, both high school and college aged, are more willing to seek-help if they are experiencing distress (Cepeda-Benito & Short, 1998; Cramer, 1999; Sheffield et al., 2004; Rickwood et al., 2005; Tatar, 2001; Vogel and Wei, 2005). In the present study, almost all relations between attachment and help-seeking went through distress. Not only is distress associated with help-seeking it also appears to be a crucial component in the path to help-seeking. For high school adolescents, level of distress may be one of the strongest antecedents of a willingness to seek help. It is also interesting that the BSI used to evaluate distress in this study measures actual distress but the help-seeking measure asks about willingness *if* the adolescents were experiencing these problems. It appears experiencing current distress is associated with a willingness to seek help in the future.

Limitations and Future Directions

Statistical Limitations

Several modifications were made to the model. It is appropriate and common to modify a model (Bentler, 2007; Kline, 2005; Ullman, 2007). Barrett (2007) and others, however, have argued that any modifications made to a model changes the process from

model testing to model building. Even though these modifications were based on theory and previous research, it would have been advantageous to have another separate sample of participants to use to re-run the new modified model. The field may benefit from future replication of this work with another sample of adolescents.

Sampling limitations

The participants for this study were all high school students from schools in western and central New York. The first sampling limitation is that there were no urban schools used in this study. Urban school districts were contacted but none responded. While this is a limitation to the generalizability and diversity of this study, it also represents the realities of collecting research in the schools. Often it is not possible to obtain a more representative sample despite continued attempts. The second sampling limitation is that there were three different types of schools: alternative, regular education, and private. Participants from each school were combined for the final sample. Yet, previous research suggests that there may be differences between students from alternative and regular education high schools (May & Copeland, 1998). The means for the variables were investigated and based on mean differences, the regular education high schools and private high school were not significantly different from each other on the main variables. The only variable in which the regular education and private high school students was different, however, was on that of subjective social status as compared to society. This is not surprising since the students from the private high school have to pay tuition and likely come from families with high socioeconomic status. There were differences on a few variables between the alterative schools and the combined regular education and private school. There were no significant differences on the attachment

variables or on the help-seeking intentions variable, which suggests that the results of this model may not be different for the different types of schools. It would be, however, appropriate to rerun the final model and compare differences between the two different groups, the alternative high schools and the combined regular and private high schools. Unfortunately, the sample was not large enough to compare these two groups for the final model. Additionally, students from the two alternative high schools were inconsistent in completing the instruments.

The third sampling limitation is that there may be gender differences for the final model. The investigation of gender means for the variables in this study indicated significant mean differences by gender among the variables. Specifically, there were gender differences among attachment anxiety, primary coping, secondary coping, involuntary disengaged coping, and help-seeking intentions. These differences, especially those that suggest that females are more apt to use emotion regulation and emotional support (primary coping), rumination (involuntary engaged coping), report more distress, and more of a willingness to seek help are supported by previous research on adolescent coping (Eschenbeck, Kohlmann, & Lohaus, 2007; Hampel, 2007) and help-seeking (Boldero & Fallon, 1995). Sheffield et al. (2004), however, did not find gender differences in a willingness to seek professional help. Though these differences may exist, the sample was not large enough to compare males and females using the final model. The last sampling limitation is that the model was not analyzed for differences in grade level. Some researchers have found differences in coping by grade level and age (Hampel & Peterman, 2006; Seiffge-Krenke, Aunola, & Nurmi, 2009). Seiffge-Krenke et al. (2009) found that active and internal coping styles (analogous to primary and

secondary control) increased in adolescence ages 12 to 19, but withdrawal coping only increased between the ages of 12 to 15. In this sample, however, there were only 14 freshman (all from one alternative high school) and 120 seniors (mixed from all schools); therefore, it was not useful to compare freshman to seniors. Because of sample size, it was also not possible to run the final model by grade level or age. According to Compas et al. (2001), research on coping in children and adolescent needs to consider development and the changes that take place during this age group when investigating coping. Another caveat in considering grade level differences is that some upper class students like seniors may be more aware of the types of resources for coping or support, which are available in the school. Knowledge of school resources may also be a necessary confounding variable that could be included in future research. Based on the previous limitations, the results of this study may not be generalized to high school students in general.

Instrument limitations

The present study relied on self-report measures of coping and help-seeking intentions; it was not possible to learn if beliefs about coping and help-seeking actually match behaviors. Most studies that have looked at attachment, coping, or professional help-seeking in adolescents have used self-report measures. In the future, it would be useful to use behavioral observations of actual coping or help-seeking behaviors. Distress was significantly related to help-seeking, but these results did not clarify how distress was related to help-seeking. Is it that adolescents believe that only those experiencing a lot of distress should seek help or do high levels of distress naturally lead to seeking support to quell the distress? The field of adolescent help-seeking could benefit from

further studies investigating this distinction. Additionally, this is the first time the ISCI was used with adolescents. Ideally, a different sample would have been used to validate the measure.

