No Man Is an Island: The Need to Belong and Dismissing Avoidant Attachment Style

Mauricio Carvallo
Shira Gabriel
State University of New York at Buffalo

The need to belong theory proposes that all human beings need social connections. However, dismissive avoidant individuals claim to be comfortable without close relationships and appear to be indifferent to how other people think of them. The current studies examined the association between dismissing avoidant attachment and the desire to feel accepted by others. In Study 1, high-dismissive participants reported experiencing higher than average levels of positive affect and state self-esteem after learning that other participants accepted them. In Study 2, high-dismissive participants felt better about themselves and experienced higher levels of positive affect after learning that in the future they would be successful in interpersonal relative to independent domains or controls. The results of these studies suggest that dismissive avoidants do not represent a counterexample to the hypothesis that all human beings have a fundamental need and desire to belong.

Keywords: *need to belong; attachment behavior; avoidance; self-esteem; motivation*

For decades, psychologists have argued that human beings are inherently driven by a desire to form and maintain interpersonal relationships (Baumeister & Leary, 1995; Bowlby, 1969, 1973; Maslow, 1968; McClelland, 1951; Murray, 1954; Stevens & Fiske, 1995). From this perspective, people seek relationships with others to fill a fundamental need, and this fundamental need lies at the heart of many important social phenomena, ranging from both infant and adult attachment to perceptions of personal and group discrimination (Bowlby, 1973; Carvallo & Pelham, in press). It is not surprising that the need to belong is inherent given humans' evolutionary history. Human beings have long depended on the cooperation of others for the provision of food, protection from predators and elements, and the acquisition of essential knowledge (Caporael & Brewer, 1995; Wilson, 1978). Without the formation and maintenance of social bonds, early hominids would not have been able to cope with or adapt to their physical environments (Caporael & Brewer, 1995).

Presumably, the survival value of interdependence has evolved into a set of internal mechanisms that propel human beings into social groups (Stevens & Fiske, 1995). These mechanisms predispose all humans to relate to others, to experience affective distress when social relationships are denied or dissolved, and to experience pleasure or positive affect from social contact and relatedness (Baumeister & Leary, 1995). Consistent with this view, people develop social bonds with relative ease under even the most adverse circumstances (Tajfel, 1970). Furthermore, most people are eager to extend and quite reluctant to break social bonds, even when relationships are maladaptive or harmful (Strube, 1988). This tendency is sufficiently potent that complete strangers often can capitalize on this motive and get people to agree to social contracts that are not in their own self-interest (Cialdini, 2001).

The importance of relationships is evident in the strong emotional reactions they elicit (Scherer, Summerfield, & Wallbott, 1983). Indeed, emotions are most frequently and intensely experienced in the context of interpersonal relationships (Ekman & Davidson, 1994). Forming and maintaining social bonds is positively correlated with happiness in life and positive life outcomes (Baumeister & Twenge, 2003; Myers, 1992). People who have close connections with others are not

Authors' Note: The authors thank Joanne Davila, Sandra Murray, and Brett Pelham for their helpful comments on an earlier draft of this article. Correspondence concerning this article should be addressed to Mauricio Carvallo, Department of Psychology, State University of New York, Buffalo, 206 Park Hall, Buffalo, NY 14260; e-mail: mrc22@buffalo.edu.

PSPB, Vol. 32 No. 5, May 2006 697-709
DOI: 10.1177/0146167205285451

only happier but also are mentally and physically healthier than people who lack stable and meaningful social support (McAdams, 1986). Even mundane emotions are tightly linked to social experience. For example, whether bowlers smile or frown is more closely related to the reactions of their fellow bowlers than to objective outcomes such as bowling a strike (Ruiz-Belda, Fernandez-Dols, Carrera, & Barchard, 2003).

Conversely, lack or loss of interpersonal relationships leads to negative emotional experiences such as anxiety, depression, distress, loneliness, and feelings of isolation (Baumeister & Tice, 1990; Simpson, 1987). Social exclusion, for example, is correlated with crime and antisocial behavior (Sampson & Laub, 1993), substance abuse (D. R. Williams, Takeuchi, & Adair, 1992), poor academic performance (O'Neil, Welsh, Parke, Wang, & Strand, 1997), reckless driving (Harano, Peck, & McBride, 1975), and losing one's sense of control (K. D. Williams, Cheung, & Choi, 2000). Social exclusion or rejection also leads to considerable decreases in feelings of self-esteem (K. D. Williams, Shore, & Grahe, 1998). Indeed, research suggests that self-esteem is directly related to social inclusion. Specifically, high self-esteem comes from feeling acceptance by others, whereas low self-esteem arises from rejection or fear of a lonely life (Leary, Tambor, Terdal, & Downs, 1995).

The propensity of belongingness needs to shape emotion and stimulate goal-directed activity supports the fundamental nature of the need to belong. However, as Baumeister and Leary (1995) have pointed out, a fundamental motivation also must satisfy another important criterion, namely, universality. In other words, a motivation can be regarded as fundamental only if it is found in all normal human beings and it is not limited to certain groups or individuals (Baumeister & Leary, 1995). Our report examines people whose interpersonal styles might appear to contradict the belongingness hypotheses: people with dismissing avoidant interpersonal styles. People with dismissing avoidant style often are described as lacking the desire to form or maintain social bonds (Atkinson, Heyns, & Veroff, 1954; Bartholomew, 1990) and devalue the importance of relationships (Bartholomew & Horowitz, 1991).

Dismissing Avoidance

What does it mean to have a dismissing avoidant style? According to attachment theory (Bowlby, 1973), individual differences in adult attachment styles are conceptualized as differences in the models people maintain of themselves and others (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987). These models develop early in childhood and are carried forward in life (Hazan & Shaver, 1987), influencing expectations for other interpersonal relationships and for people in the world in general (Bowlby, 1973; Bretherton, 1985; Collins & Read, 1990). Presumably, dismissing avoidants have a negative model of others, reflected in a lack of interest in forming close relationships and maintaining emotional closeness with others (Atkinson et al., 1954; Bartholomew, 1990; Fraley, Davis, & Shaver, 1998). Although they distrust others, dismissive individuals seem to posses a positive model of self. Apparently, because they are not convinced of the availability of others for emotional support, they maintain high levels of self-esteem by investing disproportionately in abilities or accomplishments (Brennan & Bosson, 1998; Brennan & Morris, 1997; Fraley et al., 1998). Thus, the positive views they hold of themselves are presumably based on their sense of achievement and competence rather than feelings of acceptance from others (Bartholomew, 1990).

