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Positive Attentional Bias, Attachment Style, and Susceptibility to Peer Influence

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Susceptibility to peer influence may be related to activation in reward-related brain regions. The current study extends research on the role of reward sensitivity in peer influence by examining whether preferential attention to positive emotional stimuli predicts behavior in peer interactions, and whether this association is moderated by attachment style in a sample of 36 same-sex peer dyads. Positive attentional bias was associated with lower autonomy and greater avoidance with peers. This association was attenuated among individuals with secure attachment style. Attention to negative stimuli was associated with less avoidant and more hostile behavior during peer interactions. Results suggest that preferential attention to positive emotional stimuli is associated with greater susceptibility to peer influence, particularly in individuals low in secure attachment.

The capacity to be autonomous from negative peer influences improves throughout adolescence (Steinberg & Monahan, 2007); however, some individuals are more susceptible to peer influence into emerging adulthood (Harden, Hill, Turkheimer, & Emery, 2008; Monahan, Steinberg, & Cauffman, 2009). Those with greater susceptibility to peer influence are vulnerable to negative psychosocial outcomes (Allen, Porter, & McFarland, 2006b; Fuligni, Eccles, Barber, & Clements, 2001). Yet, there has been relatively little research devoted to understanding the origins of individual differences in susceptibility to peer influence. This study presents results from a pilot investigation, with the aim of offering new directions for understanding susceptibility to peer influence.

One promising line of research has investigated the origins of susceptibility to peer influence from the perspective of attachment theory (Ainsworth, 1989; Bowlby, 1969). Attachment styles represent characteristic ways of relating to significant others and reflect an individual's capacity for successfully regulating emotions in the context of close relationships (Allen & Miga, 2010). After childhood, four attachment styles are typically identified: secure, anxious-preoccupied, dismissive-avoidant, and unresolved-disorganized. A secure attachment style has been conceptualized as the ability to maintain both autonomy and closeness in relation to family, peers, and romantic partners. Notably, attachment style has been shown to contribute to individual differences in susceptibility to the influence of a same-sex peer (Allen et al., 2006b) and of a romantic partner (Gudjonsson, Sigurdsson, Lydsdottir, & Olafsdottir, 2008), and secure attachment predicts high-quality peer relationships and less negative peer pressure (Allen, Porter, McFarland, McElhaney, & Marsh, 2007).

Attachment style has also been linked to individual differences in attention and other basic cognitive processes (Chavis & Kisley, 2012; Dykas & Cassidy, 2011; Gillath, Giesbrecht, & Shaver, 2009; Mikulincer, 1997). Selective attention has been compared with a "spotlight" that quickly and automatically orients an individual's cognitive and affective processing to particular cues from the environment (Posner, 1980). Most research on individual differences in selective attention has focused on attention to negative (sad or threatening) stimuli in the development of depressive and anxiety disorders (Disner, Beevers, Haigh, & Beck, 2011; Frewen, Dozois, Joanisse, & Neufeld, 2008). In addition, selective attention away from threatening or sad emotional stimuli is associated with insecure attachment styles (Dewitte, 2011; Dewitte & De Houwer, 2008; Dewitte, Koster, De Houwer, & Buysee, 2007), which is generally consistent with Main, Kaplan, and Cassidy's (1985) prediction that

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individuals' "internal working models" of attachment relationships would influence "the direction and organization of attention" (p. 77).

In comparison with research on negative attention biases, fewer studies have examined individual differences in selective attention to positive emotional stimuli. It has been argued, however, that "an adaptive and fundamental function of attentional systems entails the orientation of cognitive resources toward the processing of emotional stimuli of greater potential reward or reinforcement value" (Frewen et al., 2008). Previous research is consistent with the hypothesis that, just as "punishment-sensitive" individuals show attentional bias toward negative emotional stimuli, "reward-sensitive" individuals pay greater attention to positive emotional cues (Derryberry & Reed, 1994). Specifically, greater positive attentional bias is associated with higher extraversion (Derryberry & Reed, 1994), higher optimism (Segerstrom, 2001), more positive mood (Mauer & Borkenau, 2007; Tamir & Robinson, 2007), greater "enhancement" motivations to drink alcohol (e.g., drinking to increase positive affect; Colder & O'Connor, 2002), and lower anxiety (Frewen et al., 2008). In addition, experimental studies have suggested that positive affect and positive attentional bias have a reciprocal and causal relation. Positive mood inductions result in greater selective attention to positive emotional stimuli (Tamir & Robinson, 2007), whereas participants who receive attentional training that increases attention to positive emotional stimuli report greater positive affect (Grafton, Ang, & Macleod, 2012).