While not a limitation, future thought should be given to the subscales of involuntary disengaged coping and involuntary engaged coping. These scales correlate highly with one another and future thought should be given to combining these scales in future research. The decision in this study to keep the scales separate was based on the theoretical differences between involuntary disengaged and involuntary engaged coping but it may be appropriate to combine these measures in the future.

Methodology Limitation

Cross-sectional data were used for this study. Using longitudinal data would allow for researchers to learn how attachment is related to coping, distress and help-seeking over time. Specifically, it would allow for the study of changes in attachment style, coping repertoire, and distress being associated with changes in intentions to seek counseling. Future researchers may want to use experimental designs to investigate the effects of interventions, such as classroom educational programs on coping styles and effective ways of dealing with distress on adolescent help-seeking.

Significance and Implications

Despite the previous limitations, this study has contributed to the understanding of adolescent attachment, coping, and professional help-seeking. The first and most important contribution of this study is a conceptual model of help-seeking in adolescents. This model was based on previous models of help-seeking in college students by Shaffer et al. (2006) and Vogel and Wei (2005). Through path analysis, the present study has

contributed to the literature by providing a model of help-seeking intention in adolescents. This model allowed for the path from attachment through coping then distress to help-seeking intentions to be traced and investigated.

Second, this study has built on the work of Cooper et al. (1998) by expanding our understanding of how attachment is associated with coping in adolescents. Results of this study indicated that adolescents who are high in attachment anxiety or attachment avoidance are apt to use less adaptive and more harmful ways of coping. Those who are high in attachment avoidance are apt to use disengaged types of coping as predicted by theory, but those high in attachment anxiety may use engaged and disengaged types of coping. This final finding was surprising, in that theory would predict the use of only engaged, and not disengaged types of coping.

In addition to coping differences in regards to attachment, there were also some differences in coping between types of schools and gender that are a contribution to the literature. It may be beneficial to examine some of these differences. Female students scored high on primary control coping, secondary control coping and involuntary engaged coping. These results are in line with previous research, which suggests that females are more likely to use problem solving and social support seeking (Eschenbeck et al., 2007) and social support seeking and rumination (Hampel, 2007). Additionally, there were significant differences between the regular education/private schools category and the alternative high schools category. Specifically, those from the regular education and private schools indicated higher scores in primary control, secondary control coping and voluntary disengaged coping than did those in the alternative high schools category. Little previous research seems to exist on differences in coping for these two types of

schools. Many students in alternative schools, however, are placed because of at-risk behavior and poor academic performance (Grunbaum, Lowry, & Kann, 2001; May & Copeland, 1998). Therefore, it is not surprising that students from alternative learning programs would report less usage of problem solving, support seeking, or acceptance of the stressor. It is puzzling why students from regular education and private schools would use more disengaged (denial, avoidance, wishful thinking) types of coping more than alternative students, especially when May and Copeland (1998) found that alternative students used more avoidant coping strategies than regular education students. It may be that for some of these regular education or private school students in the present study, wishful thinking or avoidance may seem as more hopeful that the problems will be solved or go away. It may be that the types of problems experienced by the regular education and private school students are easier to avoid and deny than the more difficult issues faced by students in alternative schools. Another possibility is that the students in the alternative schools may not be able to report as accurately on their coping skills as the students in regular education. Third, this study validated the Intentions to Seek Counseling Inventory (ISCI) Interpersonal Concerns subscale for use with an adolescent population. The ISCI has been used numerous times with college students and found to be related to attachment and distress (Lopez et al., 2002; Vogel & Wei, 2005; Wei et al., 2003). No such measure of help-seeking intentions in adolescents for specific problems has existed. Validating this instrument for use with high school age students will now allow researchers to more accurately investigate help-seeking for specific problems with adolescents.

Finally, there are a few implications for the practice of school counseling. Previous research has found that many adolescents who could benefit from professional help do not seek out the help they need (Boldero & Fallon, 1995; Rickwood et al., 2005) and that schools may be at the forefront in providing or referring adolescents for mental health services (Powers, Eiraldi, Clarke, Mazzuca, & Krain, 2005). The model identified in the present study has created a picture of possible intervention points to influence adolescents' willingness to seek help. The goal of interventions by school counselors or other mental health professionals would be to increase adolescents' adaptive coping and usage of professional counseling. The most pertinent finding to school interventions is that distress was strongly associated with professional help-seeking and mediated the relation between attachment anxiety and help-seeking. Additionally, the importance of coping cannot be understated for adolescents (Compas et al., 2001). Adolescents who are apt to cope in adaptive ways have fewer mental health problems and are better adjusted socially and academically than those adolescents who cope in maladaptive disengaged ways (Connor-Smith et al., 2001; Seiffgre-Krenke & Klessinger, 2000). Therefore, the second finding of importance is that coping, specifically involuntary disengaged coping (emotional numbing and inaction), seems to be important in mediating the relation between attachment style and help-seeking. Students may be downplaying distress and not seeking help even though they are experiencing considerable distress; counselors need to be aware that students may be suffering in silence.