When asked about their interpersonal preferences, dismissive individuals tend to explicitly reject or minimize the importance of emotional attachments, passively avoid close relationships, and strive for self-reliance and independence (Bartholomew, 1990; Collins & Feeney, 2000; Griffith & Bartholomew, 1994). For instance, participants who endorse Bartholomew and Horowitz's (1991) index of dismissing avoidance indicate, "I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me" (p. 244). Moreover, dismissive avoidants display an avoidant behavioral pattern even in the presence of separation and loss from close relationships, two instances in which the attachment system (or the need to feel connected to others) should be more likely to be activated (Ainsworth, Blehar, Waters, & Wall, 1978; Baumeister & Leary, 1995; Fraley et al., 1998). In addition, dismissive avoidants appear to be indifferent to what others think of them (Bartholomew & Horowitz, 1991) and are relatively averse to positive feedback from others (Brennan & Bosson, 1998).

If dismissing individuals truly lack the motivation to form and maintain close relationships and are indifferent to social feedback, they may well constitute counterexamples to the need to belong. As previously discussed, for the need to belong to be fundamental it must affect all normal individuals. The existence of a subset of the population (approximately 18%) (Bartholomew & Horowitz, 1991) who are "comfortable without close relationships" casts serious doubts on the fundamental nature of the need to belong, just as it would cast doubts on the fundamental nature of the hunger and thirst needs if 18% of the population were "comfortable without food and water." However, it is possible that dismissive individuals have a strong need to belong but have learned to inhibit their belongingness

desires as a defense against potential rejection. Indeed, a closer look at dismissive behavior shows that avoidant behavioral patterns are likely to be triggered as responses to real or imagined separation or rejection (Fraley et al., 1998; Fraley & Shaver, 1998). Thus, dismissing avoidance may represent a defensive process designed to prevent the experience of negative affect from social rejection (Bartholomew, 1990; Griffin & Bartholomew, 1994). If dismissives choose to disaffiliate from others to minimize the possibility of being rejected, they may well have a strong need to feel connected and accepted by others rather than a lack of belongingness needs (Baumeister & Leary, 1995; Shepperd & Arkin, 1990).

How could one assess whether dismissive individuals actually care about connecting to others when they claim that they do not? Baumeister and Leary (1995) have proposed that emotional reactions should follow directly from real, potential, or imagined changes in one's belongingness status. Specifically, negative affect should follow when relationships are ended, threatened, or rejected and positive affect should follow from forming and solidifying social bonds (Berscheid & Ammazzalorso, 2004). If dismissives truly care about relationships, the experience of rejection or other negative social outcomes should lead to negative mood or decreased self-esteem (Crocker & Wolfe, 2001). However, research in this area suggests that in response to actual or potential rejection, dismissive avoidants are likely to deactivate their attachment systems as a defensive strategy to minimize feelings of distress (Fraley et al., 1998; see also Twenge, Catanese, & Baumeister, 2003). Therefore, confronting dismissives with interpersonal threats may shed very little light on the true nature of dismissive avoidants' belongingness needs. The current research attempted to circumvent this issue by examining the reactions of dismissive individuals to social success instead of social threat. Assessing affective responses to positive interpersonal outcomes may constitute an indirect, unobtrusive way to evaluate belongingness needs among dismissing individuals (Greenwald & Banaji, 1995).

Overview of the Present Research

The studies presented in this report were designed to test how individuals with dismissive attachment styles react to positive social feedback. If the need to belong is indeed universal, then even individuals who claim not to care about social relationships should experience positive affective reactions to positive social feedback. Indeed, because dismissive individuals often have missed out on the opportunity to satisfy their need to belong, they might be more sensitive than others to socially relevant cues that denote acceptance (Gardner, Pickett, & Brewer, 2000; see also Snodgrass, 1985). Thus, their reactions to positive social outcomes (e.g., social approval) should be even stronger than the reactions of nondismissive individuals. If, on the other hand, dismissive individuals truly do not care about social relationships, as they claim, then they should show less-favorable reactions to positive social feedback than should nondismissive individuals. These competing hypotheses were tested in two related studies. In the first study, participants were led to believe that other students had evaluated them positively and wanted to interact with them. In the second study, participants were led to believe that regardless of what had happened in the past, they would have success in either interpersonal or individual domains in the future.

In addition to having implications for the need to belong, this research also has implications for attachment theory. Specifically, dismissive avoidant behavior has been explained as the result of a defensive deactivation of the attachment system to avoid potential rejection (e.g., Cassidy & Kobak, 1988; Tidwell, Reis, & Shaver, 1996) or a genuine disregard for interpersonal closeness (Bartholomew, 1990). Unfortunately, it is difficult to distinguish empirically between someone who has deactivated his or her attachment system out of fear of rejection and someone who genuinely does not desire social contact because both of these motivations, by and large, lead to the same behavior: avoidance of intimacy. Thus, the underlying interpersonal motivations of dismissive avoidants remain untested. The current studies attempt to bypass dismissive avoidants' highly sensitive defensive systems by providing dismissive avoidants with clear, unambiguous positive social feedback. If fear of rejection is at the heart of the dismissive style, then removing such fear should elucidate the true motivation of dismissive attachments to connect to others. Conversely, if dismissive avoidants genuinely do not care about social connections, then the removal of fear of rejection should not affect them. Therefore, the current studies may provide a rare glimpse into the true nature of dismissive avoidants.

Finally, we also were interested in examining whether the state self-esteem levels of dismissing avoidants would depend on perceived positive regard from others for two reasons. First, the relevance of an event to one's contingencies of self-worth should determine to what degree the event affects self-esteem (Crocker & Wolfe, 2001). Thus, if social connectedness and acceptance is important to dismissive avoidants' lives, positive social feedback is likely to affect their state self-esteem. Second, the sociometer theory predicts that self-esteem should be strongly related to perceived social acceptance (Leary & Downs, 1995; Leary et al., 1995). However, past research has indicated that the self-esteem of dismissing avoidants

is disconnected from social rejection experiences and is instead likely to be based on their perceived abilities and accomplishments (Brennan & Bosson, 1998; Brennan & Morris, 1997). Although this could be explained by dismissive avoidants' disconnection of their attachment systems to protect the self from negative feedback, it also could mean that the sociometer theory does not apply to them. To address these two issues, the current research will examine whether positive social feedback will increase the self-esteem of dismissive avoidants. Indeed, because the need to belong becomes stronger when it is thwarted (Leary et al., 1995), the tendency for self-esteem to increase following social acceptance might be even stronger for people with dismissive avoidant attachment styles. If, on the other hand, dismissive individuals' self-esteem is tied to knowledge of personal abilities and attributes rather than to positive regard from others, they should report lower state self-esteem than should nondismissive individuals in response to increments in belongingness.

