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The Generalization of Attachment Representations to New Social Situations: Predicting Behavior during Initial Interactions with Strangers

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Abstract

The idea that attachment representations are generalized to new social situations and guide behavior with unfamiliar others is central to attachment theory. However, research regarding this important theoretical postulate has been lacking in adolescence and adulthood, as most research has focused on establishing the influence of attachment representations on close relationship dynamics. Thus, the goal of this investigation was to examine the extent to which attachment representations are predictive of adolescents' initial behavior when meeting and interacting with new peers. High school adolescents ($N = 135$) participated with unfamiliar peers from another school in two social support interactions that were videotaped and coded by independent observers. Results indicated that attachment representations (assessed through interview and self-report measures) were predictive of behaviors exhibited during the discussions. Theoretical implications of results and contributions to existing literature are discussed.

Keywords

ATTACHMENT; ADOLESCENCE; INTERACTION; BEHAVIORS; UNFAMILIAR PEERS; STRANGERS

Attachment theory posits that every individual builds experience-based "representational or working models" of the world and of himself/herself in it, and with the aid of these models the individual perceives events, forecasts the future, constructs plans, and selects strategies for interacting with others (Bowlby, 1969/1982/1973/1980). Core aspects of these models include the individual's notions of (a) who his/her attachment figures are, where they may be found, and how they may be expected to respond, (b) how acceptable or unacceptable the individual is in the eyes of his/her attachment figures, (c) whether or not the self is judged to be the sort of person toward whom anyone is likely to respond in a helpful way, (d) how accessible and responsive attachment figures are likely to be should the individual turn to them for support,

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and (e) the probable availability of attachment figures (e.g., whether they are readily available, not available, available occasionally or contingently). According to the theory, these working models and forecasts derived from them are based on actual experiences with significant others, and once developed, they are generalized to new social situations.

In his theorizing, Bowlby stated that "an unwanted child is likely not only to feel unwanted by his parents but to believe that he is essentially unwantable, namely unwanted by anyone. Conversely, a much-loved child may grow up to be not only confident of his parents' affection but confident that everyone else will find him lovable too. Though logically indefensible, these crude over-generalizations are none the less the rule" (Bowlby, 1973, pp. 204–205). It is this process of generalization that is thought to account for the influence of early relationships on later relationships. Thus, in new relationships, when old representational models are not necessarily appropriate, they may nonetheless remain to guide an individual's behavior, sometimes in pathological ways. Although Bowlby viewed representational models as remaining open to new input, he also viewed them as becoming increasingly resistant to change because they tend to operate outside the realm of consciousness. Representational models are similar to constructs such as "schema" and "relational models" described within other theoretical perspectives (see Baldwin, 1992, and Fiske & Taylor, 1991, for reviews of literature suggesting that schemas influence information processing and behavior). They are important within social relationships because they not only guide behavior, but also guide representations, feelings, and the processing of information (attention, perception, memory, interpretation) within these relationships (Bowlby, 1980; Bretherton, 1990; Collins, Guichard, Ford, & Feeney, 2004; Main, Kaplan, & Cassidy, 1985).

Thus, the idea that attachment representations contribute to the formation of new relationships is an important part of attachment theory. Representational models can serve a useful purpose for the individual, making unnecessary the construction of a new set of expectations for each new situation. As Bowlby (1969/1982) stated, "If the model is to be of any use in novel situations, it must be extended imaginatively to cover potential realities as well as experienced ones" (p. 81). For instance, an individual with a representation of others as supportive may be more likely to behave in a friendly manner toward new people. An individual with a representation of the self as unlovable may expect to be rejected by the people he meets and thus behave defensively (see Thompson, 1999, for elaboration on the idea that people are likely to generalize the expectations they have derived from familiar caregivers when they do not know what to expect from someone unfamiliar). Because interactions with strangers are not relationships at all, it may be argued that these interactions will not be influenced by individual differences in attachment (see Berlin & Cassidy, 1999, for elaboration). However, because all close relationships begin as interactions with strangers, we are advancing the hypothesis that the way people approach, interact with, and respond to strangers reflects in part their internal working models of themselves, others, and relationships.

There are a number of reasons why a connection between adolescents' attachment representations and interaction behaviors with new acquaintances might exist. First, representational models of attachment may guide individuals' expectations about others' behavior as well as their own behavior within relationships. These expectations are likely to direct one's own behaviors as well as the behaviors elicited from others through a process of self-fulfilling prophecy. Second, it is possible that the type of parenting which contributed to secure representations may contribute to good relations with others. That is, secure adolescents may learn sensitive and responsive behavior from their parents and use it themselves. Alternatively, secure adolescents may have parents who are themselves socially skilled and well-liked, and these adolescents may learn behavior leading to being well-liked through modeling. Relatedly, secure adolescents may have parents who contribute to their relationships with peers through doing things such as facilitating positive peer experiences for their children

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and providing useful advice for getting along with peers. Third, secure adolescents may have good social skills, good affect regulation, good frustration tolerance, or any of a number of other appealing characteristics which contribute to positive social relationships (Elicker, Englund, & Sroufe, 1992; Kobak & Sceery, 1988; Sroufe, 2005). Finally, the positive self-feelings associated with a secure attachment (Cassidy, 1988; Sroufe, 1988) may contribute directly to being well-liked because others may be attracted to those adolescents with a positive outlook and belief in their own self-worth. These pathways are not mutually exclusive, and they may all play roles.

Although there are good theoretical reasons to expect that a connection between adolescents' attachment representations and interaction behaviors with new acquaintances might exist, attachment theory's predictions regarding the influence of working models of attachment on relationship behaviors have been applied principally to close relationships. Indeed, substantial empirical evidence reveals strong associations between attachment and a variety of close relationship processes in children and adolescents, including social behavior with peers, peer acceptance, and friendship quality (e.g., Allen, Moore, Kuperminc, & Bell, 1998; Cassidy, Kirsh, Scolton, & Parke, 1996; Elicker, Englund, & Sroufe, 1992; Furman, 2001; Kobak & Sceery, 1988; for a review, see Berlin & Cassidy, 1999). For example, secure attachments are linked with more harmonious relationships with others and with friendship quality and quantity (Elicker, Englund, & Sroufe, 1992; Freitag et al., 1996; Grossman & Grossman, 1991; Kerns, 1994; Kerns, Klepac, & Cole, 1996; Kobak & Sceery, 1988; Park & Waters, 1989; Pierrehumbert, Ianotti, Cummings, & Zahn-Waxler, 1989; Shulman, Elicker, & Sroufe, 1994; Treboux, Crowell, Owens, & Pan, 1994; Youngblade & Belsky, 1992).

In addition, extensions of the theory to adult relationships have focused on the influence of attachment representations on close relationship dynamics (for a review of this literature, see Mikulincer & Shaver, 2007). For example, links between early attachments and subsequent romantic relationships have been demonstrated. That is, adults' self-reported romantic attachment styles and romantic relationship characteristics have been linked in theoretically predictable ways to their recollections of their early relationships with their parents (Bartholomew & Horowitz, 1991; Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987; Simpson, 1990). Most relevant to the current investigation, individual differences in attachment have been predictive of support-seeking and support-giving behaviors in adult romantic relationships. One study examining support behaviors exhibited as one member of a couple awaited "a set of experimental procedures that arouse considerable anxiety and distress in most people" indicated that secure individuals sought and provided more support as their partner's distress increased, whereas insecure-avoidant individuals sought and provided less support as their partner's distress increased (Simpson, Rholes, & Nelligan, 1992). Another study examining support behaviors exhibited as couple members discussed a stressful life event indicated that individuals who were higher in avoidance tended to use indirect support-seeking strategies and to seek relatively low levels of support regardless of how stressful they perceived their problem to be (Collins & Feeney, 2000). Individuals who were higher in attachment-related anxiety provided less instrumental support, were less responsive, and exhibited more negative support behaviors; however, they tended to provide relatively high levels of support when their partner's needs were clear and direct. A subsequent study in which need for support was experimentally manipulated indicated that insecure individuals, particularly insecure-avoidant individuals, were relatively unresponsive to their partner's needs (Feeney & Collins, 2001). Avoidant individuals showed a tendency to provide the least support when it was needed the most, and anxious individuals showed a tendency to provide high levels of support regardless of need. Taken together, these findings are consistent with the view that attachment insecurity limits one's ability to seek and provide support effectively within close relationships.

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In contrast, research examining the extent to which adolescents' or adults' attachment representations predict behavior in new social situations with strangers has been noticeably absent. Generally, studies have only investigated links between *infant* attachment (assessed in the Strange Situation) and *infants'* sociability toward strangers. For example, Main and Weston found that insecure infants showed more conflict and less friendly responsiveness toward an unfamiliar adult than secure infants. In a similar study, Pastor (1981) found that secure infants were more sociable and more positively oriented toward an unfamiliar peer; avoidant infants were more negative in orientation toward the peer; and anxious infants appeared highly stressed, ignored most of the peer's offers, and were most negative (see also Thompson & Lamb, 1983 for a study examining links between security and stranger sociability in infancy).

There are two studies that come close to considering this issue in older samples. One is a study in which 50 adult stranger dyads were observed as they engaged in a challenging puzzle building task (Roisman, 2006). In this study, secure adults demonstrated positive emotional engagement during the puzzle activity, preoccupied adults dominated the activity, and dismissing adults exhibited negative emotion during the activity. However, this was a structured non-attachment-related situation focused on a puzzle task, and not on meeting and getting acquainted with a stranger. Another is a study in which undergraduate Israeli students reported their willingness to self-disclose to others and (while being tape-recorded) spoke to a confederate who exhibited experimentally manipulated levels of self-disclosure. Results indicated that secure and anxious-ambivalent participants, but not avoidant participants, reciprocated disclosure and reported liking toward a high-disclosing confederate. However, this was an activity with a confederate that did not involve naturalistic interaction because the participant was instructed to speak for 2 minutes after hearing a confederate speak for 2 minutes.

Given the centrality to attachment theory of the notion that attachment-related representations are brought forward into new relationships, the goal of this investigation is to take a first step toward examining if and how this may occur in adolescence. Specifically, we examine the extent to which attachment representations are related to observations of adolescents' initial behavior when meeting, interacting with, and responding to the behavior of new peers. The theoretical claim that attachment representations are generalized to new social situations and guide behavior with unfamiliar others is necessary to establish given that behavior during initial interactions are likely to play an important role in shaping the way in which a new relationship develops.

Specifically, the current investigation examines whether individual differences in attachment representations predict behaviors centered on support-seeking and support-giving in interactions with new acquaintances. We selected support-giving and support-seeking behaviors as a focus of this investigation because these are core aspects of attachment that we believed would be most likely to transfer to new relationships. According to attachment theory, working models are constructed based on interactions with significant others in the specific domain of seeking and providing care. Because support interactions are most salient and central to attachment, we examined attachment influences on initial encounters with unfamiliar peers in this specific domain. If we do not see the influence of attachment representations on behaviors in this domain, we reasoned that it would be unlikely that we would see an influence in other, less attachment-relevant domains. This expectation meshes with research showing that attachment insecurity limits adults' ability to seek and provide support effectively during interactions with their romantic partners (e.g., Collins & Feeney, 2000, 2004; Feeney & Collins, 2001; Simpson, Rholes, & Nelligan, 1992).

We selected adolescents as a population of interest because many researchers believe that peer relationships become increasingly important during adolescence as individuals mature and

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develop greater capacities to initiate, maintain, and terminate their peer relations (Asher & Coie, 1990; Buhrmester, 1992). Given that adolescence is marked by increasing autonomy and psychological independence from parents (Ainsworth, 1989; Allen & Land, 1999), failures in peer relations can have a particularly damaging effect on adolescents' own personal growth and well-being (Bukowski, Newcomb, & Hartup, 1996). For these reasons, adolescence can be viewed as a particularly important period in which to examine factors that may contribute to initial interactions with new peers. Although there is some research examining attachment differences in the ways in which infants and toddlers play with an unfamiliar peer or adult (Main & Weston, 1981; Pastor, 1981; Thompson & Lamb, 1983), there has been no research, to our knowledge, examining the ways in which attachment representations influence interaction behaviors with unfamiliar peers in adolescence.