Another applicable finding of this study to school counseling is that high levels of either attachment anxiety or attachment avoidance are associated with detrimental ways of coping and willingness to seeking help. It is not always practical for school counselors

to attempt to intervene with students on an individual basis, but counselors often conduct classroom guidance activities and presentations on a number of topics. It may be useful to conduct guidance presentations on effective types of coping, especially highlighting the importance of professional help-seeking. Classroom guidance and discussions on coping may be helpful in providing those high in attachment anxiety and avoidance an expansion of their coping repertoire. Level of distress was found to be important in students' willingness to seek help. It might also be beneficial to give students the message that they may come to counseling for anything, not just serious problems or distress. Such interventions may help to normalize counseling and reduce potential stigma; although, further research would be needed to investigate whether such messages are effective.

Additionally, counselors need to consider attachment style, coping, and the amount of distress of adolescents when students come to them for counseling and support. Adolescents may be experiencing a great deal of ambivalence in coming to counseling based on their attachment style, ways of coping, or distress. It may be beneficial for counselors to discuss with new clients their decision to seek help. In this way, counselors can talk through some of this ambivalence and uncertainty adolescents may experience. This may help students feel more comfortable about coming to counseling more often which could allow for greater benefits. According to Bowlby (1988), therapists can become a secure base through counseling, even if the client initially has insecure models of attachment. Counselors often only have a small window of time in which to intervene, therefore, anything that a counselor can do to be viewed as a secure base may be beneficial in helping students get needed services. Counselors do not always have to wait

for students to seek them out; counselors can start a dialogue on help-seeking when they meet with students for annual scheduling and course credit reviews.

Summary and Big Picture Findings

This discussion has covered a large number of findings; therefore, the following paragraphs will summarize a few of the key points. First, attachment was indirectly related to help-seeking but in some ways that were not initially expected as well as in ways that were expected. Those high in attachment avoidance were expected not to seek help and those high in attachment anxiety were expected to seek help at significant levels. The expectation that attachment anxiety would be linked to help-seeking was not supported. It may be that those high in attachment anxiety are seeking help at expected levels but they may be seeking help from friends rather than from professionals. The expected inverse relation between attachment avoidance and help-seeking was also not found. It may be that some of those high in attachment avoidance report being willing to seek professional help whereas others are less willing to engage in help-seeking, such that there is no relation. It may be because of the familiarity of counselors in the schools helps them to be perceived as approachable by some students high in attachment avoidance.

Help-seeking intentions appear to be related to ways of coping, which are in turn linked to attachment anxiety and avoidance. As expected, those high in attachment avoidance use voluntary disengaged coping (avoidance and denial) and involuntary disengaged coping (emotional numbing and inaction) but rarely use primary coping (problem solving and emotional expression). Interestingly, those high in attachment anxiety use the expected approach of involuntary engaged coping (emotional arousal, intrusive thoughts, and rumination) but also use the unexpected approaches of

involuntary and voluntary disengaged coping. It is striking that attachment anxiety is related to voluntary and involuntary disengaged coping more than attachment avoidance. Seiffge-Krenke (2006) also found that those students high in attachment anxiety from the ages of 14 to 21 also self-reported using withdrawal coping strategies. Over the seven years of Seiffge-Krenke's study, adolescents high in attachment anxiety had equally high scores in support-seeking and avoiding the stressor. It may be that those high in attachment anxiety who use hyperactivating strategies, may use many ways of coping to cope with their distress. This activating of the attachment system may increase all levels of coping. It may also be that much of the work on hyperactivating strategies was done with adults (Mikulincer et al., 2003) and adolescents may still be developing and solidifying their ways of coping with attachment related distress.

Another explanation for those high in attachment anxiety using disengaged types of coping may be that disengaging ways of coping as measured by the Responses to Stress Questionnaire (RSQ), such as the mind going blank, not thinking about the problem, pretending that it never happened, and wanting to escape, could also be similar to the reasons that adolescents give for using drugs or alcohol. According to Cooper et al. (1998), adolescents high in attachment anxiety experienced negative affect and hostility. In their study, it was this anger and hostility that was related to their drug and alcohol use. It is possible, that even though the RSQ does not measure illicit behaviors, some of these adolescents high in attachment anxiety who are also experiencing anger and hostility may be using voluntary disengaged coping (avoidance and denial) and involuntary disengaged coping (emotional numbing and inaction) strategies through their

substance use, and it was disengaging through substances that they were thinking about when completing the RSQ.

It would be expected, however, that all these ways of coping would be significantly related to distress but they are not. Only involuntary disengaged coping is related to distress. This seems to indicate that involuntary disengaged coping could be the most harmful way of coping. Because it is involuntary or even unconscious; individuals may not realize involuntary disengaged coping is harmful. Therefore, this way of coping may have the poorest outcomes and lead to the greatest distress. It is also possible; however, that involuntary disengaged coping is most likely to be used by adolescents when they feel themselves overwhelmed by distress, regardless of attachment style. The design of the study required that caution be used in interpreting the direction of causality. It may be that only those students with higher levels of distress engage in involuntary disengaged coping (or that a third variable not accounted for in the model causes both involuntary disengaged coping and distress).