STUDY 1

The first study tested the hypotheses that high-dismissing avoidant individuals would report relatively higher levels of positive affect and self-esteem after experiencing inclusion by others. Participants in a getting acquainted study either (a) learned that the three other participants in the study strongly preferred them as an interaction partner or (b) received no feedback relevant to social inclusion. Immediately after the experimental manipulation, we assessed participants' levels of positive affect and state self-esteem.

Method

PARTICIPANTS

Participants were 131 undergraduates (83 men, 48 women) from the State University of New York, Buffalo, ranging from 18 to 54 years old ($M = 20.24$). The ethnic composition of our sample was 49% Caucasian, 34% Asian or Asian American, 7% African American, 3% Hispanic, and 7% other ethnicities. Participants received research credit as a partial requirement for a course in introductory psychology.

PROCEDURE AND MATERIALS

Participants were told that they would be taking part in a study of "social interaction in chat rooms" designed to investigate the ways in which impressions of other people developed in the absence of face-to-face interaction. Participants were placed in individual cubicles with a computer and were told that the study would take part in two stages. Participants were told that during the first part of the study they would (a) complete a personality survey that they would exchange with all other participants in the study, (b) be asked about their impressions of the other participants, and (c) rank the other participants in terms of preference as potential interaction partners in a chat room activity. Participants were told that during the second part of the study they would interact with another participant in a 15-min chat room activity followed by additional questions about their impressions of their interaction partners.

Next, participants completed an "information exchange questionnaire" that required them to rate themselves on 15 different personality items (e.g., cooperative, open-minded, and rational) and then to answer five self-descriptive questions (e.g., "Where would you prefer to spend your spring break vacation?" and "What are your three favorite hobbies or leisure activities?"). Presumably, participants would be exchanging this questionnaire electronically with the other three participants.

After the questionnaires were completed, the computer screen displayed the alleged responses of the three other participants followed by a questionnaire that asked participants to rate the other participants on the basis of their questionnaire responses. All participants actually read the same three questionnaires, which were written by the experimenters to look like typical undergraduate responses. In addition, participants were asked to rank all the other participants in terms of preference as potential interaction partners on the upcoming interaction activity.

Once participants completed their ratings and ranking, they were asked to wait while the computer ostensibly analyzed all of these rankings. All participants were told that to facilitate the interaction partner selection process, the participant who was ranked highest by all other participants would get to choose his or her interaction partner first. Participants were then randomly assigned to experimental condition. Participants in the accepted condition were told that they had received the highest ranking and would be asked to select one of the other three participants as an interaction partner. Participants in the control condition did not received feedback about rankings. They were simply informed that they would be assigned to participate with one of the other three participants.

Immediately after the experimental manipulation, participants completed a series of questionnaires before the alleged interaction activity began. These questionnaires would ostensibly assess variables that could influence their impressions of their interaction partners and included a mood measure, a state self-esteem measure, an attachment style measure, and some demographic questions. Participants were reminded that their responses to these questionnaires would remain completely anonymous and that the other participants would not see them. They also were reminded that after com-

pleting the questionnaires, they would interact with another participant in the final stage of the study. After completing these questionnaires, participants were carefully probed for suspicion. They were then fully debriefed and thanked for their participation.

Mood. We assessed mood using five positive items (happy, proud, determined, enthusiastic, and inspired) of the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988). Participants reported the degree to which they were currently experiencing each feeling or emotion using a scale ranging from 1 (*not at all*) to 9 (*very much*) ($\alpha = .84$).

State self-esteem. We assessed state self-esteem using a modified version of the Rosenberg (1965) Self-Esteem Scale (e.g., "Right now, I feel that I have a number of good qualities"). Participants responded to each item on a scale from 1 (*strongly disagree*) to 9 (*strongly agree*). Negative items were recoded ($\alpha = .86$).

Attachment style. Participants' dismissive attachment style was measured using Bartholomew and Horowitz's (1991) single-item self-report attachment classification measure. Participants were asked to rate, on a 9-point scale, the extent to which they agreed with the following statement describing the dismissing attachment style: "I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me." In addition, participants used the same measure to rate three different paragraphs describing the secure, preoccupied, and fearful attachment styles.

To obtain a more reliable measure of participants' attachment styles, this measure was administered on two different occasions (Baldwin & Fehr, 1995). Participants first completed this measure during a mass testing session 3 weeks prior to the study. A single index for the different attachment dimensions was created by averaging the pretest and the score taken during the experimental session (all *r*s > .29).[1]

Results

MANIPULATION CHECK

After participants completed the dependent measures, they were asked to report how they were ranked by the other participants in the study. Three participants assigned to the experimental condition did not recall how the other participants ranked them, and 5 participants assigned to the control condition incorrectly reported being ranked first or second. The exclusion of these participants from our analyses did not alter any of the results of the study. Thus, all participants were included in the analyses.

PRELIMINARY ANALYSIS

To rule out the possibility that our manipulation had an impact on participants' posttest attachment scores in our main independent variable (dismissive avoidance), we entered the pre- and posttest dismissing attachment style scores into a 2 (type of feedback: no feedback vs. feedback) between-participants × 2 (time: pretest vs. posttest) within-participants analysis of variance (ANOVA). The analysis revealed a nonsignificant main effect and Type of Feedback × Time interaction, *p*s .449 and .464, respectively.[2]

MOOD

We hypothesized that after learning that other people accepted them, high-dismissing participants would experience heightened positive affect relative to low-dismissing participants. We tested this hypothesis using a two-step hierarchical regression analysis recommended by Aiken and West (1991). In Step 1, we included experimental condition as a dichotomous variable (0 = no feedback, 1 = acceptance feedback) and dismissing attachment style as a continuous variable predicting positive affect. Dismissing attachment style was centered at its mean (as were all continuous predictors in subsequent analyses). The combined effect of these two predictors revealed no significant effects for condition or dismissing style, $\Delta R^2 = .02$, $F(2, 128) = 1.34$, *ns*. In Step 2, we added the two-way interaction term. The addition of this term revealed a significant Dismissing Attachment Style × Feedback interaction, $\Delta R^2 = .03$, $F(1, 127) = 4.14$, $p < .05$ (see Figure 1). Tests of the simple effects of condition revealed a marginal effect for individuals high (i.e., 1 standard deviation above the mean) in dismissive attachment. These individuals reported higher levels of positive affect in the acceptance feedback condition than in the no feedback condition ($\beta = .21$, $p = .085$). Low-dismissive (i.e., 1 standard deviation below the mean) participants did not differ based on condition ($\beta = -.14$, $p = .251$).