Unlike research on attachment and peer influence, no previous research has specifically examined the relation between attention to emotional cues and peer influence. However, recent research in neuroscience has suggested that brain regions involved in reward sensitivity may play a role in susceptibility to peer influence. Chein, Albert, O'Brien, Uckert, and Steinberg (2011) reported that adolescents showed significantly greater activation in reward-related brain regions, including ventral striatum, when completing an experimental risk-taking task in the presence of their peers compared with when they were alone. Moreover, the magnitude of the "neural peer effect" was positively associated with adolescents' self-reports of susceptibility to peer influence (Steinberg & Monahan, 2007), suggesting that heightened reward processing is associated with greater susceptibility to peer influence. Consequently, our first hypothesis was that individuals who selectively attended to positive emotional cues would show greater susceptibility to peer influence.

In addition, although attachment has been linked with both peer influence and individual differences in attention, no previous study has examined how attachment processes interact with reward processing. Given that attachment styles may reflect an individual's ability to regulate emotion in the context of social interactions (Allen & Miga, 2010), individuals with secure attachment may show attenuated relations between attentional bias and susceptibility to peer influence. Thus, our second hypothesis was that attachment style would moderate the relation between selective attention and susceptibility to peer influence.

Finally, one complicating issue in the study of peer influence is the lack of theoretical or empirical consensus regarding how to best measure individual differences in susceptibility to peer influence. The majority of research on peer influence has focused on risk-taking behavior and has operationalized peer influence as the association between peer risk-taking (or perceptions of peer risk-taking) and individual behavior (e.g., Borsari & Carey, 2001; Harden et al., 2008). This focus is motivated by the well-established role of peers in adolescent externalizing problems, such as delinquency and substance use (Brechwald & Prinstein, 2011). Yet, peers may influence each other to engage in behaviors that are not inherently risky or rewarding. Alternatively, the self-report measure of resistance to peer influence developed by Steinberg and Monahan (2007) frames questions about peer influence without referring specifically to risk-taking behaviors; however, it suffers from the usual limitations of self-report instruments, including social desirability biases. Our approach to measuring susceptibility to peer influence is to use a laboratory-based peer influence task, in which peer dyads interact to solve a hypothetical dilemma (Allen et al., 2006a,b). This approach retains the advantages of observing an individual's behavior during a structured social interaction, a strategy that has been successfully used in studies of deviancy training in adolescence (e.g., Dishion & Owen, 2002). At the same time, this approach avoids conflating susceptibility to peer influence with willingness to engage in risk behavior.

GOALS OF THE CURRENT STUDY

The first goal of the current project was to test the association between selective attention to emotional stimuli and susceptibility to peer influence, measured using observational ratings of a dyadic peer interaction. We hypothesized that individuals with greater attentional bias to positive stimuli would show greater susceptibility to peer influence. Second, consistent with the previous literature on this topic, we sought to test the association between attachment style and susceptibility to peer influence. We hypothesized that individuals with a secure attachment style would show reduced susceptibility to peer influence. Finally, we sought to contribute to an integration of the literatures on attachment and attention by examining whether attachment style moderates the relation between attentional bias and susceptibility to peer influence.

METHOD

Participants

Thirty-six same-sex peer dyads (72 individuals total; *M* age = 18.7 years [range = 18–23, *SD* = 1.1 years]; 88% female; 43% non-Hispanic White, 25% Hispanic or Latino, 11% African American, 19% Asian American; 84% born in the United States) were recruited from the introductory psychology participant pool at a large southwestern public university. Participants were instructed to bring a "good friend" with them to the laboratory; nominated friends had to be the same gender and within 2 years of each other's age.