Next, distress has arisen as an extremely important mediator of the link between attachment and help-seeking; all paths in the model from attachment to help-seeking led through distress. It seems that for adolescents in this study; level of distress was an important predictor of students' willingness to seek help.

Attachment anxiety and attachment avoidance both were associated indirectly with help-seeking. Both dimensions of attachment follow the path through involuntary disengaged coping to distress and then help-seeking. It is surprising that attachment anxiety, which is typically thought to be associated with hyperactivating strategies, was related to a type of coping that might be thought to be a deactivating strategy that is more

likely to be related to avoidance. It appeared, however, that the relation between both attachment anxiety and attachment avoidance with involuntary disengaged coping was an important predictor of eventual help seeking.

Finally, this study has potential implications for school counseling practice. Because students high in either attachment anxiety or avoidance may be willing to seek help from school counselors, it may be beneficial if school counselors could help students high in attachment anxiety or avoidance view the school counselor as a viable source of support. It may be helpful for counselors to be visible in the school and interact with the students; being seen as trustworthy and as a secure base could help students feel comfortable seeking help from the school counselor even if the student is high in attachment anxiety and avoidance. Most school counselors already make an effort to do so as a part of their jobs, which may help to explain why sometimes those high in avoidance reported a willingness to seek professional help. It may also be helpful for school counselors to focus on students who appear to be engaging in involuntary disengaged coping strategies, as these students are likely to experience higher levels of distress, yet may not be open to seeking help.

This study has provided possible points for intervention by noting how adolescents' coping and distress are related to help-seeking. As suggested previously in this discussion, classroom guidance activities or interventions on coping may be useful. In particular, helping students increase adaptive coping and rely less on involuntary disengaged coping may be beneficial. According to Clarke (2006), it is also necessary to teach students that certain situations require different types of coping. It could also be helpful to use classroom presentations or school wide programs to encourage students to

seek help from school counselors for all kinds of concerns and not wait until the adolescents' level of distress is very high. Further research on how to best intervene to increase adolescents' coping repertoire and encourage help-seeking could be beneficial.

Appendix A

Demographic Questionnaire

Age _____ Years

Sex _____ Female

_____ Male

Year in School

_____ Freshman

_____ Sophomore

_____ Junior

_____ Senior

_____ Other

Race/ethnicity (check all that apply)

_____ Black/African American

_____ Asian/Asian American/Pacific Islander

_____ White/European American

_____ Hispanic/Latino/a

_____ Native American

_____ Middle Eastern

_____ Other (please specify _____)

Relationship Status

_____ Never been in a romantic relationship

_____ Not currently in a romantic relationship but have had a romantic relationship previously

_____ Currently in a first romantic relationship

_____ Currently in a romantic relationship and had a previous romantic relationship

Parental Marital Status

_____ Married

_____ Separated

_____ Divorced

_____ Never Married

_____ Other

Mother's Highest Level of Education _____

Father's Highest Level of Education _____

Mother's Occupation _____

Father's Occupation _____

Appendix B

Scale of Subjective Social Status-
Youth Version (SSS-YV)

This measure was excluded due to copyright.

Appendix C

Brief Symptom Inventory (BSI)

This measure was excluded due to copyright.

Appendix D

Intentions to Seek Counseling Inventory (ISCI)

This measure was excluded due to copyright.

Appendix E

Response to Stress Questionnaire (RSQ)

This measure was excluded due to copyright.

Appendix F

Experiences in Close Relationships (ECR)

Brennan, K., Clark, C., Shaver, P. (1998). Self-report measurement of adult attachment: An integrative overview. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford Press.
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Instructions: The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

1	2	3	4	5	6	7
Disagree Strongly			Neutral/ Mixed			Agree Strongly

- ___ 1. I prefer not to show a partner how I feel deep down.
- ___ 2. I worry about being abandoned.
- ___ 3. I am very comfortable being close to romantic partners.
- ___ 4. I worry a lot about my relationships.
- ___ 5. Just when my partner starts to get close to me I find myself pulling away.
- ___ 6. I worry that romantic partners won't care about me as much as I care about them.
- ___ 7. I get uncomfortable when a romantic partner wants to be very close.
- ___ 8. I worry a fair amount about losing my partner.
- ___ 9. I don't feel comfortable opening up to romantic partners.
- ___ 10. I often wish that my partner's feelings for me were as strong as my feelings for him/her.
- ___ 11. I want to get close to my partner, but I keep pulling back.
- ___ 12. I often want to merge completely with romantic partners, and this sometimes scares them away.
- ___ 13. I am nervous when partners get too close to me.
- ___ 14. I worry about being alone.