We selected the two most widely accepted, well-validated methods of assessing individual differences in attachment representations in adolescence and adulthood. First, we assessed attachment via the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985; Main & Goldwyn, 1984; Main, Goldwyn, & Hesse, 2003), the structured interview that is used most widely to assess attachment in adolescents and adults. This interview does not rely on the content of internal working models in classifying adolescents, but instead focuses on the ways in which the adolescent processes emotionally-charged memories of attachment experiences with their parents during childhood (the degree of coherence, clarity, and organization brought to bear in discussing highly affectively charged situations). The AAI focuses primarily on childhood relationships with parents. However, rather than assessing the quality of the adolescent's attachment to one or both parents, the AAI assesses a current state of mind about prior attachment experiences with parents. Individuals considered to have a secure state of mind are those who value attachment relationships and consider them to be influential, yet can reflect on them with objective autonomy.

Second, we assessed attachment security via the Experiences in Close Relationships scale (Brennan, Clark, & Shaver, 1998), which assesses the actual content of internal working models of attachment and the expectations and behavioral strategies thought to reflect those working models. The ECR focuses on general experiences and expectations regarding relationships with romantic partners. This is the most widely used self-report measure of adult attachment representations. The ECR is appropriate for use in a sample of adolescents because research has shown that a history of romantic relationship experiences is very common among adolescents (see Furman & Collins, 2008, for a review). Most adolescents in the United States report having special romantic relationships (Carver, Joyner, & Udry, 2003; Furman & Hand, 2006) and thinking about romantic partners for many hours each week (Richards, Crowe, Larson, & Swarr, 1998).

According to attachment theory (Bowlby, 1969/1982/1973), attachment representations include both conscious and non-conscious components; thus, the simultaneous use of both attachment measures permits the most comprehensive assessment of any potential links between attachment representations and behaviors exhibited by adolescents when interacting with new acquaintances. That is, the ECR relies on respondents' subjective perceptions (which are more conscious), whereas the AAI relies on coherence and clarity of discourse regarding attachment experiences during childhood and therefore provides a more implicit (and likely less conscious) assessment of attachment representations. Recent work has indicated that although the AAI and ECR are not highly correlated and therefore cannot be viewed as tapping a unitary underlying construct of "attachment," they both tap important aspects of attachment representations, and they both have strong psychometric properties, including substantial predictive validity for interpersonal dynamics to which attachment theory postulates they should relate (Mikulincer & Shaver, 2007; Roisman, Holland, Fortuna, Fraley, Clausell, & Clarke, 2007). Both measures yield valuable information regarding secure versus insecure

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attachment representations, and we predict similar effects across the two measures. We use the AAI to assess overall security of attachment representations, and we use the ECR to assess the two major dimensions thought to underlie security versus insecurity of attachment representations – attachment avoidance and attachment anxiety.

Specific Hypotheses

We examined the ways in which adolescents seek and provide support in laboratory interactions with an unfamiliar, same-sex peer. We hypothesize that the way people approach and interact with strangers will reflect their internal working models of themselves, others, and relationships. Because people do not know what to expect from someone unfamiliar, it is reasonable to expect that their behavior will be guided, at least in part, by generalized expectations they have derived from interactions with familiar individuals (attachment figures). If this is the case, then adolescents with secure attachment representations should exhibit more positive support-seeking and support-giving capacities than adolescents with insecure attachment representations – even in interactions with strangers. Our specific hypotheses are as follows:

Hypothesis #1: Adolescents' attachment representations will be predictive of the support-seeking behaviors they exhibit during initial interactions with unfamiliar peers

Secure attachment representations include views of close others as being accessible, available, and responsive when support is needed, and they include views of the self as being acceptable and the sort of person toward whom others are likely to respond in a helpful way (Bowlby, 1969/1982/1973). If attachment representations are generalized to new social situations and guide behaviors even in initial encounters with strangers, then secure attachment representations should be associated with a greater willingness and ability to use others as a secure base and a safe haven by seeking support as needed. This should be manifest in specific behaviors including the direct seeking of emotional and instrumental forms of support, a willingness to express feelings of distress, a lack of avoidance with regard to discussing problems and concerns, and a receptiveness to support attempts. Individuals who generally expect others to be accessible and responsive (characteristic of those with secure attachment representations) are also likely to engage in warm/friendly (and not negative/hostile) interactions with others. Thus, we expect greater security to be associated, even in interactions with new acquaintances, with a greater propensity to form supportive, nurturing relationships with others.

In contrast, insecure attachment representations include views of close others as being either unavailable (characteristic of avoidant attachment representations) or available only occasionally or contingently (characteristic of anxious attachment representations), and they include views of the self as being unacceptable/unworthy (particularly characteristic of anxious attachment representations) and the sort of person toward whom others are unlikely to respond in a helpful way (Bowlby, 1969/1982/1973/1980; Collins, Guichard, Ford, & Feeney, 2004; Main et al., 1985). Insecure-avoidant attachment representations also include beliefs that expressions of distress are unacceptable because they have been associated with negative outcomes, and that intimacy/closeness is not desirable, whereas insecure-anxious attachment representations include beliefs that expressions of distress must be either amplified or expressed in a particular way in order to receive a desired response (e.g., Hazan & Shaver, 1987; Kobak & Sceery, 1988; Shaver & Mikulincer, 2007). Thus, insecure-avoidant attachment representations should be linked, even in first encounters with strangers, with specific behaviors that indicate a desire to keep attachment behaviors decreased and muted (i.e., a lack of any form of support-seeking, an unwillingness to express feelings of distress, and avoidance with regard to discussing problems and concerns), and insecure-anxious attachment representations should be linked with specific behaviors that convey an uncertainty about

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others' availability and responsiveness and a resulting belief that one must exhibit attachment behaviors that are increased and heightened in order to receive a response (i.e., the seeking of emotional and instrumental forms of support and a willingness to express feelings of distress, combined with a tendency to express negative/hostile affect because they do not perceive support to be forthcoming) (Cassidy & Berlin, 1994; Cassidy & Kobak, 1988; Main, 1990).

Hypothesis #2: Adolescents' attachment representations will be predictive of the support-giving behaviors they exhibit during initial interactions with unfamiliar peers

If attachment representations guide the way people approach, interact with, and respond to strangers (as we predict), then this should be true for behaviors centered on the provision of support as well as the seeking of support. This is because working models of attachment are built interactionally and encompass views regarding both sides of the attachment-caregiving relationship. That is, attachment representations are theorized to include beliefs about the likelihood of receiving care from others (and rules that guide support-seeking behavior and the regulation of personal distress) as well as beliefs about providing care to others (and rules that guide support-giving and the regulation of a significant other's distress; Bowlby, 1969/1982; Collins & Feeney, 2000; Feeney & Collins, 2001; Kobak & Sceery, 1988; Kunce & Shaver, 1994).

Because secure attachment representations include beliefs that expressions of distress are generally responded to with sensitive support provision, beliefs that the self is capable of having positive relations with others, and beliefs that others are sensitive and responsive to one's own attachment needs, we predict that secure attachment representations should be associated with a greater willingness and ability to provide a secure base and a safe haven by giving support to others as needed – even during initial encounters with strangers. This should be manifest in specific behaviors including the provision of responsive support (e.g., listening to others' concerns, not avoiding others' expressions of distress or discussion of others' problems, providing helpful forms of support), an ability to be other-focused instead of self-focused during a discussion, and engagement in warm/friendly interactions with others.

The characteristics of avoidant and anxious attachment described earlier (i.e., avoidant individuals are averse to intimacy/closeness and expressions of distress, and anxious individuals are concerned about their own acceptability and others' responsiveness toward them) have implications for caregiving as well as careseeking. Thus, we predict that even in initial encounters with strangers, insecure attachment representations should be associated with a reduced capacity to provide responsive support, the provision of controlling forms of support, and a tendency to be self-focused instead of other-focused during a discussion of another's problems/concerns (e.g., Feeney & Collins, 2001; Kunce & Shaver, 1994).

Hypothesis #3: Adolescents' attachment representations will predict how they seek or give support in response to specific behaviors displayed by new acquaintances

We also expected adolescents' support-seeking/support-giving responses to the support-giving/support-seeking behavior of new acquaintances to be consistent with their own attachment. That is, we expected adolescents' attachment to interact with their new acquaintance's support-giving behavior to predict the adolescents' support-seeking behavior (within an interaction in which the adolescent is in a support-seeking role), and we expected adolescents' attachment to interact with their new acquaintance's support-seeking behavior to predict the adolescents' support-giving behavior (within an interaction in which the adolescent is in a support-giving role).

Because behaviors stemming from insecure attachment representations easily become defensive (Mikulincer, Shaver, & Cassidy, in press; Reibstein, 1998), we expect that in

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response to the negativity or self-focus of others (even a stranger), insecure adolescents will respond by becoming angry or unresponsive – responses that thwart the fulfillment of both individuals' needs (and possibly future relationship development). Specifically, insecure attachment representations (reflecting prior experiences with attachment figures who were either rejecting/unavailable or inconsistently available) were expected to be associated with more negative responses to any negative or unsupportive behavior of new acquaintances. However, this sensitivity to negative peer behavior is not likely to characterize adolescents high in attachment security. Moreover, because anxious attachment representations reflect a strong concern about others' acceptance and availability as well as a strong desire for closeness and intimacy (e.g., Bartholomew, 1990; Collins & Read, 1990; Hazan & Shaver, 1987; Simpson, 1990), these representations are expected to be linked with behavioral responses (even toward new acquaintances) that reflect their characteristic behavioral ambivalence and push-pull relationships with others. Thus, these individuals may exhibit both negative responses (e.g., expressions of hostile affect, self-focus) and positive responses (e.g., support-seeking behavior, receptiveness to support attempts, warmth/friendliness) to the behavior of new peers reflective of their behaviors in close relationships (e.g., Feeney & Collins, 2001; Kunce & Shaver, 1994). Finally, we expect attachment avoidance to be linked with behavioral responses to new acquaintances that reflect their negative representations of others' responsiveness and goodwill (e.g., expressions of negative/hostile affect), their desire to keep attachment behaviors decreased and muted (e.g., avoidance of support-seeking and expressions of distress), and their generally unresponsive and controlling style of responding to the needs of others (e.g., Feeney & Collins, 2001; Kunce & Shaver, 1994; Simpson et al., 1992).

Gender

Although not a focus of this investigation, we included gender in all analyses given that it is widely assumed, because of traditional gender roles defined and reinforced by society, that males and females have different styles of relating to one another during social support exchanges (Derlega, Barbee, & Winstead, 1994; Maccoby, 1990), and that these differences may be most likely to emerge during interactions between strangers (Deaux & Major, 1987). For example, it is generally assumed that the female gender role cultivates emotional forms of support (such as comfort and sympathy), whereas the male gender role cultivates more tangible types of support (such as instrumental aid or advice): Men are generally expected to be task oriented, valuing being in charge and exercising emotional control, whereas women are generally expected to be relationship-oriented, valuing emotional closeness and the disclosure of feelings (Derlega et al., 1994; Maccoby, 1990). Barbee et al. (1993) have also noted that the female role, emphasizing nurturance and emotional expressivity, may make it easier for women to disclose their problems to others, whereas the male role, emphasizing independence, control, achievement, and emotional inexpressiveness, may make it difficult for men to seek support when they are experiencing distress.

Despite the prevalence of these views, however, there is limited empirical evidence to support them. Although gender differences in both self-report and observational data have been documented in the support literature (e.g., Barbee, Gulley, & Cunningham, 1990), the studies conducted in this area generally provide mixed and inconsistent evidence – perhaps due to variability both across and within studies in the type of situation, type of relationship, and personal characteristics (such as age) of the support-seeker and support-provider. Also, researchers have concluded that the magnitude of gender differences (when found) are typically small and are qualified by other more proximal situational variables (Canary & Hause, 1993; Dindia & Allen, 1992; Goldsmith & Dun, 1997; Mickelson, Helgeson, & Weiner, 1995), and that self-reports of support provision may be distorted to fit gender-role norms (Derlega et al., 1994; Mickelson et al., 1995; Winstead et al., 1992).