Measures and Procedures

After obtaining participant consent, each member of the friendship dyad completed, in separate rooms, a battery of self-report survey measures and computer-administered tasks. The order of the self-report survey and computer tasks was balanced across participants. Next, the friends were brought together for a videotaped interaction task that took approximately 8 min. Participants were told that their interaction would be videotaped, and videotapes were transcribed and coded by trained research assistants. Completion of the protocol took approximately 2 hr per participant.

Selective attention to emotional stimuli. Selective attention was measured using the Emotional Pictures Dot Probe Task (Loney, 2003). Participants were presented with one block of 16 practice trials followed by four blocks of 24 trials. Each trial consisted of two images appearing simultaneously (on the top and bottom halves of the screen) for 250 ms; then, a dot appeared on screen in the spatial location of one of the images. None of the images were repeated across trials. Participants were instructed to press a response key as quickly as possible to indicate the location of the dot; quicker response times are expected when the location of the dot is congruent with the location of the stimulus to which they are attending. Images were either negative or distressing (e.g., crying baby), positive or rewarding (e.g., kittens), or neutral (e.g., books). Positive and negative images contained humans (e.g., baby smiling for positive, baby crying for negative), but the neutral images did not. There were three potential picture pairings: neutral–neutral, negative–neutral, and positive–neutral.

There were two measures of attention. First, attentional facilitation reflects selective orientation of attention toward emotional stimuli. Attentional facilitation was calculated (separately for negative and positive images) by subtracting the average latency to respond to probes replacing emotional stimuli in emotional–neutral pairs, from the average latency to respond to probes in neutral-neutral pairings (Kimonis, Frick, Munoz, & Aucoin, 2007). The mean facilitation score for negative stimuli (Fac-N) was −13.32 ms (*SD* = 54.50). The mean facilitation score for positive stimuli (Fac-P) was 0.59 ms (*SD* = 41.78). Second, attentional bias reflects difficulty disengaging attention away from emotional stimuli in order to respond to a probe. Bias was calculated (separately for positive and negative images) by subtracting the average latency to respond to probes replacing emotional stimuli in emotional–neutral pairs from the average latency to respond to probes replacing neutral stimuli in emotional–neutral pairs. The mean positive bias score was 15.61 ms (*SD* = 58.54); the mean negative bias score was 16.81 ms (*SD* = 126.36). Data for positive and negative attentional bias and facilitation were dropped for one individual, because the participant's scores on all four variables were outliers (>3 *SD*s above the mean).

Attachment style. Attachment was measured using self-report on an adapted version of the Adult Attachment Scales (AAS; Collins & Read, 1990), which taps participants' perceptions of the availability and dependability of others and their comfort with close relationships (e.g., "I find it relatively easy to get close to others."). Participants rated 21 items on a 5-point scale (1 = *not at all characteristic of me* to 5 = *very characteristic of me*).

Peer influence. Participant's peer interactions were assessed using the MARS Revealed Conflict

Task (Allen, Porter, & McFarland, 2001). The MARS task has been used extensively in previous research, and behavior with peers on this task has been linked with parental relationships (McElhaney, Porter, Thompson, & Allen, 2008), popularity with peers (Allen et al., 2006a,b; McFarland & Little, 2004), externalizing behavior (Allen et al., 2006a,b), relational aggression in romantic relationships (Schad, Szwedo, Antonishak, Hare, & Allen, 2008), and depressive symptoms (Allen et al., 2006a; Chango, McElhaney, & Allen, 2009). This task measures peer influence in terms of observed behavior during a discussion of a hypothetical moral dilemma, which is thought to reflect a fundamental process by which adolescents develop behavioral norms (Allen et al., 2006a,b; Hill & Holmbeck, 1986). A primary strength of this paradigm is that it assesses peer influence in a “neutral” context, outside the realm of risk-taking behavior.