- ___ 15. I feel comfortable sharing my private thoughts and feelings with my partner.
- ___ 16. My desire to be very close sometimes scares people away.
- ___ 17. I try to avoid getting too close to my partner.
- ___ 18. I need a lot of reassurance that I am loved by my partner.
- ___ 19. I find it relatively easy to get close to my partner.
- ___ 20. Sometimes I feel that I force my partners to show more feeling, more commitment.
- ___ 21. I find it difficult to allow myself to depend on romantic partners.
- ___ 22. I do not often worry about being abandoned.
- ___ 23. I prefer not to be too close to romantic partners.
- ___ 24. If I can't get my partner to show interest in me, I get upset or angry.
- ___ 25. I tell my partner just about everything.
- ___ 26. I find that my partner(s) don't want to get as close as I would like.
- ___ 27. I usually discuss my problems and concerns with my partner.
- ___ 28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
- ___ 29. I feel comfortable depending on romantic partners.
- ___ 30. I get frustrated when my partner is not around as much as I would like.
- ___ 31. I don't mind asking romantic partners for comfort, advice, or help.
- ___ 32. I get frustrated if romantic partners are not available when I need them.
- ___ 33. It helps to turn to my romantic partner in times of need.
- ___ 34. When romantic partners disapprove of me, I feel really bad about myself.
- ___ 35. I turn to my partner for many things, including comfort and reassurance.
- ___ 36. I resent it when my partner spends time away from me.

Appendix G

General Help-Seeking Questionnaire (GHSQ)

Rickwood, D., Deane, F. P., Wilson, C. J., & Ciarrochi, J. (2005). Young people's help-seeking for mental health problems. *Australian e-Journal for the Advancement of Mental Health*, 4 (3), supplement. Retrieved 2005, from www.auseinet.com/journal/vol4iss3suppl/rickwood.pdf

Below is a list of people who you might seek help or advice from if you were experiencing a personal or emotional problem. Please circle the number that shows **how likely is it** that you would seek help from each of these people for a personal or emotional problem during the **next 4 weeks**?

		Extremely Unlikely						Extremely Likely
1a)	Partner (e.g., significant Boyfriend or girlfriend)	1	2	3	4	5	6	7
1b)	Friend (not related to you)	1	2	3	4	5	6	7
1c)	Parent	1	2	3	4	5	6	7
1d)	Other relative/ Family member	1	2	3	4	5	6	7
1e)	Mental health professional (e.g., school counselor, psychologist, psychiatrist)	1	2	3	4	5	6	7
1f)	Phone help line (e.g. Lifeline, Kids Help Line)	1	2	3	4	5	6	7
1g)	Family Doctor/GP	1	2	3	4	5	6	7
1h)	Teacher (year advisor, classroom teacher)	1	2	3	4	5	6	7
1i)	Someone else not listed Above (please describe who this was)	1	2	3	4	5	6	7
1j)	I would not seek help from Anyone	1	2	3	4	5	6	7

2a) Have you ever seen a mental health professional (e.g., school counselor, counselor, psychologist, psychiatrist) to get help for personal problems? (Circle one)

Yes No

If you circled "no" in question 2a, you are finished this section. If you circled "yes" please complete 2b, 2c, and 2d below.

2b) How many visits did you have with the mental health professional? _____ visits

2c) Do you know what type of mental health professional(s) you've seen? If so, please list their titles (e. g., counselor, psychologist, psychiatrist)

2d) How helpful was the visit to the mental health professional? (Please circle)

Extremely Unhelpful

1

2

3

4

5

Extremely Helpful

Appendix H

Parental Opt-Out Consent Form

Parental Opt Out Form for Social Science Research**The Pennsylvania State University (PARENTS)****Title of Project: Help-Seeking Intentions in Adolescents: Links to Attachment, Distress, and Coping****Principal****Investigator:**

Chris Radziwon, M.Ed
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College of Education
Pennsylvania State University
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Cdr184@psu.edu

Faculty Advisor:

Susan S. Woodhouse, Ph.D.
313 CEDAR Building
College of Education
Pennsylvania State University
University Park, PA 16802
Ssw10@psu.edu

1. Purpose of the study: You are being asked to allow your child to participate in a research study. Before you agree to allow your child to participate, it is important that you be given an explanation of the study. We are doing this study because we want to learn more about how adolescents' personality characteristics are related to how they cope with stressors, including their intentions and willingness to seek professional help (for example from school counselors).

2. Procedures to be followed: Your child will be asked to fill out 5 questionnaires that will take approximately 35 minutes during a class period. Your teacher is aware of the study and has agreed to allow his/her classroom students to have the opportunity to participate.

3. Discomforts and Risks: There are no expected risks with this study. Your child may experience minimal discomfort, at most, as she/he answers several personal questions.

4. Benefits: Your child will benefit from this study when we present the group results information on stress to your school officials. The information can assist the school personnel in developing enhanced prevention and intervention programming. There will

also be long term benefits for adolescents in general as we more clearly understand how adolescents cope with stressors, and the factors that contribute to seeking help.