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Clearly, additional research examining gender differences in observable support dynamics is needed in order to help clarify the inconsistent findings in this literature. Thus, although not a focus of this investigation, we included gender as another potential predictor of the support-seeking and support-giving behaviors of adolescents – an age group that has not been previously investigated in this regard. Given previously inconsistent findings regarding gender, we advance no specific hypotheses regarding gender (or the interaction of gender with attachment representations) predicting the support dynamics of adolescents when interacting with strangers.

Method

Participants

Participants were 135 eleventh-grade students (62% female) recruited from schools in the suburbs of a large metropolitan area in the Northeast United States. Each adolescent participant (hereafter referred to as the “target adolescent”) was assigned to interact with a same-sex, unfamiliar peer from another school (hereafter referred to as the “peer”). The 135 target adolescents were a subset of the 189 adolescents who participated in a larger study of family and peer relationships in adolescence. Fifty-four of the 189 adolescents from the larger study were not included in this report either because of missing data or because they did not meet the criterion of serving first as support-seeker rather than support-giver. The majority of unfamiliar interaction partners for the 135 target adolescents (i.e., the support-givers in the first interaction) were individuals recruited for the purpose of participating in this single data collection session (i.e., they did not participate in the larger study, and no AAI data are available for them). The mean age of the target adolescent participants was 16.5 (range = 15–18, *SD* = .58), and their ethnicity was 8.5% Asian, 14.1% Black, 4.1% Hispanic, and 73.3% Caucasian. Adolescents who participated in the full study of family and peer relations were compensated with $100; unfamiliar peers were compensated with $25 for participation in the single data collection session. The target adolescent participant (one member of each dyad) was the unit of analysis.

Procedure

In their classrooms during the spring of their junior year, target adolescents provided demographic information and completed a packet of questionnaires including the self-report measure of attachment (the ECR). Then, during the summer, target adolescents visited the university for a laboratory session. During this laboratory session, each target adolescent participated in a discussion activity with a same-sex unfamiliar peer from another school. Target adolescents also completed the Adult Attachment Interview during this visit.

The discussion activity was introduced as a peer advising task, and it created an appropriate context in which to observe support-seeking and support-giving behaviors. Prior to this activity, each target adolescent and peer was given, individually, a written list of topics described to them as those that adolescents typically identify as areas of difficulty in their lives (e.g., “being concerned with my appearance,” “choosing a college,” “being respected as an adult”). Each target adolescent and peer then was asked (separately) to indicate, using a 5-point scale, the degree to which he or she was currently concerned about each topic. For each target adolescent and for each peer, the experimenter then arranged a series of cards (each listing one topic) in order of most to least concern based on the target adolescent’s and the peer’s ratings. These cards were used as discussion topics for the peer advising task.

Each target adolescent had two 10-minute discussions with the unfamiliar peer partner. For the first discussion, the target adolescent was placed into a “support-seeker” role while the unfamiliar peer was placed into a “support-provider” role. For the second discussion, the target

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adolescent and peer switched roles, and the target adolescent was placed into a "support-provider" role while the peer was placed into a "support-seeker" role. For each discussion, the person assigned to the "support-seeking" role was given his or her stack of cards and asked to discuss each topic, in the arranged order, with his or her assigned interaction partner. The specific instructions for this task were as follows: "(Person's name in the support-seeking role), here is a stack of cards each labeled with a topic. I've put them in the order I would like you to talk about them. I would like you to explain to (person's name in the support-giving role) what it is about that topic that worries you, and see if (s/he) can be of help to you. Try to stay on that topic, but if you run out of things to say about the first topic, you can move on to the next card. If you feel uncomfortable with a certain topic, you can skip that topic. You will have 10 minutes for the entire discussion." The experimenter left the room after giving instructions for the first discussion, returned to repeat the instructions for the second discussion, then left the room again so that the target adolescent and peer were alone during the discussion. Both interactions were videotaped from behind a two-way mirror.

All target adolescents were placed in the role of support-seeker first because attachment, theoretically, has been most closely linked to the *seeking* of care. Although we fully expected attachment representations to be linked to the *giving* as well as the seeking of care as described above, our goal was to examine effects of attachment representations on support-seeking first, uncontaminated by target adolescents having earlier been placed in a support-giving role. Thus, the order of the support-seeking and support-giving roles was uniform across all target adolescents.

Measures

Coding of support-seeking/support-providing behaviors—A coding system was developed to measure the support-seeking and support-providing behaviors of the target adolescent and the unfamiliar peer. This coding system is a modified version of coding systems used to assess support-seeking and support-provision in adult romantic relationships (Collins & Feeney, 2000; Feeney, 2004). All dimensions were coded on rating scales ranging from (1) *not at all* to (5) *consistent/highest quality*. Five coders were trained to reliability and independently rated the videotaped interactions. All coders were unaware of hypotheses and other information about the adolescents. A set of randomly selected interactions (37%, n = 101) was assessed for reliability. A sixth independent coder, who was also blind to other adolescent information, coded disagreements. Each interaction was rated by different coders such that each adolescent's support-seeking behaviors were rated independently of his or her support-providing behaviors. Interclass correlation coefficients (ICC) were computed for each scale for which there was sufficient variability. The support-seeking scales had ICC values that ranged from .68–.85 (M = .76) and support-providing scales had ICC values that ranged from .65–.89 (M = .79). All scales are described below.

Support-seeking behaviors for each interaction (for the target adolescent in the first interaction and the unfamiliar peer in the second interaction) were coded on the following dimensions. (1) *Acknowledgement of concern/distress*: the degree to which the disclosing person appeared to be distressed, concerned, or worried about the problems/issues being disclosed; includes both indirect (subtle) and direct (verbal) expressions/signs of worry, emotional distress, or concern; (2) *Emotional support-seeking/emotional disclosure*: the extent to which the disclosing person openly described, talked about, and shared emotions and feelings related to the problems/issues discussed; (3) *Instrumental support-seeking/descriptive disclosure*: the extent to which the disclosing person talked openly about the details of a particular problem/issue and/or asked for tangible or informational support in dealing with it (e.g., asking how to solve a particular problem); (4) *Indirect-support-seeking/avoidance*: the extent to which the disclosing person exhibited reluctance to openly and directly seek support or express thoughts, feelings, needs,

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or concerns related to a problem/issue; includes indirect support-seeking behaviors such as hinting about a problem or "beating around the bush" when discussing a problem, as well as avoidance behaviors such as changing the topic and making excuses not to stay on task; (5) *Warmth/friendliness*: the extent to which the disclosing person interacted in a warm, friendly, and positive manner; (6) *Negative or hostile affect*: the extent to which the disclosing person exhibited negative or hostile behavior, including (but not limited to) nonverbal expressions of disapproval (e.g., rolling eyes), as well as verbal expressions that criticize, belittle, or make fun of the suggestions offered by the interaction partner; (7) *Receptiveness to support attempts*: the extent to which the disclosing person was receptive to and accepting of the advice/ support provided by conveying either nonverbally or verbally that the input/feedback is welcomed and appreciated, (8) *Overall support-seeking effort*: a summary rating of the extent to which the disclosing person made an active effort to communicate his/her concerns, worries, or problems by actively disclosing the details of his/her problems, as well as his/her thoughts and feelings about the problems.

Support-providing behaviors for each interaction (for the target adolescent in the second interaction and the unfamiliar peer in the first interaction) were coded on the following dimensions. (1) *Listening/attentiveness*: the extent to which the person in the support-providing role displayed clear signs of being focused on the disclosing person and of processing his/her disclosure of information; includes behaviors such as eye contact, nodding, not appearing distracted or bored, and verbally indicating that the information has been heard (e.g., by restating the issue); (2) *Emotional support*: the extent to which the person in the support-providing role focused on the emotional needs of the disclosing person when providing support by expressing empathy, encouragement, compassion, and validation of feelings; (3) *Instrumental support*: the extent to which the support-provider offered assistance aimed at solving a specific problem; (4) *Warmth/friendliness*: the extent to which the support-provider interacted in a warm, friendly, and positive manner; (5) *Negative/hostile affect*: the extent to which the person in the support-providing role was overtly negative, hostile, or critical during the interaction; (6) *Avoidance/Dismissing*: the extent to which the person in the support-providing role avoided discussion of the issues raised by the disclosing person and/or dismissed the importance of the issues under discussion. This scale includes behaviors such as changing the subject, ignoring the disclosing person, engaging in another activity while the person is speaking, and physically moving away from the disclosing person; (7) *Self-focus*: the extent to which the person in the support-providing role directed attention toward him/herself and his/her own needs instead of focusing on the needs and concerns of the disclosing person; (8) *Controlling support*: the extent to which the support-provider behaved in a dominating, bossy, or forceful manner in his/her attempts to provide support; (9) *Overall sensitivity/ responsiveness*: a summary rating of the extent to which the adolescent in the support-providing role demonstrated an active effort to be sensitive and responsive to the disclosing person throughout the discussion (e.g., by remaining actively engaged during the discussion and making a persistent effort to help the disclosing person work through the discussion topics by being attentive, communicating understanding, and providing emotional and/or instrumental forms of support as needed).

Adult Attachment Interview (AAI; George, Kaplan, & Main, 1984, 1985, 1996; Main & Goldwyn, 1984; Main et al., 2003). The AAI is a 60-minute semi-structured interview designed to assess adolescents' and adults' current "state of mind with respect to attachment" (George et al., 1985; Hesse, in press). During the interview, target adolescents were asked to provide general descriptions ("semantic memories") of their relationship with each parent and to provide specific examples ("episodic memories") of these more general descriptions. The interview also included questions that tap memories of feeling loved or unloved, memories of being upset or ill, and memories of separations and losses.

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Each interview was transcribed then rated on a series of 9-point scales that represent each target adolescent's childhood attachment experiences with parents (e.g., of being parented in a loving way) and "current state of mind with regard to attachment." Four coders who were trained and certified as reliable by Mary Main and Erik Hesse rated the AAI transcripts. All coders were blind to any information about the adolescent participants. A composite index representing *coherence of mind* in discussing attachment-relevant events and memories derived from these ratings was used in data analyses (ICC = .68). Higher scores on this index indicate greater attachment security; thus, this index is referred to as AAI security in descriptions of data analyses. This dimensional approach is consistent with implications of recent research examining the latent structure of individual differences reflected in the Adult Attachment Interview (Roisman, Fraley, & Belsky, 2007).

Experiences in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998). In addition to the AAI, target adolescents completed this widely used 36-item self report measure of adult attachment that taps working models of romantic attachment relationships and contains two subscales. The Avoidance subscale (18 items; $\alpha = .91$) measures the extent to which an individual is comfortable with closeness and intimacy as well as the degree to which the individual feels that people can be relied on to be available when needed. The Anxiety subscale (18 items; $\alpha = .88$) measures the extent to which an individual is worried about being rejected, abandoned, or unloved. Target adolescents responded to each item on a scale ranging from 1 *(strongly disagree)* to 7 *(strongly agree)* in terms of their general orientation toward romantic relationships. The avoidance and anxiety subscales were not significantly correlated ($r = -.05$, *ns*). The anxiety ($r = -.10$, *ns*) and avoidance ($r = -.10$, *ns*) subscales also were not significantly correlated with the coherence of mind score from the AAI, indicating that these variables are tapping independent aspects of attachment security and insecurity. As typical in research using the ECR, we also examined interactions between the anxiety and avoidance dimensions to test effects for particular combinations of avoidance and anxiety: secure (low anxiety, low avoidance), fearful (high anxiety, high avoidance), preoccupied (high anxiety, low avoidance), and dismissing (low anxiety, high avoidance).