STATE SELF-ESTEEM

Our analyses for state self-esteem included the same predictors as our analyses for mood. Once again, the analyses showed no significant main effects for condition or levels of dismissing style, $\Delta R^2 = .01$, $F(2, 128) = .31$, *ns*. However, when the interaction term was added to the regression, we obtained a significant Dismissing × Feedback interaction, $\Delta R^2 = .05$, $F(1, 127) = 7.32$, $p < .01$ (see Figure 2). Tests of simple effects of condition revealed that high-dismissive participants reacted to the acceptance feedback by reporting significantly higher levels of state self-esteem than did high-dismissive controls ($\beta = .24$, $p < .05$). Surprisingly, low-dismissive participants in the no feedback condition expressed marginally higher levels of state self-esteem than did low-dismissive partici-

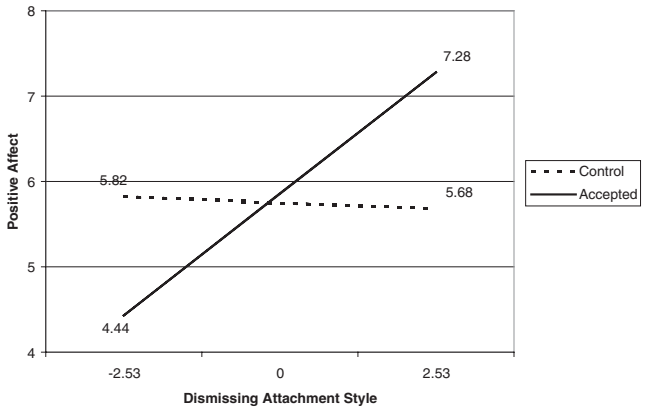

Figure 1 Positive affect among high-dismissing avoidant and low-dismissing avoidant participants as a function of experimental manipulation.

NOTE: Predicted values for participants 1 *SD* above and below the mean in dismissive attachment.

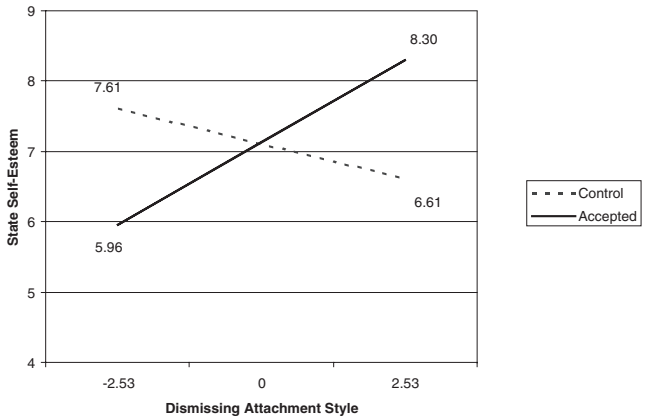

Figure 2 State self-esteem among high-dismissing avoidant and low-dismissing avoidant participants as a function of experimental manipulation.

NOTE: Predicted values for participants 1 *SD* above and below the mean in dismissive attachment.

pants in the positive feedback condition ($\beta = -.23$, $p = .067$).

To determine whether the relationships observed on mood and state self-esteem were unique to the participants' levels of dismissing attachment style, we repeated the above analyses including as predictors their scores on the secure, preoccupied, and fearful attachment styles. In this way, we could partial out any effects of these three attachment styles on participant's mood and self-esteem after exposure to the experimental manipulation. These analyses revealed a marginally significant result for the Dismissing × Feedback interaction for mood, $\Delta R^2 = .03$, $F(1, 124) = 3.49$, $p = .06$, and an almost identical result for the Dismissing × Feedback interaction for state self-esteem, $\Delta R^2 = .05$, $F(1, 124) = 7.86$, $p < .01$, suggesting that the results obtained corresponded to unique associations with levels of dismissing attachment styles. In addition, we conducted independent hierarchical regression analyses for each of the other three attachment styles (i.e., secure, preoccupied, and fearful) patterned from the analyses of participants' scores on dismissing attachment style. The analyses for mood revealed no main effects or interactions for any of the three attachment styles. However, the analyses for state self-esteem showed that secure attachment ($\beta = .24$, $p < .01$) was positively associated with state self-esteem, whereas fearful attachment ($\beta = -.28$, $p < .01$) and preoccupied attachment ($\beta = -.37$, $p < .01$) were both negatively associated with state self-esteem. No other significant main effects or interactions for any of the three attachments styles were observed. Thus, the effects observed for mood and self-liking in Study 1 appear to be specific to the dismissive attachment style.

Discussion

The first study examined how individuals high and low in dismissive attachment style reacted to positive social feedback. As predicted, after learning that other participants had ranked them first as potential interaction partners, participants who were high in dismissing avoidance not only expressed higher levels of positive affect (relative to those who received no feedback) but also reported higher levels of state self-esteem. These findings suggest that dismissive avoidant individuals are not impervious to positive social feedback. To the contrary, they are sensitive to others' evaluations and do care about social connections. Similarly, the results of the study support the sociometer view that levels of self-esteem are associated with levels of social inclusion.

As we had anticipated, levels of positive affect reported by low-dismissive participants in the acceptance feedback condition did not differ from those in the no feedback condition. Presumably, low-dismissive participants believe that they are generally liked and supported by others, so it should have come as no surprise that others have chosen them first as interaction partners. However, low-dismissive participants who received acceptance feedback reported marginally lower levels of state self-esteem compared to low-dismissive controls.

We were surprised to find lower self-esteem among the low-dismissive participants who received acceptance feedback. Therefore, a second study was run to determine if that unexpected finding would replicate. In addition, the second study addressed other potential limitations of Study 1. Specifically, some readers may argue that our manipulation may have affected participants' mood and self-esteem by affecting their sense of compe-

tence. Presumably, dismissing individuals should value competence-related endeavors as a source of self-esteem (Bartholomew, 1990; Brennan & Bosson, 1998). Therefore, the feedback received by participants could have been interpreted as a validation of their possession of valued self-attributes, resulting in both positive affect and enhanced self-esteem. Although the explicit focus on interpersonal acceptance in the feedback makes this unlikely, it is nonetheless possible. In addition, some readers may be concerned that other differences existed between the control and acceptance conditions, in addition to the intended positive social feedback. For example, participants in the acceptance condition thought that they would be allowed to pick their partner, whereas those in the control condition did not. In addition, those in the control condition were implicitly informed that they were not ranked highest by the other participants, so perhaps some control participants felt rejected rather than neutral in that condition. The second study was designed to replicate and extend the findings of the first study while also eliminating its potential confounds.