Participants were given a hypothetical scenario about 12 characters stranded on Mars and were given 5 min to choose separately which seven characters would return to Earth. Adolescents were then instructed to discuss their chosen characters for up to 8 min, in order to “decide together which seven people are going on the spaceship returning to Earth” (Allen et al., 2006a, b). Peer interactions were videotaped, transcribed, and coded for the following three dimensions: autonomy, avoidance, and hostility (Allen et al., 2001). Each dimension was coded on a 0–4 scale. Autonomy reflects participants’ capacity to disagree with friends and provide reasons for their choices. Participants were rated as higher on autonomy if they consistently provided reasons within the context of disagreement (e.g., “I think we should take the doctor because he could help out if someone got sick”). Avoidance was coded based on the participant’s reluctance or hesitation to disagree with the friend. Participants were rated as higher on avoidance when they repeatedly gave in or changed their position without providing reasons for doing so. An avoidant participant might comment, “I’ll go along with this,” while implicitly making clear that he or she is capitulating to prevent further disagreement. Finally, hostility measured the extent to which a participant undermined a warm, positive interaction by making devaluing statements intended to be rude, disdainful, or hurtful (e.g., “You’re out of your mind. You must have bumped your head!”). All interactions were coded by at least two trained coders who discussed each rating until a consensus was met. When coders disagreed on the rating, videotaped observations were used to reach consensus. All scores were rank-transformed prior to analyses, such that higher scores represent more of a particular behavior. In particular, we conceptualized high scores on avoidance and low scores on autonomy as reflecting high susceptibility to peer influence, whereas we conceptualized hostility as reflecting difficulty in maintaining a warm peer relationship.

Analytic plan. We present three sets of analyses. First, using a confirmatory factor analysis (CFA) approach in the software program Mplus (Muthén & Muthén, 1998–2010), we test the factor structure previously reported for the AAS and estimate factor scores to use as our measures of attachment style. Second, we present the zero-order correlations among the study variables, as estimates of the “raw” associations among attachment style, selective attention, and peer influence. Third, we test the significance of these associations using a series of linear mixed-effects models, which account for clustering of observations within dyads. Following convention, all analyses statistically controlled for gender. Because of small sample size, the linear mixed-effects models were restricted to attentional variables with significant zero-order correlations with observed peer interaction behavior. These analyses constitute the primary tests of our hypotheses.

RESULTS

Estimation of Factor Scores for Attachment Style

A CFA model that specified the factor structure of the AAS reported by Collins and Read (1990) fit poorly ($\chi^2 = 256.0$, $df = 116$, $p < .0001$; RMSEA = 0.13; CFI = 0.82; TLI = 0.79). Consequently, we conducted an exploratory factor analysis within the CFA framework (Brown, 2006), using three factors (Muthén & Muthén, 1998–2010). The fit of this model was acceptable (RMSEA = 0.09; CFI = 0.94; TLI = 0.91; $\chi^2 = 132.4$, $df = 118$, $p = .002$). We next fit a CFA in which factor loadings that were not statistically significant (at $p < .05$) or that were <0.3 were fixed to zero (see the appendix). The fit of the trimmed model was also acceptable (RMSEA = 0.09; CFI = 0.93; TLI = 0.91; $\chi^2 = 164.3$, $df = 109$, $p = .001$). Examination of the items loading onto each factor revealed that the factors tapped preoccupied, secure, and dismissing styles of attachment.

This final CFA model was used to estimate factor scores within Mplus, which were used for all subsequent analyses. Secure attachment was negatively correlated with both preoccupied ($r = -.55$) and dismissing attachment ($r = -.44$), whereas preoccupied attachment was largely independent from dismissing ($r = .12$). The items comprising each factor showed adequate to good internal reliability (preoccupied attachment: $\alpha = .83$, mean item-total correlation = .65; secure attachment: $\alpha = .71$, mean item-total correlation = .52; dismissing: $\alpha = .83$, mean item-total correlation = .43).

Correlations Among Study Variables

Zero-order correlations among study variables (including the factor scores estimated in the previous analysis) are summarized in Table 1. Bias toward positive emotional stimuli (Bias-P) was related to significantly lower autonomy and higher avoidance when interacting with peers. Attention to negative stimuli (Fac-N) was associated with less avoidant behavior with peers. Finally, preoccupied attachment was associated with higher avoidance, whereas secure attachment was associated with higher autonomy.