As an indicator of the appropriateness of this measure of romantic attachment representations for our adolescent sample, we assessed the prevalence of romantic relationships experiences among the population of adolescents from which our sample was drawn. Results indicated that (a) 80.1% of the adolescents answered "yes" to the question, "Have you ever dated anyone or had a boyfriend/girlfriend?," (b) the average age of a first boyfriend/girlfriend was 13.67, and (c) adolescents reported having been romantically involved with an average of 4.58 people. Thus, most adolescents in this sample have a history of romantic relationship experiences on which to base their responses to the ECR.

Results

Preliminary Analyses

Preliminary analyses were conducted to examine intercorrelations among coded variables and reduce the number of variables used in data analysis. A principal components analysis of the eight coded support-seeker variables indicated that five of these variables (acknowledgement of concern/distress, emotional support-seeking, instrumental support-seeking, overall support-seeking, and indirect support-seeking/avoidance reverse coded) were highly intercorrelated (mean r (135) = .57, $p < .001$) and loaded on a single factor representing *support-seeking behavior* during the discussion. The remaining 3 variables (warmth/friendliness, negative/hostile affect, and receptiveness to support attempts) were retained as separate variables. Intercorrelations among all final support-seeker variables used in data analyses are as follows: $r = .07$, *ns* for support-seeking and warmth/friendliness; $r = .08$, *ns* for support-seeking and negativity/hostility; $r = .32$, $p < .001$ for support-seeking and receptiveness to support; $r = .00$,

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ns for warmth/friendliness and negativity/hostility; $r = .22$, $p < .01$ for warmth/friendliness and receptiveness to support; and $r = -.04$, *ns* for negativity/hostility and receptiveness to support.

A principal components analysis of the nine support-provider variables indicated that four variables (overall sensitivity/responsiveness, emotional support, listening/attentive, and avoidance/dismissing reverse coded) were highly intercorrelated (mean $r(135) = .50$, $p < .001$) and loaded on a single factor representing *responsive support behavior* during the discussion, and both instrumental support and controlling support were correlated ($r(135) = .35$, $p < .001$) and loaded on a factor representing instrumental/controlling support. The remaining 3 variables (warmth/friendliness, negative/hostile affect, and self-focus) were retained as separate support-provider variables. Intercorrelations among all final support-provider variables used in data analyses are as follows: $r = .21$, $p < .05$ for responsive support and instrumental/controlling support; $r = .34$, $p < .001$ for responsive support and warmth/friendliness; $r = -.06$, *ns* for responsive support and negativity/hostility; $r = -.25$, $p < .01$ for responsive support and self-focus; $r = -.05$, *ns* for instrumental/controlling support and warmth/friendliness; $r = .27$, $p < .01$ for instrumental/controlling support and negativity/hostility; $r = .05$, *ns* for instrumental/controlling support and self-focus; $r = -.23$, $p < .01$ for warmth/friendliness and negativity/hostility; $r = .08$, *ns* for warmth/friendliness and self-focus; and $r = .03$, *ns* for negativity/hostility and self-focus. Means and standard deviations for all study variables are presented in Table 1.

Hypothesis Testing

The three major hypotheses were examined using hierarchical regression analyses. While testing the first two hypotheses, main effects of gender, as well as interactions of attachment and gender, in predicting support-seeking and support-giving behaviors were also examined. Thus, the main effect variables were entered on the first step of the regression equation and included all attachment measures (AAI security, anxiety and avoidance from the ECR). The two-way interaction terms (gender × AAI security, gender × anxiety, gender × avoidance, and anxiety × avoidance) were entered on the second step. All significant interactions were explored by calculating the simple slope of the dependent measure on the predictor variable at one standard deviation above and below the mean on the moderator variable.

Hypothesis #1: Adolescents' attachment representations will be predictive of the support-seeking behaviors they exhibit during initial interactions with unfamiliar peers—Links between target adolescents' attachment representations and their support-seeking behaviors (i.e., support-seeking, warmth/friendliness, negative/hostile affect, receptiveness to support attempts) were examined using data from the first interaction (when target adolescents were in the support-seeking role); the role of gender was also examined. Hierarchical regression analyses were conducted predicting each support-seeking behavior. As shown in Table 2, results revealed that greater AAI security predicted greater support-seeking behavior and greater receptiveness to support, and greater ECR attachment anxiety (which reflects a concern of being rejected by others) was associated both with greater support-seeking behavior and greater expressions of negative/hostile affect. No significant associations emerged for the ECR avoidance dimension. Moreover, results indicated a significant interaction of attachment anxiety and avoidance predicting support-seeking behavior (See Table 2). As depicted in Figure 1, follow-up tests revealed a strong positive association between attachment anxiety and support-seeking for target adolescents low in attachment avoidance (simple $b = .25$, $t(125) = 3.52$, $p < .001$); however, no significant association emerged between anxiety and support-seeking for target adolescents high in avoidance (simple $b = -.05$, $t(125) = -.52$, *ns*). Thus, it appears to be adolescents who are high in anxiety but low in avoidance (preoccupied adolescents) who are seeking the most support. Results also revealed main effects

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of gender, with males exhibiting less support-seeking behavior, less warmth/friendliness, and less receptiveness to support attempts than females (see Table 2).[1]

Hypothesis #2: Adolescents' attachment representations will be predictive of the support-giving behaviors they exhibit during initial interactions with unfamiliar peers—Links between target adolescents' attachment representations and their support-giving behaviors (i.e., responsive support, instrumental/controlling support, warmth/friendliness, negative/hostile affect, and self-focus) were examined using data from the second interaction (when target adolescents were in the support-providing role); again the role of gender was examined. Results indicated that the attachment dimensions were predictive of support-providers' behaviors as follows (see Table 3): Greater AAI attachment security was associated with more responsive support and with less self-focus during the discussion. In addition, ECR attachment anxiety was positively associated with warmth/friendliness during the discussion. No significant associations emerged for the ECR avoidance dimension. The main effect of gender indicated that males provided less responsive support than females.

In addition to these main effects, results indicated two significant interactions of attachment anxiety and gender: one predicting responsive support, and one predicting self-focus (see Table 3). Follow-up tests revealed that these two interactions showed similar patterns. As depicted in Figure 2, there was no association between anxiety and responsive support provision for females (simple $b = .07$, $t(78) = 1.19$, *ns*); however, there was a tendency for attachment anxiety to be negatively associated with responsive support provision for males (simple $b = -.15$, $t(46) = -1.65$, $p = .106$).[2] Similarly, as depicted in Figure 3, there was no association between anxiety and self-focus for female support-providers (simple $b = -.09$, $t(78) = -.87$, *ns*); however, there was a significant positive association between anxiety and self-focus for male support-providers (simple $b = .25$, $t(46) = 1.99$, $p = .05$). Thus, as males (but not females) experience greater attachment anxiety, they provide less responsive support and exhibit greater self-focus.

Hypothesis #3: Adolescents' attachment representations will predict how they seek or give support in response to specific behaviors displayed by new acquaintances—Next, we tested the hypothesis that the target adolescents' attachment interacts with the peers' support-giving behavior to predict target adolescents' support-seeking behavior toward the peer (within the first interaction), and that target adolescents' attachment interacts with the peers' support-seeking behavior to predict target adolescents' support-giving behavior toward the peer (within the second interaction). We used a series of hierarchical regression analyses as described below and included gender as a control variable in all analyses.

Analyses with AAI Security: Within the first interaction in which target adolescents were support-seekers, we examined whether target adolescents' AAI security interacted with each of the peer's support-giving behaviors (i.e., responsive support, instrumental/controlling support, warmth/friendliness, negative/hostile affect, and self-focus) to predict the target

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[1]To examine whether these effects (and any subsequent effects) were due to adolescents' degree of concern about the problems discussed, we also ran these and all subsequent analyses controlling for adolescent concern. We computed a "concern" variable representing the target adolescents' average ratings of the 5 topics they indicated were of greatest concern to them. [For the peer advising task, topics were arranged in order of most to least concern, and adolescents typically discussed no more than 5 topics during the discussions.] The associations between the concern ratings and the three attachment dimensions (coherence of mind, anxiety, avoidance) were as follows: $r = -.21$, $p = .014$ for concern and coherence; $r = .16$, $p = .077$ for concern and anxiety; and $r = .20$, $p = .023$ for concern and avoidance. All effects remained the same.

[2]Because the change in R-Square was not significant at Step 2 when *all four* interaction terms (gender × AAI Security, Gender × Anxiety, Gender × Avoidance, Anxiety × Avoidance) were entered into the equation together, we verified the significance of this interaction by conducting a regression analysis to examine only the interaction between anxiety and gender predicting responsive support (without the other interaction terms in the model). Results of this analysis indicated both a statistically significant interaction effect ($\beta = -.79$, $SE = .11$, $t(125) = -2.04$, $p < .05$) and a statistically significant R-Square Change ($\Delta R^2 = .03$, $F(1,122) = 4.17$, $p < .05$).

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adolescents' support-seeking behaviors (i.e., support-seeking, warmth/friendliness, negative/hostile affect, receptiveness to support attempts). Results of hierarchical regression analyses revealed that target adolescents' AAI security interacted with the peers' negative/hostile affect to predict the target adolescents' negative/hostile affect, $\beta = -1.21$, $SE = .03$, $t(133) = -2.06$, $p < .05$ [$\Delta R^2 = .12$, Total $R^2 = .16$, F_{change} (1,130) = 18.66, $p < .001$]. Follow-up analyses indicated that for target adolescents low in AAI security, greater peer negative/hostile affect was associated with greater target adolescent negative/hostile affect (simple $b = .33$, $t(133) = 4.56$, $p < .001$); in contrast, for target adolescents high in AAI security, no association emerged (simple $b = -.08$, $t(133) = -1.47$, *ns*). Thus, greater attachment insecurity was linked to reciprocity of negative/hostile affect (i.e., to greater negative/hostile affect in relation to the negative/hostile affect of an unfamiliar peer). See Figure 4.

Evidence for this negative reciprocity also emerged within the second interaction in which the target adolescent and peer switched support-seeking and support-giving roles. Results of the regression analyses examining the interaction between the target adolescents' AAI security and each of the peer's support-seeking behaviors (i.e., support-seeking, warmth/friendliness, negative/hostile affect, receptiveness to support attempts) predicting the target adolescents' support-giving behaviors (i.e., responsive support, instrumental/controlling support, warmth/friendliness, negative/hostile affect, and self-focus) within the second interaction revealed that target adolescents' AAI attachment security interacted with the peers' negative/hostile affect to predict the target adolescents' negative/hostile affect, $\beta = -1.09$, $SE = .05$, $t(133) = -2.33$, $p < .05$ [$\Delta R^2 = .04$, Total $R^2 = .39$, F_{change} (1,130) = 9.02, $p < .01$]. Follow-up analyses indicated that for target adolescents low in AAI security, greater peer negative/hostile affect was associated with greater target adolescent negative/hostile affect (simple $b = .81$, $t(133) = 8.54$, $p < .001$); however, for target adolescents high in AAI security, no association emerged (simple $b = .27$, $t(133) = 1.94$, *ns*). See Figure 5.

Analyses with ECR attachment anxiety and attachment avoidance—Results involving *attachment anxiety* revealed the following: Within the first interaction, target adolescents' attachment anxiety interacted with peers' self-focus (in the support-giving role) to predict the target adolescents' warmth/friendliness (in the support-seeking role), $\beta = 1.29$, $SE = .02$, $t(125) = 3.01$, $p < .01$ [$\Delta R^2 = .04$, Total $R^2 = .10$, F_{change} (1,122) = 4.31, $p < .05$]. Follow-up analyses revealed that for target adolescents high in attachment anxiety, no association emerged between peer self-focus and target adolescents' warmth/friendliness (simple $b = .10$, $t(125) = 1.26$, *ns*), whereas for target adolescents low on attachment anxiety, a significant positive association emerged (simple $b = .26$, $t(125) = 3.20$, $p < .01$). Thus, it is the low anxiety (and not high anxiety) adolescents who respond more positively to a peer's self-focus during a time when the peer is supposed to be providing support. See Figure 6.