STUDY 2

The second study consisted of a conceptual replication of Study 1. This time, however, we did not attempt to manipulate perceptions of acceptance from a group. Instead, we manipulated participants' perceptions of future success in both individual and interpersonal domains (Twenge, Baumeister, Tice, & Stucke, 2001). We predicted that individuals high in dismissing interpersonal style would experience higher levels of positive affect than would those low in dismissing interpersonal style after receiving feedback about future interpersonal success. If the feedback about interpersonal feedback affects participants only because of what it implies about the individual self, then the same (or a stronger) pattern should emerge in the individual success condition. Conversely, if, as we hypothesize, dismissive avoidants react to interpersonal feedback with positive emotions because of their strong, unfulfilled need to belong, then the same pattern should not emerge in the individual success condition.

Brennan and Morris (1997) found that self-competence, rather than self-liking, predicted dismissing attachment. Thus, to ensure that our measure of self-esteem in no way reflected the participants' sense of competence, we included a measure of self-liking that assessed participants' overall view of their self-worth, or "goodness," irrespective of their abilities or competence (Tafarodi & Swann, 1995). Accordingly, we predicted that dismissing avoidants would report higher levels of self-liking after receiving feedback about future interpersonal success but not after receiving feedback about future individual success.

PARTICIPANTS

Participants were 115 undergraduates (57 men, 58 women) from the State University of New York, Buffalo, ranging from 17 to 27 years old ($M = 18.75$). The ethnic composition was 57% Caucasian, 17% Asian or Asian American, 13% African American, 5% Hispanic, and 8% other ethnicities. Participants received research credit as a partial requirement for a course in introductory psychology.

PROCEDURE AND MATERIALS

Participants were told that the purpose of the study was to examine and validate a measure of a bogus personality trait referred to as "surgency." The measure consisted of a number of different questionnaires that participants were asked to complete using a computer. Participants were informed that the computer would compute their surgency scores immediately after they had completed the questionnaires. The set of questionnaires included the same attachment style measure used in Study 1 (Bartholomew & Horowitz, 1991) and several unrelated filler questionnaires that tapped into personal or interdependent domains. After completing the questionnaires, and while they supposedly waited for their scores, participants in the interpersonal and individual future success conditions were asked to read a bogus article that was purportedly published in the magazine *Psychology Today*. The article allegedly provided a descriptive summary of surgency.

Participants in the "interpersonal future success" condition read the following description:

> A new study conducted at Washington University (WU) in St. Louis shows how an individual's future interpersonal success can be predicted by measuring how high or low they are on surgency. An individual's level of surgency, for example, can tell us how they will generally fare in interpersonal relationships. A person who scores high on surgency will often have lots of friends and long-lasting, fulfilling romantic relationships. It does not, however, tell us how they will function independently. We cannot measure surgency to predict future professional accomplishments. A person who scores high on surgency will most likely experience fulfilling relationships, but he or she may or may not become an accomplished individual.

Participants in the "individual future success" condition read a similar description of the trait:

> A new study conducted at Washington University (WU) in St. Louis shows how an individual's future success can be predicted by measuring how high or low they are on surgency. An individual's level of surgency, for example, can tell us how they will generally perform in individual tasks. People who score high on surgency often accom-

plish a great deal, publish books, discover new things, or make contributions to whatever their professions are. It does not, however, tell us how they will function with others. We cannot measure surgency to predict future relationship satisfaction or interpersonal success. A person who scores high on surgency will most likely become an accomplished individual, but he or she may or may not experience relationship fulfillment.

Participants in the control condition received no information about surgency. After completing their questionnaires, these participants were simply asked to wait for the computer to calculate their surgency scores.

Next, participants were presented with their surgency scores. All participants received the same score and feedback: "The average surgency score of University at Buffalo students is 67. You scored an 89 out of 100 on surgency. You are very high on surgency." Immediately after reading their scores, participants were asked to complete a series of questionnaires that included a positive affect measure, a self-liking measure, and some demographics questions. After completing these questionnaires, participants were probed for suspicion about the hypothesis and feedback, fully debriefed, and thanked for their participation.

Mood. We assessed mood using the same five positive items from the PANAS that we used in Study 1 (Watson et al., 1988). This measure was reliable ($\alpha = .87$).

Self-liking. Because of time constraints, we assessed global (state) self-liking using a single item: "Right now, I feel very happy with who I am." This item was answered on a scale ranging from 1 (*not at all*) to 9 (*very much*). Recent studies have shown that single and multi-item measures of self-esteem are strongly correlated (Hogg & Sunderland, 1991; Robins, Hendin, & Trzesniewski, 2001).

Results

MANIPULATION CHECKS

No participant reported suspicions regarding the experimental materials or the cover story used in the study. However, 5 participants (3 in the interpersonal future success and 2 in the independent future success conditions) failed to recall correctly the description of surgency provided to them. The exclusion of these participants did not alter the results of our analyses (if anything, their deletion made the results slightly stronger). Thus, we included all participants in our analyses.

MOOD

We expected that after receiving feedback of future interpersonal success, high-dismissing individuals would experience higher levels of positive affect relative to low-dismissing individuals. However, we did not expect to observe this same pattern of results when the feedback was related to individual future success. To test these hypotheses, we examined the effects of dismissing attachment style (a continuous variable) and condition (a categorical variable: interpersonal future success, individual future success, or control) on positive affect. As in Study 1, we followed the prescriptions of Aiken and West (1991) and used multiple-regression analyses to analyze these data. We represented the three-level categorical variable by using dummy variable coding in which the control condition was coded as the comparison group. For all analyses, the predictor variables were (a) dismissing avoidant attachment style, (b) experimental condition (represented by two separate vectors; see Aiken & West 1991), and (c) the two interaction terms needed to assess interactions involving the three levels of the experimental condition.

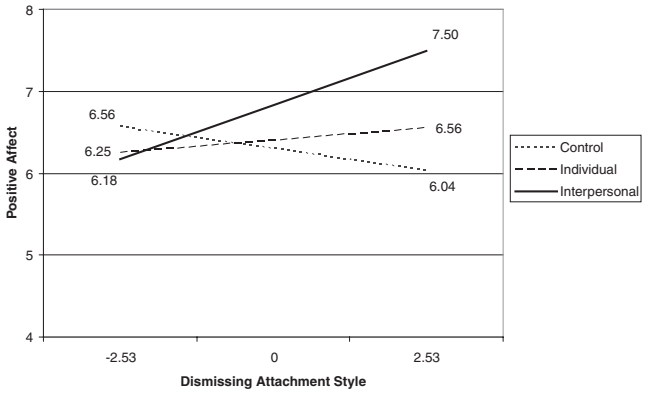

Figure 3 Positive affect among high-dismissing avoidant and low-dismissing avoidant participants as a function of experimental manipulation.