4. Duration/time of the procedures and study: Participation in this study will involve 1 class period.

5. Statement of Confidentiality: Your child's participation in this research is confidential. The questionnaires do not ask for any identifying information that could connect you child to his or her answers. Data will be stored in a in a locked cabinet and/or in password-protected computer files. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared. Penn State's Office for Research Protections, the Social Science Institutional Review Board and the Office for Human Research Protections in the Department of Health and Human Services may review records related to this research study.

6. Right to ask questions: Please contact Chris Radziwon at (814) 865-4655 or Dr. Susan Woodhouse at (814) 863-5726 with questions, complaints or concerns about the research. You can also call this number if you feel this study has harmed you. If you would like to learn more about your rights as a research subject, please call the Office for Research Protections at (814)865-1775.

7. Voluntary Participation: Your decision to allow your child to participate in this research is voluntary. Your child can stop at any time. Your child can skip any questions he/she does not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you or your child would receive otherwise or to which you are otherwise entitled Participation or not participating will not have an effect on your child's grades and class standing. No one at his/her school will have access to the information provided.

If you DO NOT agree to allow your child to participate in this study, please sign the enclosed OPT-OUT slip (see next page) and return it to your child's school office by XXXX.

If you do not return the form by XXXX, your child will be asked to complete the questionnaires as described above.

If you agree to allow your child to participate, you do not need to do anything or return any forms.

Help-Seeking Intentions in Adolescents Study

If you DO NOT want your child to participate, please sign your name and indicate the date below and return to the school office.

**I DO NOT want my son/daughter _____
(PRINT FULL NAME) to participate in this research.**

Parent/Guardian Signature **Date**
Please return this form to the school office by XXXX.

Appendix I

Parental Signed Consent Form

Informed Consent/Parent Permission for Social Science Research**The Pennsylvania State University (PARENTS)**

Title of Project: Help-Seeking Intentions in Adolescents: Links to Attachment, Distress, and Coping

Principal

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College of Education
Pennsylvania State University
University Park, PA 16802
Ssw10@psu.edu

1. Purpose of the study: You are being asked to allow your child to participate in a research study. Before you agree to allow your child to participate, it is important that you be given an explanation of the study. We are doing this study because we want to learn more about how adolescents' personality characteristics are related to how they cope with stressors, including their intentions and willingness to seek professional help (for example from school counselors).

2. Procedures to be followed: Your child will be asked to fill out 5 questionnaires that will take approximately 35 minutes during a class period. Your teacher is aware of the study and has agreed to allow his/her classroom students to have the opportunity to participate.

3. Discomforts and Risks: There are no expected risks with this study. Your child may experience minimal discomfort, at most, as she/he answers several personal questions.

4. Benefits: Your child will benefit from this study when we present the group results information on stress to your school officials. The information can assist the school personnel in developing enhanced prevention and intervention programming. There will also be long term benefits for adolescents in general as we more clearly understand how adolescents cope with stressors, and the factors that contribute to seeking help.

4. Duration/time of the procedures and study: Participation in this study will involve 1 class period.

5. Statement of Confidentiality: Your child's participation in this research is confidential. The questionnaires do not ask for any identifying information that could connect you child to his or her answers. Data will be stored in a in a locked file cabinet and/or in password-protected computer files. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared. Penn State's Office for Research Protections, the Social Science Institutional Review Board and the Office for Human Research Protections in the Department of Health and Human Services may review records related to this research study.

6. Right to ask questions: Please contact Chris Radziwon at (814) 865-4655 or Dr. Susan Woodhouse at (814) 863-5726 with questions, complaints or concerns about the research. You can also call this number if you feel this study has harmed you. If you would like to learn more about your rights as a research subject, please call the Office for Research Protections at (814)865-1775.

7. Voluntary Participation: Your decision to allow your child to participate in this research is voluntary. Your child can stop at any time. Your child can skip any questions he/she does not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you or your child would receive otherwise or to which you are otherwise entitled Participation or not participating will not have an effect on your child's grades and class standing. No one at his/her school will have access to the information provided.

If you AGREE to allow your child to participate in this study, please sign one of the 2 enclosed CONSENT forms (see next page) and return it to your child's school office by XXXX. Retain the other copy for your file or future reference.

If you do not return the form by XXXX, your child will not be permitted to take part in the study.

Help-Seeking Intentions in Adolescents Study

If you AGREE to allow your child to participate, please sign your name and indicate the date below and return to the school office.

**I ALLOW my son/daughter _____
(PRINT FULL NAME) to participate in this research.**

Parent/Guardian Signature **Date**

Person Obtaining Consent **Date**
Please return this form to your school office by XXXX.