Within the second interaction, the pattern of reciprocal negative interaction that was associated with high AAI insecurity also emerged for adolescents high on attachment anxiety. Target adolescents' attachment anxiety interacted with the peer's negative/hostile affect to predict the target adolescents' concurrent negative/hostile affect when giving support, $\beta = 1.82$, $SE = .08$, t (125) = 4.09, $p < .001$ [$\Delta R^2 = .09$, Total $R^2 = .40$, F_{change} (1,122) = 17.88, $p < .001$]. Follow-up analyses indicated that for target adolescents high in attachment anxiety, greater peer negative/hostile affect was associated with greater target adolescent negative/hostile affect (simple $b = .68$, $t(125) = 8.51$, $p < .001$); however, for target adolescents low on attachment anxiety, no significant association emerged (simple $b = .07$, $t(125) = .43$, *ns*). See Figure 7. Consistent with the results for AAI insecurity, high anxiety adolescents strongly reciprocate expressions of negative/hostile affect, even in initial encounters with strangers. Also within the second interaction, target adolescents' attachment anxiety interacted with the peers' receptiveness to support attempts to predict target adolescents' concurrent warmth/friendliness when giving support, $\beta = 1.41$, $SE = .12$, t (125) = 1.96, $p < .05$ [$\Delta R^2 = .03$, Total $R^2 = .12$,

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F_{change} (1,122) = 3.94, $p < .05$]. Follow-up analyses revealed that for target adolescents high in attachment anxiety, greater peer receptiveness to support attempts was associated with greater target adolescent warmth/friendliness (simple $b = .41$, $t(125) = 3.27$, $p < .001$); however, for target adolescents low in attachment anxiety, no association emerged (simple $b = .06$, $t(125) = .51$, *ns*). See Figure 8. Thus, high anxiety adolescents are especially friendly and warm when their interaction partners show an acceptance of their support attempts.

Results involving *attachment avoidance* revealed the following: Within the first interaction, target adolescents' attachment avoidance interacted with peers' instrumental/controlling support to predict target adolescents' warmth/friendliness, $\beta = -2.32$, $SE = .09$, $t(125) = -2.32$, $p < .05$ [$\Delta R^2 = .04$, Total $R^2 = .05$, F_{change} (1,122) = 5.06, $p < .05$]. Follow-up analyses revealed that for target adolescents high in attachment avoidance, greater peer support was associated with lower target adolescent warmth/friendliness (simple $b = -.25$, $t(125) = -2.17$, $p < .05$); however, for target adolescents low in attachment avoidance, no association emerged (simple $b = .17$, $t(125) = 1.27$, *ns*). Thus, greater attachment avoidance is linked to less warmth/friendliness in relation to the instrumental/controlling support provision of unfamiliar peers. See Figure 9.

Two three-way interactions involving both the anxiety and avoidance dimensions emerged. Within the first interaction, a significant 3-way interaction among target adolescents' avoidance, target adolescents' anxiety, and peers' instrumental/controlling support predicted the target adolescents' negative/hostile affect, $\beta = 6.79$, $SE = .03$, $t(125) = 3.37$, $p < .001$ [$\Delta R^2 = .07$, Total $R^2 = .26$, F_{change} (1,118) = 10.47, $p < .01$]. Follow-up analyses revealed that for target adolescents who are low in both avoidance and anxiety (secure adolescents), greater peer instrumental/controlling support was associated with greater target adolescent negative/hostile affect, $\beta = .66$, SE =.02, $t = 4.04$, $p < .001$, as it was for target adolescents who are high in both avoidance and anxiety (fearful adolescents), $\beta = .53$, SE = .05, $t = 3.53$, $p < .001$. However, for target adolescents who were high in avoidance and low in anxiety (dismissing avoidant adolescents), or for target adolescents who were high in attachment anxiety and low in avoidance (preoccupied adolescents), no association emerged, $\beta = .16$, $SE = .03$, $t = .90$, *ns*, and $\beta = .11$, SE =.09, $t = .42$, *ns*, respectively. See Figure 10. Thus, dismissing and preoccupied adolescents do not exhibit negative/hostile affect in relation to the provision of instrumental/controlling support, whereas secure and fearful adolescents do.

Within the second interaction, a significant 3-way interaction among target adolescents' avoidance, target adolescents' anxiety, and the peer's support-seeking predicted the target adolescents' responsive support $\beta = 11.04$, $SE = .10$, $t(125) = 4.04$, $p < .001$ [$\Delta R^2 = .06$, Total $R^2 = .24$, F_{change} (1,118) = 10.00, $p < .01$]. Follow-up analyses revealed that for target adolescents who are low in both avoidance and anxiety (secure adolescents), $\beta = .75$, $SE = .14$, $t = 4.87$, $p < .001$, and for target adolescents who are high in both avoidance and anxiety (fearful avoidant adolescents), $\beta = .49$, $SE = .16$, $t = 2.73$, $p < .01$, greater peer support-seeking was associated with greater target adolescent responsive support. In contrast, for target adolescents high in anxiety and low in avoidance (preoccupied adolescents) and those high in avoidance and low in anxiety (dismissing avoidant adolescents), no association emerged, $\beta = .33$, $SE = .18$, $t = 1.71$, *ns*, and $\beta = -.19$, $SE = .18$, $t = -.96$, *ns*, respectively. See Figure 11. Thus, secure and fearful adolescents are providing responsive support in relation to the support-seeking of their new acquaintances; preoccupied and dismissing avoidant adolescents show no link between a peer's support-seeking and their own responsive support provision.

Discussion

Research that contributes to elucidating the extent to which attachment representations can be expected to guide interactions with strangers is important for the development of attachment

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theory. The current investigation addressed this issue using a sample of adolescents who participated in support interactions with a same-sex unfamiliar peer. Specifically, we examined the extent to which attachment security predicts support-seeking and support-giving behaviors in adolescents' interactions with strangers, as well as the extent to which attachment security predicts responses to the behavior of strangers.

Adolescents' attachment representations predicting the support-seeking and support-giving behaviors they exhibit during initial interactions with unfamiliar peers

Results of this investigation indicated that attachment was indeed predictive of adolescents' support-seeking and support-giving behaviors – even in interactions with strangers. First, adolescents who were higher in AAI security were more likely to seek support and more receptive to the support attempts of the unfamiliar peer. With regard to support-giving behavior, adolescents who were higher in AAI security were less self-focused and more sensitive/responsive during the discussion.

It is notable that these effects are ones that would be most predicted by attachment theory. These results also mesh with research showing that attachment security in both children (e.g., Ainsworth, Blehar, Waters, & Wall, 1978; Cassidy, 1986; Main et al., 1985; Matas, Arend, & Sroufe, 1978; Sroufe, Egeland, Carlson, & Collins, 2005; Steele, Steele, & Johansson, 2002; Vaughn & Waters, 1990) and adults (e.g., Mikulincer & Florian, 1995; Ognibene & Collins, 1998; Simpson et al., 1992) is associated with actively seeking care/comfort from significant others in times of need. It is remarkable that the current results reveal the same interaction pattern even during an initial encounter with a stranger. The secure adolescents in this study provided coherent AAI descriptions of comfortable relationship experiences with parental attachment figures in which they have been able to freely express distress and receive sensitive care in response to those expressions. Thus, these results suggest a process through which the past of these adolescents is brought to bear on the present, a process suggested by Bowlby (1973, 1988) when outlining the potentially far-reaching implications of working models of attachment.

Second, results obtained with the ECR were also theoretically consistent. For instance, the finding that attachment anxiety is associated with both more support-seeking and more negativity/hostility when in the care-seeking role with a stranger is intriguing and consistent with the patterns exhibited by anxious babies, as well as anxious adults, in their relationships with close others. First, this is exactly the type of behavior exhibited by anxious/ambivalent babies in the Strange Situation (Ainsworth et al., 1978). In this stressful context, anxious/ambivalent babies fully approach their parents and desire care; however, they mix this seeking behavior with angry resistance and cannot be fully settled. In fact, the coding description for anxious/ambivalent children outlined by Ainsworth et al. (1978) states that "the mixture of seeking and yet resisting contact and interaction has an unmistakenly angry quality" (p. 62). Second, although anxious adults place a great deal of importance on relationships and are strongly motivated to form them, they simultaneously experience a great deal of anxiety in their relationships with others because they are worried about being abandoned and unloved, and because they perceive significant others as being inconsistent, unreliable, and unwilling to adequately commit to relationships (e.g., Bartholomew, 1990; Collins & Read, 1990; Hazan & Shaver, 1987; Simpson, 1990). As a result, anxious adults tend to be involved in close relationships that are characterized by over-dependence on close relationship partners, frequent negative affect, and low levels of trust and satisfaction. Most relevant to the current investigation, prior research on anxious adults' support-seeking behaviors has shown that although they seek support from close others in times of stress (e.g., Mikulincer & Florian, 1995; Ognibene & Collins, 1998), their support-seeking behavior does not differ under conditions of high and low stress (Ognibene & Collins, 1998), and their support-giving

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behavior is of the compulsive type that does not differ depending upon the degree to which their partner is experiencing distress and in need of support (Feeney & Collins, 2001; Kunce & Shaver, 1994). In other studies, however, anxious attachment in adulthood has been either unrelated to support-seeking from close others (e.g., Collins & Feeney, 2000; Simpson et al., 1992) or associated with less support-seeking from them (Florian, Mikulincer, & Bucholtz, 1995). We have speculated that the inconsistent findings may reflect anxious individuals' desire to engage in situationally appropriate intimacy-related behaviors, but this desire is sometimes counterbalanced or interfered with by insecurities related to fear of rejection (see Collins & Feeney, 2004, for a review). Nonetheless, the results of the current investigation reveal that the same conflicted interaction patterns are evident even in a first encounter with a stranger, and even in a younger age demographic.

It is also interesting to point out the discrepancy in anxious adolescents' emotional expressions when in the support-seeking role versus the support-providing role. That is, although anxiety was associated with greater expressions of hostility when adolescents were in the support-seeking role, it was associated with greater expressions of warmth/friendliness when the same adolescents were in the support-providing role. This discrepancy illustrates a behavioral pattern that is consistent with the underlying representations that anxious individuals possess of themselves and others in relational contexts: When they are seeking support, it is likely that they are also seeking closeness and acceptance, but because they believe that they will not fully receive it, they become hostile in their seeking attempts. It appears that anxious individuals may have learned that this behavioral strategy (support seeking in combination with expressions of hostility) can increase the care that they receive. In fact, in his theorizing, Bowlby (1973) spoke of expressions of anger as a means of obtaining increased care as long as the expressions are not too destructive (see also Cassidy & Berlin, 1994). Of course, it is probably the case that although negativity may increase responsiveness in the short run, it is also likely to frustrate or anger the caregiver, perhaps contributing to a self-fulfilling prophecy wherein the caregiver does not want to be around the anxious individual, and the anxious individual is left feeling that others do not want to be close to them (confirming their attachment representations). In contrast, anxious individuals seem to be very happy when they are in the support-providing role and another person is asking them for care, perhaps because this provides a form of closeness, which is exactly what these individuals crave. Thus, it is unlikely to be random that it is the negativity that is being expressed when anxious individuals are in the seeking role and the positivity being expressed when they are in the providing role. It is remarkable that the interaction patterns characteristic of these individuals can be seen even in a first encounter with a stranger.

Adolescents' attachment representations predicting how they seek or give support in response to specific behaviors displayed by new acquaintances

Results of this investigation also are consistent with the proposition that working models of attachment guide responses to the behavior of others – even strangers – in ways consistent with these underlying models. Results using the AAI indicated that adolescents who were low in AAI security strongly reciprocated expressions of negative/hostile affect within both the first and second interactions, whereas adolescents who were high in AAI security did not. These results are consistent with the idea that insecure individuals are guided by negative expectations regarding the responsiveness, availability, and goodwill of others – particularly in contexts involving the giving and receipt of support. Adolescents who are high in attachment insecurity are likely both to respond more negatively to the negative behavior of others (perhaps because they are more sensitive to any type of behavior that may signal rejection) and to behave toward interaction partners in ways that elicit more negative behavior. However, sensitivity to negative peer behavior is not likely to characterize secure adolescents who have a greater propensity to

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form supportive relationships with others based on a history of positive relationship experiences.