NOTE: Predicted values for participants 1 *SD* above and below the mean in dismissive attachment.

Our analyses for mood revealed only the predicted Dismissing Attachment Style × Feedback interaction, $\beta = .34$, $p < .01$ (see Figure 3). We began our simple slopes tests by focusing on the effects of dismissing attachment style in the interpersonal future success feedback condition. Test of simple effects of condition revealed that high-dismissive (+1 standard deviation above the mean) participants in the future interpersonal success feedback condition reported significantly higher levels of positive affect than did high dismissives in the control condition ($\beta = .45$, $p < .01$). However, positive affect did not differ between high dismissives in the future individual success and control conditions ($\beta = .16$, $p > .27$). Low-dismissive (–1 standard deviation below the mean) participants in the control condition did not differ from low dismissive in the future interpersonal success ($\beta = -.119$, $p > .39$) or future individual success ($\beta = -.094$, $p > .54$) condition.

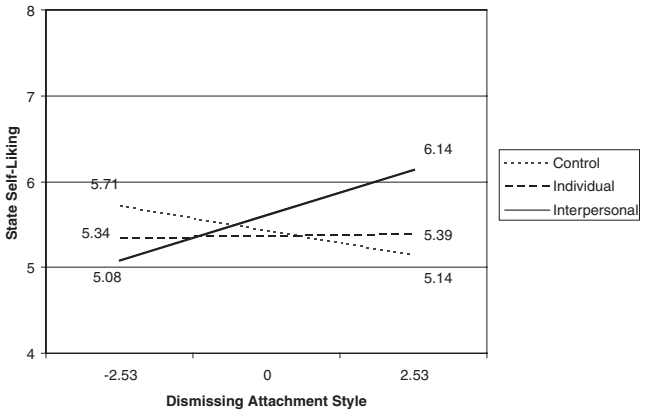

Figure 4 State self-liking among high-dismissing avoidant and low-dismissing avoidant participants as a function of experimental manipulation.

NOTE: Predicted values for participants 1 *SD* above and below the mean in dismissive attachment.

SELF-LIKING

Our analyses for (state) self-liking also revealed only the predicted Dismissing Attachment Style × Feedback interaction, β = .32, $t(109) = 2.70$, $p < .01$ (see Figure 4). A simple slope test of condition revealed that high-dismissive participants in the future interpersonal success feedback condition reported significant higher levels of state self-liking compared to high-dismissive controls (β = .33, $p < .05$). However, high-dismissive participants in the future individual success condition did not differ significantly from those in the control condition (β = –.09, $p > .57$). For low-dismissive participants, none of the contrasts were significant (both ps > .14).

Once again, to determine whether the associations observed on mood and self-liking were unique to the participants' levels of dismissing attachment style, we repeated the above analyses including as predictors their scores on the secure, preoccupied, and fearful attachment styles. The analyses for mood revealed a significant main effect for secure attachment style, β = .22, $p < .05$. A more secure attachment style predicted more positive mood. More important, the Dismissing Attachment Style × Feedback interaction remained significant, β = .31, $p < .01$. Similarly, the analyses for self-liking revealed a significant main effect for secure attachment style (β = .21, $p < .05$) and fearful attachment style (β = –.22, $p < .05$). Secure attachment predicted high self-liking, whereas fearful attachment predicted low self-liking. More important, and consistent with our previous analyses, the Dismissing Attachment Style × Feedback interaction remained significant, β = .29, $p < .05$.

As in Study 1, we also conducted independent hierarchical regression analyses for each of the other three attachment styles (i.e., secure, preoccupied, and fearful) patterned from the analyses on participants' scores on dismissing attachment style for both mood and self-liking. The analyses revealed that secure attachment was a significant predictor of mood (β = .21, $p < .05$) and self-liking (β = .28, $p < .01$). Similarly, levels of fearful attachment also were associated with mood (β = –.23, $p < .05$) and self-liking (β = –.30, $p < .01$), but in the opposite direction. In these analyses for mood and self-liking, no main effects for condition or interactions were observed for any of the three attachment styles. Thus, the effects observed for mood and self-liking in Study 2 appear to be specific to the dismissive attachment style.

Discussion

The results of Study 2 replicated and extended the results of Study 1. After receiving feedback suggesting future interpersonal success, high-dismissing avoidant participants reported higher levels of positive affect than did low-dismissing participants. This finding did not occur for participants who received feedback of future individual success. Thus, we were able rule out the possibility that effects on positive affect observed in Study 1 were based on participants' feelings of self-competence instead of belongingness. In summary, contrary to their own self-reports, dismissive individuals appear to care deeply about social acceptance.

The results of this study also provided support for the hypothesis that among high-dismissing avoidants, feelings about the self are enhanced after receiving feedback of future interpersonal success; the effects on self-liking replicated the results on self-esteem observed in Study 1. Moreover, the effects on self-liking were unique to high-dismissive participants. In other words, the effects on state self-esteem observed in Study 1 among low-dismissing participants failed to replicate in this study.

In sum, the results of Study 2 showed that high-dismissing individuals reported relatively higher positive mood and feelings about the self after learning that in the future they would be interpersonally successful. As expected, this rise in self-liking and mood did not occur for low-dismissive participants or for any participants who learned that in the future they would be successful in individual domains. As college students in a competitive university, both high- and low-dismissing individuals are likely to feel that they are highly competent. Therefore, receiving information about future individual success should come as no surprise to either group.

GENERAL DISCUSSION

The current research supports the hypothesis that despite their own claims to the contrary, dismissing avoidant individuals possess a strong desire to be accepted by others. Thus, dismissive avoidants do not

represent a counterexample of the belongingness hypothesis. In Study 1, participants who scored higher than average in dismissing avoidance reported experiencing higher than average levels of positive affect and state self-esteem after learning that other participants accepted them. The results of Study 2 replicated the results of Study 1, and they also showed that the positive mood and feelings about the self experienced by high-dismissive avoidants after receiving positive interpersonal feedback were unique to positive, interpersonal feedback. Thus, we were able to rule out the possibility that we were manipulating levels of competence instead of inclusion.