Appendix J

Implied Consent Form

Implied Consent Form for Social Science Research
The Pennsylvania State University (STUDENT)
Title of Project: Help-Seeking Intentions in Adolescents:
Links to Attachment, Distress, and Coping

Principal

Investigator: Chris Radziwon, M.Ed
327 CEDAR Building
College of Education
Pennsylvania State University
University Park, PA 16802

Faculty

Advisor: Susan S. Woodhouse, Ph.D.
313 CEDAR Building
College of Education
Pennsylvania State University
University Park, PA 16802

1. Purpose of the study: The purpose of this research is to learn more about how adolescents' personality characteristics are related to how they cope with stressors, including their willingness to seek professional help, for example, from school counselors.
2. Procedures to be followed: You will be asked to fill out 5 brief questionnaires that will take approximately 35 minutes to complete. Should you decide to complete the questionnaires, they will be completed during one class period. Your teacher is aware of the study and has agreed to allow his/her classroom students to have the opportunity to participate.
3. Discomforts and risks: There are no expected risks with this study. Minimal discomfort, at most, may be present as you answer a several personal questions.
4. Benefits: You will benefit from this study when we present the group results information on stress to your school officials. The information can assist the school personnel in developing enhanced prevention and intervention programming. There will also be long term benefits for adolescents in general as we more clearly understand how adolescents cope with stressors, and the factors that contribute to seeking help.
- 5. Duration/time of the procedures and study:** Participation in this study will involve 1 class period.

6. Statement of confidentiality: Your participation in this research is confidential. The questionnaires do not ask for any identifying information that could connect you to your answers. Your teacher or any other school officials will never see your answers. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared because your name is in no way linked to your responses.

7. Right to ask questions: Please contact Chris Radziwon at (814) 865-4655 or Dr. Susan Woodhouse at (814) 863-5726 with questions, complaints or concerns about the research. You can also call this number if you feel this study has harmed you. If you would like to learn more about your rights as a research subject, please call the Office for Research Protections at (814)865-1775

8. Voluntary participation: Your decision to be in this research is voluntary. You can stop at any time. You can skip any questions you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you would receive otherwise. Participation or not participating will not have an effect on your grades and class standing. No one at your school will have access to the information you provide.

Completion and return of the questionnaires implies that you have read the information in this form and consent to take part in the research.

Please keep this form for your records or future reference.

Appendix K

Parent Recruitment Letter

Dear Parents/Guardians,

Please allow me to introduce myself as a Penn State University doctoral student in Counseling Psychology. We are seeking the assistance of the students at your child's school to participate in a research study as part of my dissertation. The study focuses on how adolescents' personality characteristics are related to how adolescents cope with stressors, including their intentions and willingness to seek professional help, for example from school counselors. Your school administrators have granted their permission for this study to be conducted at the school during one class period. The purpose of this letter is to provide you with information so you may consider allowing your son or daughter to participate in this study. Your cooperation and assistance are very important because the more we know about how distress, coping, attachment, and help-seeking are related for our young people, the more schools and counseling organizations can take specific actions to support students' emotional, social, and academic development.

Students will be asked to complete a demographic form and five questionnaires. Questionnaires will ask about students' levels of distress, ways of coping, perceptions about seeking help, and the students' experiences in close relationships. Completing the surveys will take no more than one class period in total. On the day that data are collected, I will be available to go to classrooms to collect all of the questionnaires and answer any questions the students might have about the questionnaires.

All cooperation and participation in this study are strictly voluntary and permission to participate or not will in no way impact your child's grade or school standing. Students who do not participate will be able to use this time to read or complete an assignment. This will be decided by each classroom instructor.

Students will be requested NOT to put their names on the surveys. Since students will not include any identifying information the study will be completely confidential. Students may stop answering the survey questions at any time. NO school personnel will see any individual responses.

Please read the attached consent form.

If you have any questions at all about this study, please feel free to contact Chris Radziwon at (716) ----- or cdr184@psu.edu. I hope you will take this opportunity to allow your child to have his/her input included in this important study. Thank you very much in advance for your assistance and cooperation.

Sincerely,

Chris Radziwon

Appendix L

Student Recruitment Letter

Dear Student,

Please allow me to introduce myself as a Penn State University doctoral student in Counseling Psychology. I am seeking your assistance as part of my research study that focuses on how adolescents' personality characteristics are related to how adolescents cope with stressors, including their intentions and willingness to seek professional help, for example from school counselors.

Your school administrators have granted their permission for this study to be conducted at the school during one class period. The purpose of this letter is to provide you with information so you may consider participating in this study. Your cooperation and assistance are very important because the more we know about and the factors that contribute to high school students' willingness to seek help if needed, the more schools can take specific actions to support students' emotional and academic development.

You will be asked to complete a demographic form and five questionnaires. Questionnaires will ask about your feelings, ways of coping, perceptions about seeking help, and the students' experiences in close relationships. Completing the surveys will take no more than one class period in total. On the day that data are collected, I will be available to go to classrooms to collect all of the questionnaires and answer any questions that you might have about the questionnaires.

All participation in this study is strictly voluntary and you and your parents' decisions about whether you will participate or not will in no way impact your grade or school standing. If you do not participate you will be able to use this time to read or complete an assignment. This will be decided by each classroom instructor.