Results for attachment anxiety (assessed via the ECR) were also consistent with expectations. Adolescents who were high in attachment anxiety again showed evidence of their ambivalent interactional style – even in an initial encounter with a stranger. Results indicated that although they strongly reciprocated expressions of negative/hostile affect with their peer acquaintance, and although they did not increase expressions of warmth/friendliness in response to the self-focused behaviors of their peers (as did low anxiety individuals), they were especially warm/friendly when the peers showed an acceptance of their support attempts. This behavioral pattern involving high levels of negativity in relation to negative peer behavior, and high levels of positivity in relation to peer acceptance, again reflects anxious individuals' characteristic ambivalence and concern about the acceptance and responsiveness of others. They seem to blend both positive and negative interaction behaviors in ways that support their underlying goal of eliciting care from others while reducing the possibility of being rejected. Again, it is remarkable that this behavioral ambivalence can be seen even in an initial interaction with a stranger.

Results also provided information regarding particular types of high anxiety adolescents. Specifically, adolescents who were preoccupied (high anxiety, low avoidance) did not react negatively to their peer's provision of instrumental/controlling support as did adolescents who were fearful (high anxiety, high avoidance) or secure (low anxiety, low avoidance). Also, fearful attachment predicted increases in support provision in response to peers' support-seeking behavior (similar to the behavior of secure adolescents), whereas preoccupied attachment predicted no increases in support provision in response to peers' support-seeking behavior (similar to the behavior of dismissing adolescents). Taken together, these findings reflect a key difference between preoccupied and fearful individuals involving the degree to which they focus on getting their own attachment needs met. Preoccupied individuals strive for intimacy and closeness and worry a great deal about being valued, accepted, and cared for by others (Bartholomew, 1990). This strong focus on their own attachment needs may explain their acceptance of any type of peer behavior that centers on these needs, as well as their impeded ability to respond to the needs of others. These results are consistent with research showing that, in close romantic relationships, anxious individuals provide support that is out of sync with their partners' needs (Feeney & Collins, 2001).

Fearful individuals, on the other hand, want close relationships, but they worry about getting hurt if they trust others completely or allow themselves to get too close (Bartholomew & Horowitz, 1991). We suspect that because these individuals are not focused on getting their own needs met yet value close relationships and wish to remain connected to others, they are able to behave in ways similar to secure individuals (by responding sensitively to others' support-seeking behavior and by rejecting what may be uninformed instrumental/controlling support from a person they just met). However, they are likely to exhibit these behaviors for different reasons than secure individuals. Secure adolescents may provide responsive support to others while setting appropriate boundaries because this is the type of behavior they experienced in prior close relationships. Fearful adolescents may exhibit similar behaviors in this context because of a hypersensitivity to others (perhaps reflected in their responsive support provision) and distrust of others (perhaps reflected in their negative response to instrumental/controlling support) based in their own attachment histories. Additional work is needed to examine underlying motivations for these behaviors (see Feeney & Collins, 2003).

Results for attachment avoidance (assessed via the ECR) were less frequent, but they were consistent with expectations that avoidant adolescents would interact with new acquaintances in ways that reflect their discomfort with expressions of distress, their desire to keep attachment

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behaviors muted, and their generally unresponsive and controlling style of responding to the needs of others (e.g., Feeney & Collins, 2001; Kunce & Shaver, 1994; Simpson et al., 1992). First, results revealed that dismissing avoidant (high avoidance, low anxiety) adolescents showed no link whatsoever between a peer's support-seeking behavior and their own responsive support provision. Thus, these adolescents are not providing support in response to the peers' request for it. This behavioral pattern is consistent with prior research with adult romantic couples showing that attachment avoidance is associated with a lack of responsiveness to one's relationship partner's needs (e.g., Feeney & Collins, 2001; Simpson et al., 1992). Yet it is striking that this lack of responsiveness is also observed so clearly in an initial encounter with a new acquaintance.

Second, results revealed that dismissing avoidant (high avoidance, low anxiety) adolescents did not exhibit negative/hostile affect in relation to the peers' provision of instrumental/controlling support, whereas secure (low anxiety, low avoidance) and fearful (high anxiety, high avoidance) adolescents did. This finding must be considered in combination with the finding that individuals high on attachment avoidance exhibited less warmth/friendliness in relation to the instrumental/controlling support provision of peers. Together, these findings may indicate that individuals high in avoidance do not respond negatively to instrumental/controlling support (perhaps because it does not involve emotional closeness), yet at the same time they do not respond to it with warmth/friendliness, perhaps because to do so would lead to emotional closeness which is what they would like to avoid.

Theoretical Implications

Taken together, the results of this investigation illustrate one mechanism that may account for the stability of internal working models (or relational representations): the process of self-fulfilling prophecy. That is, the results show that secure attachment representations are associated with more seeking and providing of care, and characteristic responses to the behavior of others – even in a first encounter with a stranger. By seeking care, one is more likely to receive it, and by responding positively to the receipt of care, one is more likely to receive it again. This process is likely to cement secure individuals' representations that others are willing to give care and that the self is competent in eliciting it. A similar process is likely to occur for insecure individuals to strengthen their existing representations that others cannot be relied upon and that the self is not likely to receive care from others. Repeated experiences of fulfilling expectations are likely to confirm and further establish the generalized representations that individuals use to predict (more or less successfully) what is likely to happen during a specific social interaction (Bretherton & Munholland, 1999).

The results of this investigation are also consistent with the view that attachment characteristics play a role in shaping the development and functioning of new relationships and with the view that characteristics of important attachment relationships are likely to be replicated, to at least some extent, in subsequent relationships with others – particularly those that involve attachment-relevant themes. Our data suggest that expectations regarding the availability and accessibility of others (included in assessments of working models of attachment) play a role in interactions even among strangers. Attachment theory makes important predictions regarding the influence of working models on relationship formation (Bowlby, 1969/1982/1973), and evidence for this aspect of the theory was obtained in the current investigation.

Study Strengths and Limitations

There are a number of noteworthy strengths of this investigation. A first major strength involved the use of both of the most standard, validated, and widely accepted measures of adult attachment. Thus, we were able to provide a comprehensive test of the extent to which attachment representations can be expected to guide behavior in interactions with strangers.

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Although these two measures did not always yield the same significant effects, both measures did yield an overall pattern of results that are consistent with theoretical predictions. Bowlby (1973) describes attachment representations as being complex constructs that include both conscious and non-conscious components. Because the AAI and ECR were developed to tap into different aspects of attachment representations (and given that one assesses attachment representations regarding relationships with parents, whereas the other assesses attachment representations regarding relationships with romantic partners), it makes sense that the two measures might vary in the extent to which they are predictive of specific behaviors within a specific interpersonal context. In support of this idea, Roisman et al. (2007) have shown that these two measures predict somewhat distinct, though theoretically consistent, aspects of functioning in adult relationships. Being attachment researchers in both the social and developmental psychology traditions, we acknowledge that there is much work to be done with regard to measurement of "attachment security" and "attachment representations." However, one of the best ways to resolve these measurement issues is to examine the ways in which both standard measures predict similarly or differently across many studies. We hope the current investigation will contribute in that regard.

A related limitation, however, is that the design of this particular study meant that the ECR was completed 3 months before the peer advising task, whereas the AAI was administered on the same day. Because the AAI takes up to 2 hours to complete, we were unable to administer that earlier in the schools (which is where we had participants complete the ECR). We view this as a limitation because this discrepancy may be responsible for some of the variation in results between the two measures. However, given the time lag between completion of the ECR and the peer advising task, the links that did emerge with the ECR are quite remarkable and can be viewed as showing a predictive link.

A second major strength of this investigation involved the assessment of a variety of specific behaviors as they occurred during *two* interactions between new acquaintances. The exclusion of any one of the specific behaviors we considered (e.g., support-seeking, responsive support provision, negative/hostile affect, warmth/friendliness), and the exclusion of either one of the interactions (in which the adolescent was in the support-seeking role vs. the support-giving role), would have provided a less complete picture of what is happening during initial interactions with strangers. Although social support interactions may not be the typical types of interactions people have when they are meeting for the first time, support-seeking and support-giving behaviors were selected as a focus of this investigation because these are core aspects of attachment that are most likely to transfer to new relationships.

We acknowledge that although adolescents with secure attachment representations were comfortable seeking support from a stranger in this study, they were instructed to engage in this type of interaction, and therefore seeking support from a stranger was appropriate in this context. It is possible that, outside of the lab, secure adolescents may be less likely to seek support from strangers and instead seek support from close others. Nonetheless, this investigation demonstrated that adolescents with secure attachment representations do have the capacity to seek care and support even from strangers, which is consistent with attachment theoretical propositions. It remains for future research to determine whether other domains of interaction with strangers (including more typical first encounters) are equally influenced.

Related to this issue is the possibility that adolescents' experiences as support-seekers in the first interaction may have affected their later support-giving behavior. For example, the support-giving behavior of the peer during the first interaction may have contributed to the prediction of adolescents' support-giving behavior in the second interaction. We held the order of support-seeking and support-giving constant across all target adolescents in order to examine the effects of attachment representations on support-seeking first, uncontaminated by

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adolescents having earlier provided support to the person from whom they are seeking care. Additional studies examining the influences of prior support interactions on subsequent ones as new relationships develop will be an important avenue for future research.

A third major strength of this investigation is that it considered the behaviors of two interaction partners, which is important when examining the influence of attachment representations on interaction behavior. Although we refer to these effects as adolescents' "responses" to the behavior of new peers, we make no causal claims regarding the order in which these behaviors appeared during the interactions. Important next steps in this program of research will be to establish causal effects, and to examine dyadic effects involving the attachment representations of *both* interaction partners.

The ultimate strength and contribution of this work is that it provides important insight into the influence of preexisting representations (developed in prior significant relationships) on interaction behaviors in new social situations with unfamiliar individuals. The results suggest that individuals do, in fact, develop relationships with others in ways consistent with their prior experiences and generalized representations of those experiences. Within the framework of attachment theory, the individual is viewed as an active contributor to his or her own social environment who behaves toward others and elicits behavior from others -- all in ways guided by representational models (Bowlby, 1988). In this sense, individuals play a large role in determining which environments they experience and what effects those environments have on them (Scarr & McCartney, 1983). The results of this study indicate one mechanism through which attachment contributes to the creation of new relationships. Although a key component of attachment theory, evidence for this process has been missing, particularly with regard to a developmental period (adolescence) that has received relatively little empirical attention.

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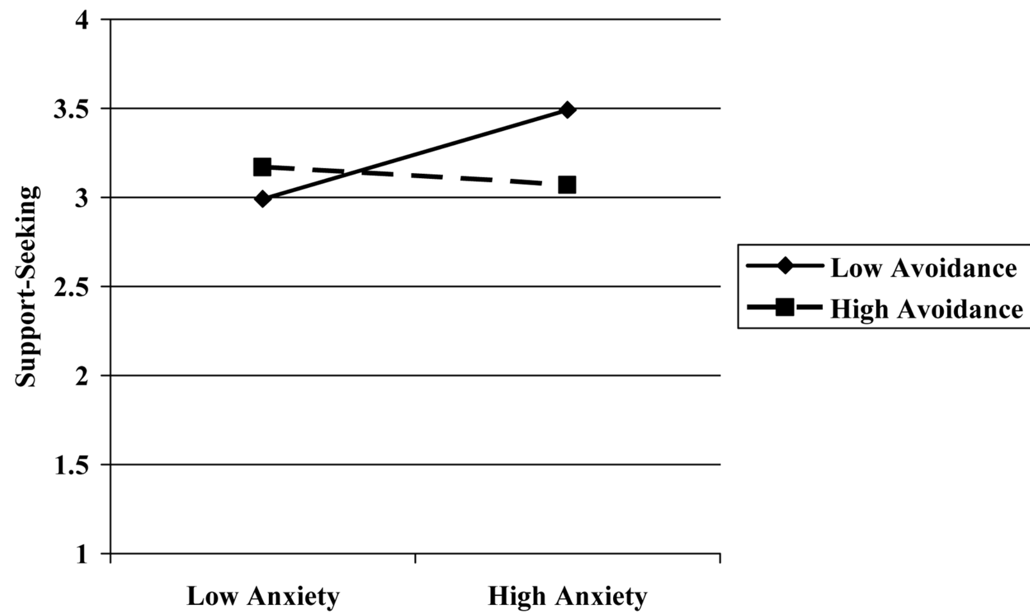

Figure 1.
Relations between target adolescent anxiety and target adolescent support-seeking behavior at low and high levels of target adolescent avoidance.