Linear Mixed-Effects Models

Stepwise results from the linear mixed-effects models of autonomy, avoidance, and hostility with peers are shown in Table 2.

Autonomy. Positive attentional bias significantly predicted lower autonomy. In addition, there was a significant interaction between secure attachment and positive attentional bias, such that the negative association between positive attentional bias and autonomy was attenuated among participants reporting secure attachment. This interaction effect is illustrated in Figure 1, which plots positive attentional bias by autonomy, separately for quartiles of reported attachment security: The negative association between autonomy and positive attentional bias is most clearly evident for participants low in attachment security. Of the residual variation in autonomy, 39% was shared by members of a peer dyad (residual intraclass correlation = .39), and the remaining 61% was individual-specific.

Avoidance. Positive attentional bias also significantly predicted higher avoidance during the peer interaction, but there was no significant interaction with attachment security. The main effect of positive attentional bias was reduced to nonsignificance in a model containing an interaction term. Of the residual variation in avoidance, 51% was shared by members of a peer dyad, and the remaining 49% was individual-specific.

Hostility. Finally, preoccupied attachment predicted greater hostility during the peer interaction, but there were no significant main effects of attention. Additionally, there was no significant interaction between positive attentional bias and secure attachment in predicting hostility, but a model estimating such an interaction term produced a significant main effect for negative attentional facilitation: Individuals who oriented their attention to negative,

TABLE 1
Correlations Among Attentional Measures, Attachment Style, and Observed Behavior With Peers ($N = 72$)

	Fac-N	*Fac-P*	*Bias-N*	*Bias-P*	*Preoccupied*	*Secure*	*Dismissing*	*Autonomy*	*Avoidance*	*Hostility*
Attention										
Fac-N	1.00									
Fac-P	.15	1.00								
Bias-N	.26*	−.12	1.00							
Bias-P	−.26*	.38*	.16	1.00						
Attachment										
Preoccupied	−.15	.01	−.04	.13	1.00					
Secure	.03	.06	−.20	−.17	−.55*	1.00				
Dismissing	−.02	−.03	.16	.01	.12	−.44*	1.00			
Behavior with peers										
Autonomy	.12	−.07	−.02	−.26*	−.16	.25*	−.03	1.00		
Avoidance	−.36*	.22	.01	.41*	.26*	−.22	.07	−.41*	1.00	
Hostility	.24	.06	.08	−.28*	.06	.16	−.10	.41*	−.27*	1.00

Note. Fac = Attentional facilitation; Bias = Attentional bias; N = Negative (sad) emotional stimuli; P = Positive emotional stimuli.
*Significantly different than zero at $p < .05$.

TABLE 2
Unstandardized Results From Mixed-Effects Models of Observed Behavior With Peers (N = 72)

	Autonomy		*Avoidance*		*Hostility*	
	β entry	*β final*	*β entry*	*β final*	*β entry*	*β final*
Step I						
Fac-N	−.05 (0.06)	−.02 (0.06)	−.09 (0.05)	−.09 (0.05)	.06 (0.04)	.09 (0.04)*
Bias-P	−.12 (0.05)*	−.05 (0.06)	.09 (0.04)*	.08 (0.05)	−.12 (0.03)*	.00 (0.04)
Step II						
Preoccupied	1.41 (3.13)	−.44 (3.14)	1.22 (2.64)	1.61 (2.76)	5.02 (2.06)*	4.70 (2.16)*
Secure	4.03 (3.73)	1.84 (3.74)	−.67 (3.18)	−.26 (3.36)	5.21 (2.60)	4.81 (2.73)
Dismissing	2.69 (2.96)	3.00 (2.08)	−1.65 (2.51)	−1.68 (2.54)	1.10 (1.99)	1.15 (2.01)
Step III						
Secure × Bias-P	.17 (0.07)*	.17 (0.07)*	−.03 (0.06)	−.03 (0.06)	.05 (0.04)	.05 (0.04)
Residual intraclass correlation[a]		.39		.51		.73

Notes. β entry = coefficients from model containing predictors from current and previous steps. β final = coefficients with model with all terms estimated. Standard errors are in parentheses. Fac-N = Attentional facilitation to negative (sad) emotional stimuli. Bias-P = Attentional bias to positive emotional stimuli.
[a]Represents the proportion of residual variance in the outcome shared by members of a peer dyad. Higher scores represent greater similarity between friends, after accounting for the effects of covariates.
*$p < .05$.

emotionally distressing stimuli showed greater levels of hostility to their friend. Of the residual variation in hostility, 73% was shared by members of a peer dyad, and the remaining 27% was individual-specific.