Consistent with our view that the effects of positive social feedback should be relatively strong among those who do not encounter it often, low-dismissive individuals who learned that they were liked by others (Study 1) or that they would be successful in future interpersonal domains (Study 2) did not report significantly higher levels of positive affect or self-esteem compared to controls. These findings are consistent with research that shows that people who hold a comfortable sense of being sought and accepted by others do not report changes on affect or self-esteem following a particular episode of inclusion (e.g., Baumeister, Dori, & Hastings, 1998; Leary et al., 1995). Because most interpersonal encounters are characterized by some degree of acceptance, people who are comfortable seeking and forming bonds with others are likely to feel loved, cared for, and supported by others (Hazan & Shaver, 1987).

Despite the lack of significant findings for the low dismissives in either study, low dismissives in Study 1 were marginally lower in self-esteem after the acceptance feedback and the same pattern, albeit a nonsignificant one, existed for self-liking in Study 2 (differences for mood did not approach significance in either study, both $ps > .25$). Although one must be circumspect in speculating about nonsignificant findings, perhaps, for low dismissives, receiving strong acceptance feedback produced a shift away from an independent self to a more interdependent self (Brewer & Gardner, 1996). Low dismissives profess to caring a great deal about relationships and thus should have particularly accessible interdependent selves easily activated by social feedback (Gardner, Gabriel, & Lee, 1999). A shift to the interdependent self should reduce the need to distinguish the self from others and increase the need to assimilate to others (Brewer, 1991). Because measures of self-esteem implicitly and explicitly require individuals to compare themselves to others (e.g., "I feel that I'm a person of worth, at least on an equal plane with others"), an interdependent focus may deflate self-esteem responses (Rosenberg, 1965). Further research would be necessary to replicate the patterns found in the current studies and explore this and other possible explanations.

In our view, the current studies provide a direct and robust test of the assumption that a strong and basic need for affiliation and acceptance is present in all normal humans. Although we should expect to find individual differences in the strength and intensity of the need to belong, establishing the existence of normal individuals who lack this motivation would falsify the belongingness hypothesis. At first blush, dismissive avoidance appears to challenge the view of the need to belong as a fundamental human motivation. However, as demonstrated in our studies, dismissive avoidants appear to show an even stronger need for acceptance than do nondismissive avoidants after receiving positive social feedback. The close relationship between emotions and motivation (Buck, 1985) clearly suggests that the heightened positive emotions experienced by high-dismissive participants after social feedback reflects a strong motivation to belong. In sum, our findings are consistent with the view that even people whose behavioral patterns suggest a lack of sociability (e.g., shy people) are strongly motivated to form relationships (Baumeister & Leary, 1995).

In addition to supporting the fundamental nature of the need to belong, the current research also has implications for attachment research. The results of our research underscore the importance of examining the moderating role of attachment style in positive as well as negative situations (see also Tidwell et al., 1996). Research on dismissive avoidance has shown that dismissive individuals protect themselves from situations that are associated with rejection by deactivating their attachment system and suppressing attachment-related thoughts and feelings (Bartholomew, 1990; Fraley, Garner, & Shaver, 2000; Fraley & Shaver, 1998). One hypothesized implication of that finding is that dismissive avoidants will be less likely to attend and elaborate on any event that may activate the attachment system (Fraley et al., 1998). Thus, from this perspective, dismissive avoidants should display the same patterns of affect regulation in both negative and positive situations (Fuendeling, 1998; Mikulincer & Sheffi, 2000). In addition, it has been hypothesized that dismissive avoidant styles should lead to the experience of less intense emotions as a consequence of both positive and negative social experiences (e.g., Pietromonaco & Feldman Barrett, 1997). By examining reactions to positive feedback, the current results challenge these assumptions. Indeed, relative to nondismissives, dismissing avoidants not only appeared to attend and process positive social feedback but reported stronger emotional reactions in response to interpersonal acceptance.

Consistent with the sociometer theory, our studies also demonstrate that the state self-esteem of dismissives fluctuates in response to positive social feedback. Previous research suggests that the sociometer is particularly sensitive to rejection rather than acceptance (Leary & Downs, 1995). This is likely to be the case because most people seek and maintain relationships and thus have many opportunities to experience a minimal level of social acceptance. Therefore, for most people, the sociometer system should be more sensitive to potential rejection than to further acceptance (Leary & Downs, 1995). In contrast, a person who is likely to act in ways that reduce his or her chances of forming relationships, and who has the ability to inhibit, deny, or ignore information that denotes social rejection, is likely to be more responsive to information that denotes increments than decrements to his or her sense of belongingness (Leary & Downs, 1995). Thus, examining dismissive avoidant attachment style provided a unique opportunity to test the assumption that people's feelings of state self-esteem are a subjective index of the degree to which they feel included by other people.

However, if their avoidant patterns render dismissive individuals less likely to engage in experiences in which they are valued and included by others, how can one explain the relatively high levels of trait self-esteem that dismissives usually report? One of the assumptions of the sociometer theory is that the self-esteem system not only monitors how much one is socially valued in the immediate situation but it also monitors the general outlook for relational appreciation and social belongingness in future interpersonal encounters and relationships. This immediate and long-term monitoring system corresponds to the common distinction between state and trait self-esteem. Thus, state self-esteem reflects the degree to which one is likely to be accepted and included versus rejected and excluded by other people in the immediate situation (Leary & Downs, 1995), whereas trait self-esteem involves the assessment of one's potential for social inclusion versus exclusion over the long run. From this perspective, high trait self-esteem appears to derive from the belief that one possesses valued social attributes that make one appealing to others (Baumeister et al., 1998). Thus, dismissing avoidants' high sense of competence and independence may provide them with potential relational appreciation and social belongingness. This view is consistent with research that shows that self-esteem is predicted by people's self-perceptions of their likeability and competence (Pelham & Swann, 1989; Shrauger & Schoeneman, 1979) as well as their performance in domains that they believe other people consider important (Harter & Marold, 1993). Needless to say, more research will be required to explicate the effect of belongingness needs as they relate to levels of self-esteem among dismissive individuals.

Conclusion

> Some people never say the words "I love you." It's not their style to be so bold. Some people never say those words "I love you." But like a child they're longing to be told.
>
> —Paul Simon, *Something So Right*

The current studies found that the more individuals claimed not to care about social connections, the more favorably they responded to feedback that they were (or would be) socially accepted. Thus, it appears that contrary to what they claim, dismissive individuals are not indifferent to how other people think of them and have a strong desire to be liked and accepted by others. In sum, people with a dismissive attachment style also have a fundamental need to feel connected to others, but because they have buried it under denial and a hard shell of indifference, it can only be glimpsed by giving them a taste of what all people need and desire most: inclusion and acceptance from others.

NOTES

1. In addition to using the composite attachment variable, the pretest and experimental session scores of dismissive attachment style also were analyzed separately. The analyses yielded similar (albeit less robust) results in all main analyses.