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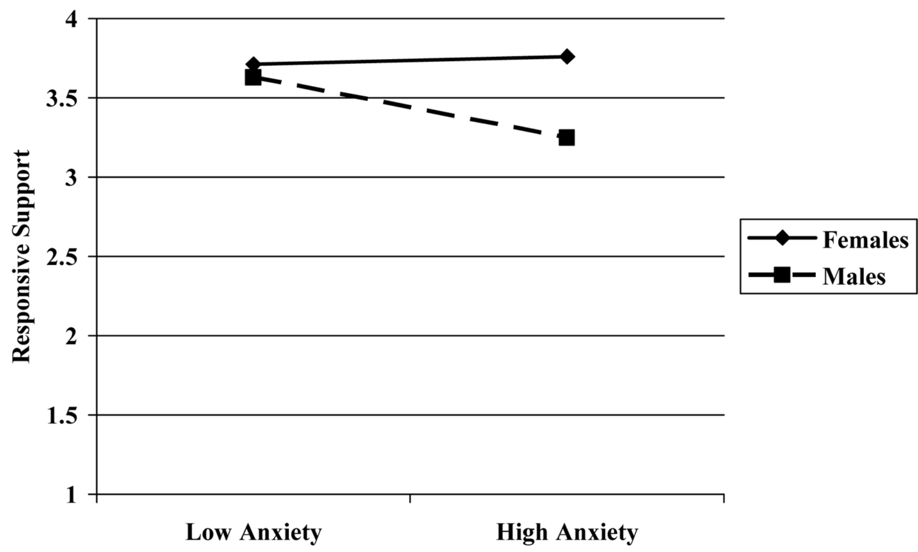

Figure 2.
Relations between target adolescent anxiety and target adolescent responsive support provision for females and males.

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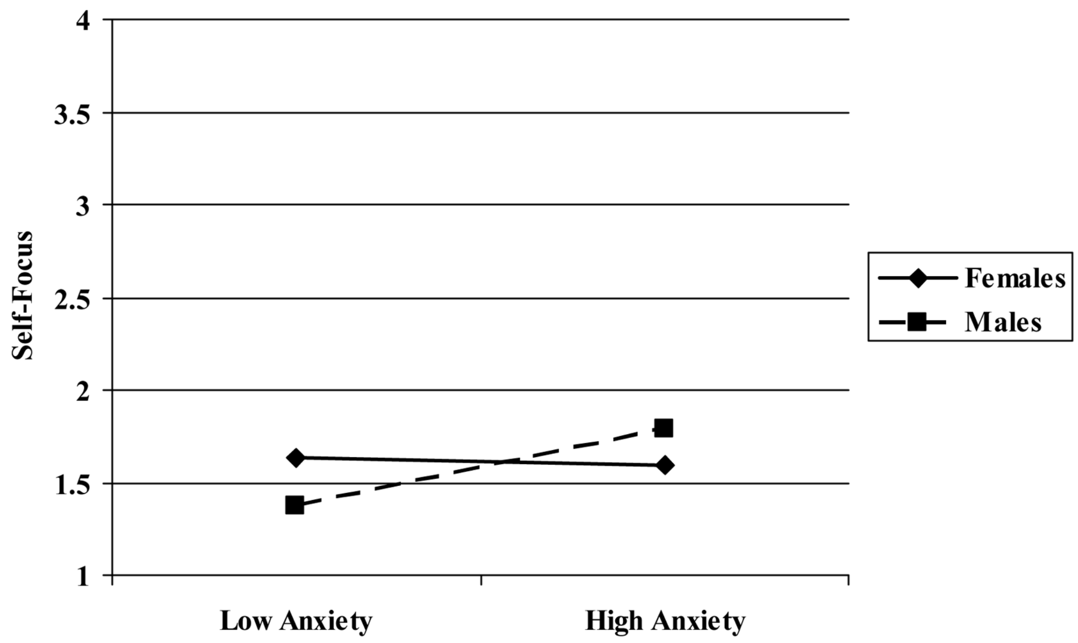

Figure 3.
Relations between target adolescent anxiety and target adolescent self-focus for females and males.

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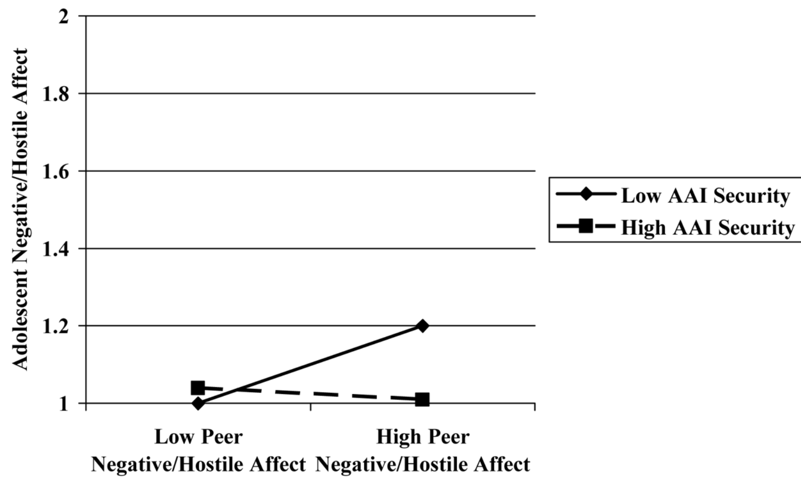

Figure 4.
Relations between peer negative/hostile affect and target adolescent negative/hostile affect at low and high levels of target adolescent AAI security (first interaction).

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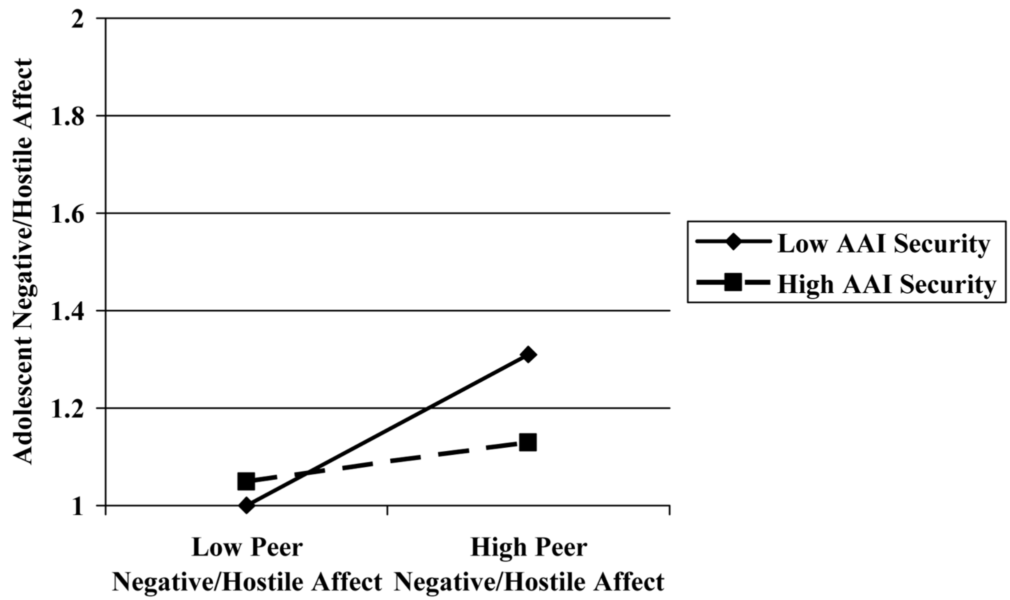

Figure 5.
Relations between peer negative/hostile affect and target adolescent negative/hostile affect at low and high levels of target adolescent AAI security (second interaction).

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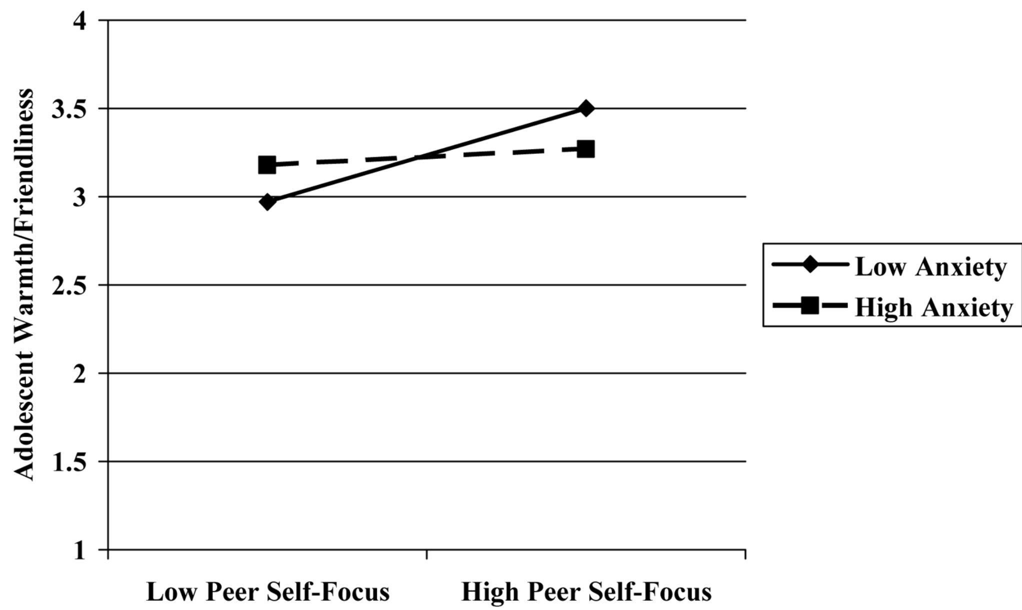

Figure 6.
Relations between peer self-focus and target adolescent warmth/friendliness at low and high levels of target adolescent attachment anxiety (first interaction).

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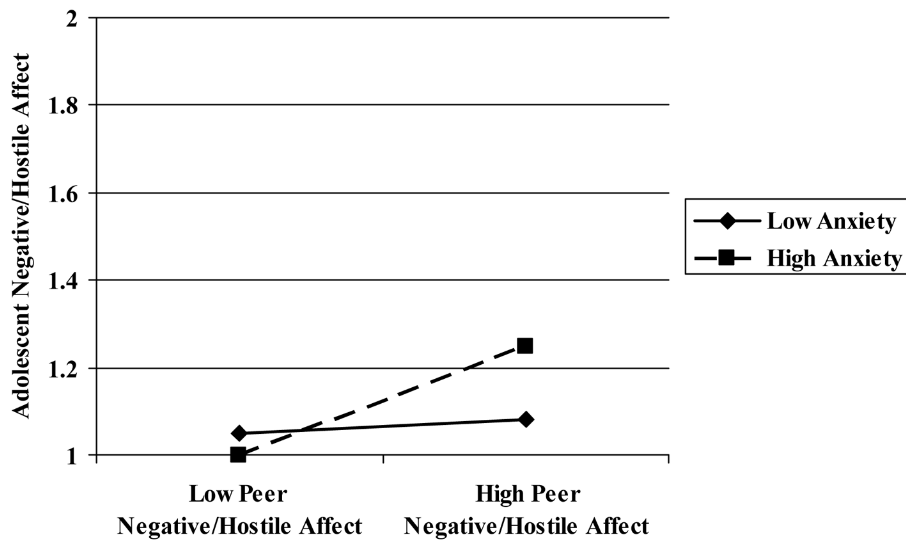

Figure 7.
Relations between peer negative/hostile affect and target adolescent negative/hostile affect at low and high levels of target adolescent attachment anxiety (second interaction).