DISCUSSION

This study is the first to examine the relation between selective attention to emotional cues and susceptibility to peer influence, measured by behavioral observations during a peer interaction task. Results indicated that participants with greater attentional bias toward positive stimuli showed less autonomous behavior and more avoidant behavior during a revealed-conflict task. In contrast, attention toward negative emotional cues was associated with more hostile and less avoidant behavior. Overall, these findings suggest that variability in basic cognitive processes may account for individual differences in patterns of social interaction. To the extent that preferential attention toward positive stimuli reflects heightened reward sensitivity, our results are relevant to emerging evidence linking reward-related neural processes with peer influence (Chein et al., 2011). Our findings suggest that these processes are in play during peer interaction, even outside of the risk-taking context. Attentional bias reflects a cognitive-affective style that, based on the cur-

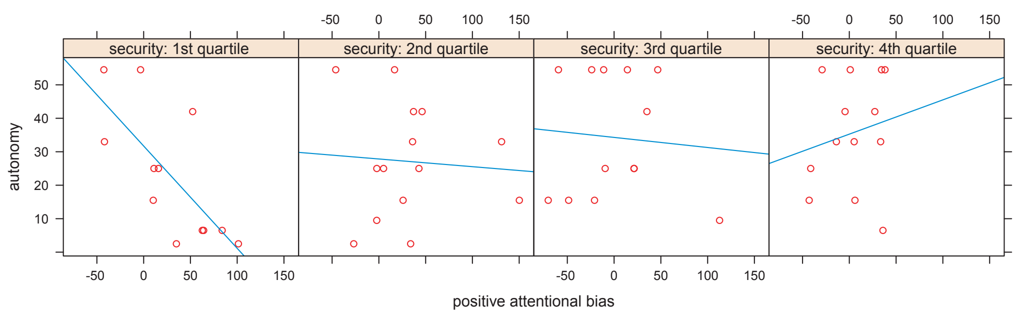

FIGURE 1 Positive attentional bias and autonomy during peer interaction by quartile of reported attachment security.
Note. Raw data points plotted using red circles. Lines of best fit plotted in blue. The ranges of the X- and Y-axes were selected to be consistent across quartiles of attachment security; data from participants scoring outside of these ranges are not shown for illustrative clarity.

rent study findings, may influence susceptibility to peer influence in general. However, not all measures of selective attention were significantly associated with susceptibility to peer influence. This may be due, in part, to the small sample size.

Peer interaction behavior was also significantly correlated with self-reported attachment. In particular, preoccupied attachment was associated with higher avoidance in peer interactions, whereas secure attachment was associated with more autonomous behavior. Moreover, attachment interacted with attention to emotional stimuli to predict susceptibility to peer influence. Notably, we found that secure attachment moderated the association between positive attentional bias and autonomous behavior: Individuals who had trouble directing their attention away from positive stimuli showed reduced autonomous behavior, unless they were high in secure attachment. The sophisticated emotion regulation skills associated with secure attachment style appear to protect against the negative effects of biased attention toward positive stimuli. Secure attachment may allow an individual whose cognitive-affective style impedes autonomous behavior to overcome this barrier and exert autonomy in the face of conflict. In contrast, the interpersonal manifestations of attentional bias may be more pronounced for individuals who lack the protective effects of attachment security. Consistent with this hypothesis, a previous study of resistance to deviant peer influence found that self-regulation—a domain that includes "modulation of behavioral, emotional, and attentional reactivity" (Gardner, Dishion, & Connell, 2008)—moderated the relation between deviant peer affiliation and antisocial behavior, presumably because youth with higher self-regulatory capacities are less influenced by the potentially rewarding aspects of deviant peer interaction (Gardner et al., 2008). Attachment security may increase resistance to peer influence by bolstering self-regulatory abilities, allowing even reward-sensitive individuals to assert autonomy.