You will be requested NOT to put their names on the surveys. Since students will not include any identifying information the study will be completely confidential. You may stop answering the survey questions at any time. NO school personnel will see any individual responses. Neither your teacher nor your principal, nor any other school personnel will see your answers. Your name will not be on the questionnaires at any time.

If you have any questions at all about this study, please feel free to contact Chris Radziwon at (814) 865-4655 or cdr184@psu.edu. Thank you very much in advance for your assistance and cooperation.

If you are interested in participating, please give the attached letter and consent form to your parent/guardian to read and sign if they consent to your participation.

Sincerely,

Chris Radziwon

Appendix M

School Recruitment Letter

Please allow me to introduce myself as a Penn State University doctoral student in Counseling Psychology. I am conducting a dissertation research study that examines the link between adolescents' personality characteristics and how they cope with stressors, including their willingness to seek professional help, especially from school counselors. You may have received an earlier request from me, but unfortunately, I need additional participants in order to meet my sample size requirements. I am sending you my study packet again to ask your permission to conduct my research study in your high school.

With the demands you and your teachers face in education, I realize the inconvenience this request may pose. However, obtaining as few as 30-50 completed surveys from students in courses or study halls would be extremely helpful. I will happily take **any** opportunity that you will allow. Specifically, courses in **Psychology, Sociology, and/or Health** may be ideal for data collection. I would be happy to return once data collection is complete to present my study to the class and/or to give a presentation on general psychological research in college.

The information gained from this study may assist you and the school counselor in enhancing your prevention and intervention programs. Students will benefit by experiencing scientific research first hand. There will also be long term benefits for adolescents in general as we more clearly understand how adolescents cope with stressors, and the factors that contribute to seeking help. Additionally, since many high school students go on to college they will benefit by experiencing how scientific research is conducted first hand.

Let me give you an overview of the procedures. First, parents and/or guardians would have the opportunity to decide if their son or daughter will participate. If the parent agrees, students will be asked to complete a demographic form and five questionnaires. Completing the surveys will take no more than one class period in total. On the day that data is collected, I will be available to go to classrooms to collect all of the questionnaires and answer any questions the students might have about the questionnaires.

Here are copies of: a) the recruitment letters we will use with parents/guardians, b) the consent forms, and c) the questionnaires that will be used. Students will be requested NOT to put their names on the surveys keeping responses confidential. Students may stop answering the survey questions at any time. NO school personnel will see any individual responses. I would, however, be happy to share a summary of the results of the study with you after the research is completed.

Thanks again for taking the time to look this over and I hope to hear from you soon. If you have any questions at all about this study, please feel free to contact me at (716) 866-1609 or cdr184@psu.edu. I am very open to working with your school to make changes to these procedures. Thank you very much in advance for your assistance and cooperation.

Sincerely,

Chris Radziwon, M.Ed.

Appendix N

Study Introduction Script for Consent Forms

Hello everyone,

My name is Chris Radziwon and I am a graduate student at Penn State University. I am here to conduct a research study on how adolescents cope with stress and if they seek help.

You were given letters and consent forms to take home and have your parents review and sign to give you permission to participate. If your parents have allowed you to participate and you would like to participate, I am asking you to fill out 5 brief surveys that will take about 35 minutes during this class period.

Please do not put your name on any of the forms. Your responses will not be connected to your name or other identifying information. I will have no way of knowing who filled out specific questionnaires.

Please remember participation is voluntary. You can stop at any time. You don't have to answer any questions you don't want to.

Appendix O

Study Introduction Script for Opt-Out Consent

Hello everyone,

My name is Chris Radziwon and I am a graduate student at Penn State University. I am here to conduct a research study on how adolescents cope with stress and if they seek help.

We sent out forms for your parents to look over about 3 weeks ago. If your parents did not want you to participate they would have filled out the form and you would have returned it to the main office.

I am asking you to fill out 5 brief surveys that will take about 35 minutes during this class period.

Please do not put your name on any of the forms. Your responses will not be connected to your name or other identifying information. I will have no way of knowing who filled out specific questionnaires.

Please remember participation is voluntary. You can stop at any time. You don't have to answer any questions you don't want to.

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- Wu, T-F., & Wei, M. (2008). Perfectionism and negative mood: The mediating roles of validation of others versus self. *Journal of Counseling Psychology, 55*, 276-288.

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PUBLICATIONS

Radziwon, C. D. (2003). The effects of peers' beliefs on eighth grade students' identification with school. *Journal of Research in Childhood Education, 17*(2), 236-249.

PRESENTATIONS

Radziwon, C. (2006, October). *Help-Seeking Intentions in Adolescents: Links to Attachment, Distress, and Coping*. Poster session presented at the annual meeting of the Pennsylvania Counseling Association, State College, Pennsylvania.

AWARDS & HONORS

Research Initiation Grant (RIG), Graduate School of Education, Penn State, 2008