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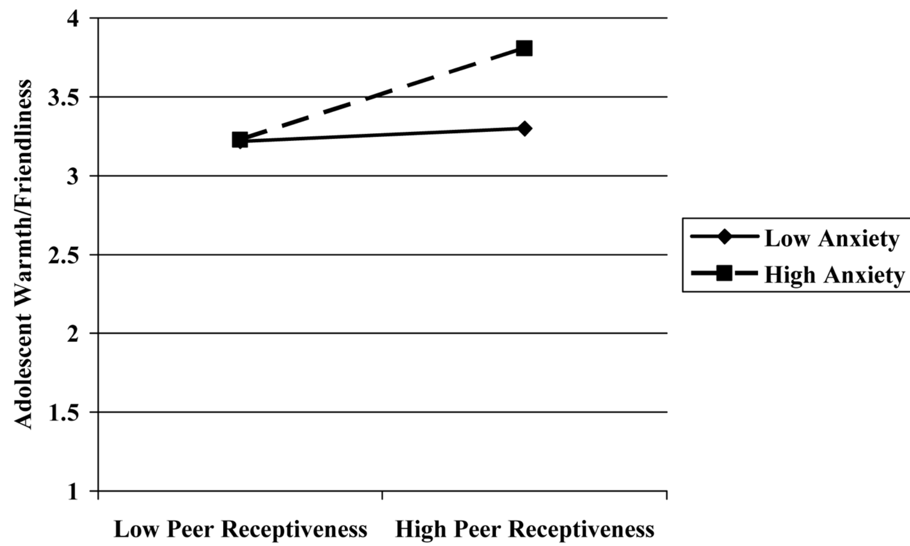

Figure 8.
Relations between peer receptiveness to support attempts and target adolescent warmth/ friendliness at low and high levels of target adolescent attachment anxiety (second interaction).

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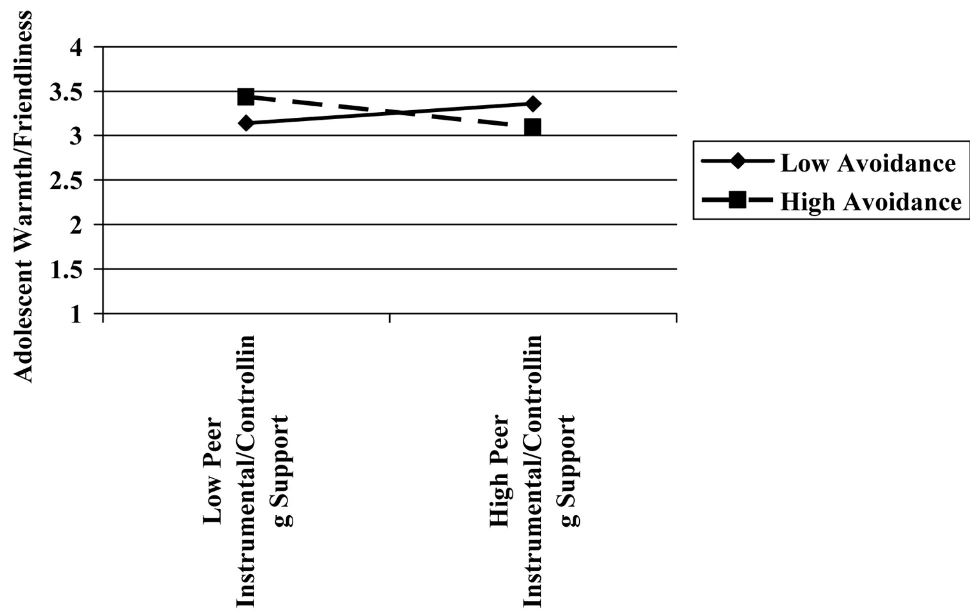

Figure 9.
Relations between peer instrumental/controlling support and target adolescent warmth/ friendliness at low and high levels of target adolescent attachment avoidance (first interaction).

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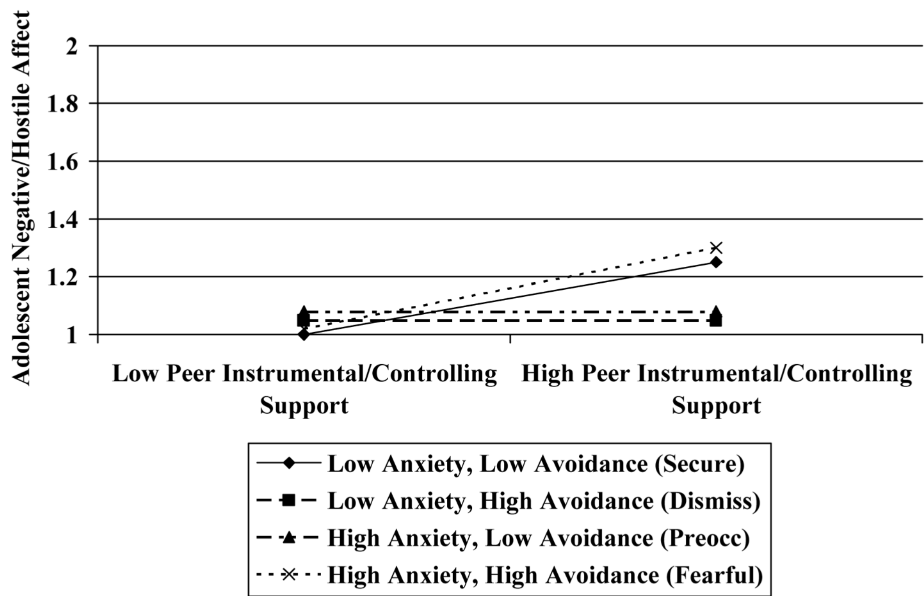

Figure 10.
Relations between peer instrumental/controlling support and target adolescent negative/hostile affect at low and high levels of target adolescent attachment anxiety and avoidance (first interaction).

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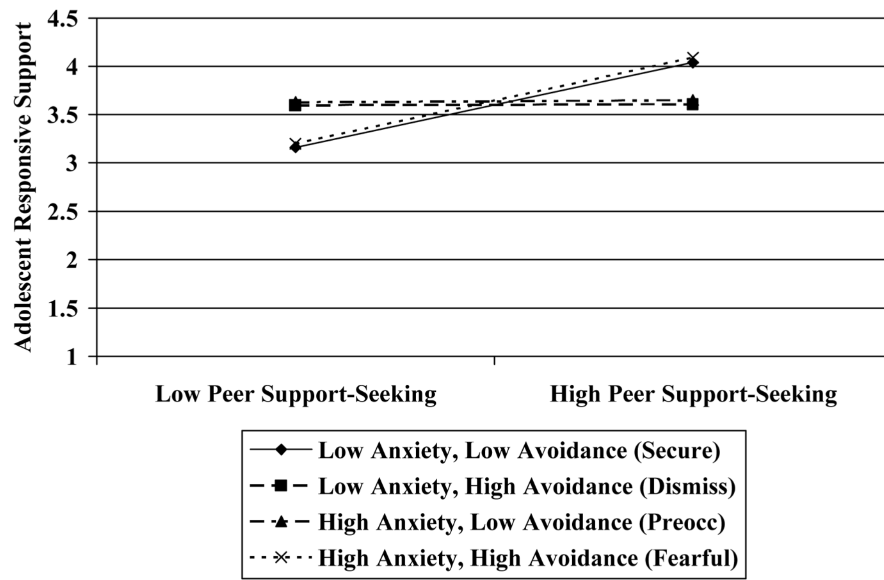

Figure 11.
Relations between peer support-seeking and target adolescent responsive support provision at low and high levels of target adolescent attachment anxiety and avoidance (second interaction).

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Table 1

Means and Standard Deviations for All Study Variables

	Mean	Standard Deviation
Attachment		
AAI Security	5.63	1.87
Attachment Anxiety	3.50	.99
Attachment Avoidance	3.01	1.09
Adolescents' Support-Seeking		
Support-Seeking	3.19	.65
Warmth/Friendliness	3.24	.60
Negative/Hostile Affect	1.04	.16
Receptiveness to Support	3.25	.65
Adolescents' Support-Providing		
Responsive Support	3.62	.60
Instrumental/Controlling Support	2.11	.63
Warmth/Friendliness	3.40	.68
Negative/Hostile Affect	1.06	.26
Self-Focus	1.61	.84
Unfamiliar Peers' Support-Seeking		
Support-Seeking	3.37	.66
Warmth/Friendliness	3.26	.60
Negative/Hostile Affect	1.05	.24
Receptiveness to Support	3.48	.71
Unfamiliar Peers' Support-Providing		
Responsive Support	3.50	.58
Instrumental/Controlling Support	2.18	.66
Warmth/Friendliness	3.28	.64
Negative/Hostile Affect	1.14	.33
Self-Focus	1.98	1.01

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Table 2

Regression Analyses Predicting Observed Support-Seeking Behaviors from Support-Seeker Attachment

	Observed Support-Seeking Behaviors in First Interaction											
	Support-Seeking			Warmth/Friendliness			Negative/Hostile Affect			Receptiveness to Support		
	β (SE)	Δ R^2	Total R^2	β (SE)	Δ R^2	Total R^2	β (SE)	Δ R^2	Total R^2	β(SE)	Δ R^2	Total R^2
Step 1		.15***	.15***		.10*	.10*		.05	.05		.16***	.16***
Gender	−.27** (.11)			−.30*** (.11)			−.02 (.03)			−.29*** (.11)		
AAI Security	.17* (.03)			.02 (.03)			−.12 (.01)			.28*** (.03)		
Anxiety (ECR)	.21* (.06)			.05 (.05)			.18* (.02)			.01 (.06)		
Avoidance (ECR)	−.03 (.05)			.05 (.05)			−.05 (.01)			−.01 (.05)		
Step 2		.07*	.22***		.02	.12*		.01	.06		.02	.18***
Gender × AAI Security	.39 (.06)			−.49 (.06)			.26 (.02)			.52 (.06)		
Gender × Anxiety	.26 (.11)			.10 (.11)			−.07 (.03)			−.18 (.12)		
Gender × Avoidance	−.06 (.11)			.41 (.11)			−.30 (.03)			.08 (.11)		
Anxiety × Avoidance	−1.09** (.05)			−.07 (.05)			.17 (.01)			−.21 (.05)		

Note. $N = 135$.

† $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

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Table 3

Regression Analyses Predicting Observed Support Provider Behaviors from Support-Provider Attachment

	Observed Support Provision Behaviors in Second Interaction														
	Responsive Support			Instrumental/Controlling Support			Warmth/Friendliness			Negative/Hostile Affect			Self-Focus		
	β (SE)	Δ R^2	Total R^2	β (SE)	Δ R^2	Total R^2	β (SE)	Δ R^2	Total R^2	β (SE)	Δ R^2	Total R^2	β (SE)	Δ R^2	Total R^2
Step 1		.09*	.09*		.03	.03		.06	.06		.01	.01		.07†	.07†
Gender	−.24** (.11)			−.04 (.12)			−.12 (.13)			.04 (.05)			−.07 (.16)		
AAI Security	.17* (.03)			.11 (.03)			.00 (.03)			.06 (.01)			−.20* (.04)		
Anxiety (ECR)	.01 (.05)			−.11 (.06)			.19* (.06)			.05 (.02)			.02 (.08)		
Avoidance (ECR)	−.03 (.05)			.01 (.05)			.06 (.06)			.05 (.02)			.13 (.07)		
Step 2		.04	.13*		.01	.04		.05	.10		.05	.06		.07*	.14*
Gender × AAI Security	.30 (.06)			.11 (.06)			−.63 (.07)			−.37 (.03)			−.57 (.08)		
Gender × Anxiety	−.81* (.11)			−.21 (.12)			−.59 (.13)			.59 (.05)			.79* (.16)		
Gender × Avoidance	−.15 (.10)			.30 (.11)			.12 (.12)			−.16 (.05)			−.54 (.15)		
Anxiety × Avoidance	−.11 (.05)			.02 (.06)			.40 (.06)			−.56 (.02)			−.08 (.07)		

Note. $N = 135$.

† $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$