The current study contains a number of strengths, which contribute to existing research on selective attention and susceptibility to peer influence. First, we used a multimethod assessment of key constructs: A laboratory task assessed attentional bias, a self-report questionnaire measured attachment style, and an observational interaction task captured susceptibility to peer influence. Second, most research examines susceptibility peer influence in the context of risk-taking activities. The study of peer influences in other contexts, however, is critical for understanding the scope of peer influence and the nature of individual differences. The current study assessed peer influence in a neutral context, which helps disentangle peer influence in general from peer influence regarding risk-taking behavior. As research on peer influence moves beyond the domain of risk-taking, it will be important to continue using behavioral assessment measures that capture how peer influence operates in moment-by-moment interactions. Observational studies of deviancy training (e.g., Dishion & Owen, 2002) have made remarkable strides toward understanding the mechanisms of peer influence. This pilot investigation illustrates the utility of incorporating similar paradigms into research on other behaviors relevant to peer influence.

There are limitations to the current research that should be noted. First, we used a relatively small, convenience sample (i.e., 36 dyads) of undergraduates who were primarily female and ethnically homogeneous. Because of this, moderation analyses should be interpreted with caution. Future research should reexamine these questions with a larger, more ethnically diverse sample. Second, the restricted age range of our sample, while appropriate given our focus on individual differences in susceptibility to peer influence, did not allow us to explore developmental differences in peer influence processes, and it is unknown whether the current findings would generalize to early or middle adolescence. Furthermore, the small sample yields a lack of power, which may have precluded findings that might have been expected with other indices of selective attention (e.g., facilitation to positive stimuli).

The current study provides preliminary evidence that attentional bias accounts for individual differences in patterns of peer interaction. Consistent with our predictions, individuals who had difficulty redirecting attention away from positive stimuli showed less autonomous behavior with peers, except when they reported secure attachment. These initial results, although in need of replication, suggest that attentional biases may play an important role in individual differences in susceptibility to peer influence.

APPENDIX
Confirmatory Factor Analysis Loadings

	Factor loadings		
Item	*Factor 1 preoccupied*	*Factor 2 secure*	*Factor 3 dismissing*
1. People are never there when you need them. (Av)	.34	−.47	
2. My desire to be really, really close to other people sometimes scares them away. (Ax)	.81		
3. I often worry that other people do not really love me. (Ax)	.88		
4. I find others are reluctant to get as close as I would like them to be. (Ax)	.75		
5. I often I worry that friends will not want to be my friend anymore. (Ax)	.80		
6. I am somewhat uncomfortable being close to others. (Av)	.62		.53
7. I find it difficult to trust other people. (Av)	.46		.54
8. I find it difficult to allow myself to depend on others. (Av)			.96
9. I do not often worry about being abandoned by other people. (S)		.55	.37
10. I am comfortable depending on others. (S)		.22	−.48
11. I am nervous when anyone gets too close. (Av)		−.56	.29
12. I am comfortable having other people depend on me. (S)		.71	.34
13. I would like to merge completely with another person. (Ax)		.20	
14. I find it relatively easy to get close to other people. (S)		.74	
15. I know that others will be there when I need them. (S)		.88	
16. I do not worry very often about someone getting too close to me. (S)		.68	
17. I am not sure that I can always depend on other people to be there when I need them. (Ax)		−.57	

Note. Factor loadings not significantly different from zero at $p < .05$ are not shown. Collins and Read (1990) developed their original scale based on descriptions of adult attachment styles from Hazan and Shaver (1987). The parentheses after each item indicate which attachment style the item was designed to tap (Av = Insecure-Avoidant; Ax = Insecure-Anxious; S = Secure). In our confirmatory factor analysis solution, only 3 items (italicized) did not load onto the intended factor, with 2 items intended to measure Insecure styles (no. 1 and no. 17) instead showing negative loadings on the Secure factor. In addition, 7 items showed cross-loadings on two factors.

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