2. We conducted similar analyses on the secure, preoccupied, and fearful attachment style scores. None of the analyses yielded significant results.

REFERENCES

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions.* Newbury Park, CA: Sage.

Ainsworth, M. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation.* Oxford, UK: Lawrence Erlbaum.

Atkinson, J. W., Heyns, R. W., & Veroff, J. (1954). The effect of experimental arousal of the affiliation motive on thematic apperception. *Journal of Abnormal & Social Psychology, 49*, 405-410.

Baldwin, M. W., & Fehr, B. (1995). On the instability of attachment style ratings. *Personal Relationships, 2*, 247-261.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147-178.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226-244.

Baumeister, R. F., Dori, G. A., & Hastings, S. (1998). Belongingness and temporal bracketing in personal accounts of changes in self-esteem. *Journal of Research in Personality, 32*, 222-235.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497-529.

Baumeister, R. F., & Tice, D. M. (1990). Anxiety and social exclusion. *Journal of Social and Clinical Psychology, 9*, 165-195.

Baumeister, R. F., & Twenge, J. M. (2003). The social self. In T. Millon & M. J. Lerner (Eds.), *Handbook of psychology: Personality and social psychology* (Vol. 5, pp. 327-352). New York: John Wiley.

Berscheid, E., & Ammazzalorso, H. (2004). Emotional experience in close relationships. In M. B. Brewer & M. Hewstone (Eds.), *Emo-*

tion and motivation perspectives on social psychology (pp. 47-69). Malden, MA: Blackwell.
Bowlby, J. (1969). *Attachment and loss. Vol. 1: Attachment.* New York: Basic Books.
Bowlby, J. (1973). *Attachment and loss. Vol. 2: Separation, anxiety and anger* (Vol. 2). New York: Basic Books.
Brennan, K. A., & Bosson, J. K. (1998). Attachment-style differences in attitudes toward and reactions to feedback from romantic partners: An exploration of the relational bases of self-esteem. *Personality and Social Psychology Bulletin, 24*, 699-714.
Brennan, K. A., & Morris, K. A. (1997). Attachment styles, self-esteem, and patterns of seeking feedback from romantic partners. *Personality and Social Psychology Bulletin, 23*, 23-31.
Bretherton, I. (1985). Attachment theory: Retrospect and prospect. *Monographs of the Society for Research in Child Development, 50*, 3-35.
Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*, 475-482.
Brewer, M.B., & Gardner, W. (1996). Who is this "we"? Levels of collective identity and self representations. *Journal of Personality and Social Psychology, 71*, 83-93.
Buck, R. (1985). Prime theory: An integrated view of motivation and emotion. *Psychological Review, 92*, 389-413.
Caporael, L. R., & Brewer, M. B. (1995). Hierarchical evolutionary theory: There is an alternative, and it's not creationism. *Psychological Inquiry, 6*, 31-34.
Carvallo, M., & Pelham, B. W. (in press). When fiends become friends: The need to belong and perceptions of personal and group discrimination. *Journal of Personality and Social Psychology.*
Cassidy, J., & Kobak, R. (1988). Avoidance and its relation to other defensive processes. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment child psychology* (pp. 300-323). Hillsdale, NJ: Lawrence Erlbaum.
Cialdini, R. B. (2001). Systematic opportunism: An approach to the study of tactical social influence. In J. P. Forgas & K. D. Williams (Eds.), *Social influence: Direct and indirect processes the Sydney symposium of social psychology* (pp. 25-39). New York: Psychology Press.
Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology, 78*, 1053-1073.
Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*, 644-663.
Crocker, J., & Wolfe, C. T. (2001). Contingencies of self-worth. *Psychological Review, 108*, 593-623.
Ekman, P., & Davidson, R. J. (1994). *The nature of emotion: Fundamental questions.* London: Oxford University Press.
Fraley, R., Davis, K. E., & Shaver, P. R. (1998). Dismissing-avoidance and the defensive organization of emotion, cognition, and behavior. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 249-279). New York: Guilford.
Fraley, R., Garner, J. P., & Shaver, P. R. (2000). Adult attachment and the defensive regulation of attention and memory: Examining the role of preemptive and postemptive defensive processes. *Journal of Personality and Social Psychology, 79*, 816-826.
Fraley, R., & Shaver, P. R. (1998). Airport separations: A naturalistic study of adult attachment dynamics in separating couples. *Journal of Personality and Social Psychology, 75*, 1198-1212.
Fuendeling, J. M. (1998). Affect regulation as a stylistic process within adult attachment. *Journal of Social and Personal Relationships, 15*, 291-322.
Gardner, W. L., Gabriel, S., & Lee, A. (1999). "I" value freedom, but "we" value relationships: Self-construal priming mimics cultural differences in judgment. *Psychological Science, 10*, 321-326.
Gardner, W. L., Pickett, C. L., & Brewer, M. B. (2000). Social exclusion and selective memory: How the need to belong influences memory for social events. *Personality and Social Psychology Bulletin, 26*, 486-496.
Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*, 4-27.
Griffin, D. W., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology, 67*, 430-445.
Harano, R. M., Peck, R. C., & McBride, R. S. (1975). The prediction of accident liability through biographical data and psychometric tests. *Journal of Safety Research, 7*, 16-52.
Harter, S., & Marold, D. B. (1993). The directionality of the link between self-esteem and affect: Beyond casual modeling. In D. Ciccneti & S. L. Toth (Eds.), *Rochester symposium on developmental psychology: Disorders and disfunctions of the self* (Vol. 5, pp. 333-370). Rochester, NY: University of Rochester Press.
Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52*, 511-524.
Hogg, M. A., & Sunderland, J. (1991). Self-esteem and intergroup discrimination in the minimal group paradigm. *British Journal of Social Psychology, 30*, 51-62.
Leary, M. R., & Downs, D. L. (1995). Interpersonal functions of the self-esteem motive: The self-esteem system as a sociometer. In M. H. Kernis (Ed.), *Efficacy, agency, and self-esteem plenum series in social/clinical psychology* (pp. 123-144). New York: Plenum.
Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology, 68*, 518-530.
Maslow, A. H. (1968). *Toward a psychology of being.* New York: Van Nostrand.
McAdams, D. P. (1986). Motivation and friendship. In S. Duck & D. Perlman (Eds.), *Understanding personal relationships: An interdisciplinary approach* (pp. 85-105). Beverly Hills, CA: Sage.
McClelland, D. C. (1951). *Personality.* New York: William Sloane.
Mikulincer, M., & Sheffi, E. (2000). Adult attachment style and cognitive reactions to positive affect: A test of mental categorization and creative problem solving. *Motivation & Emotion, 24*, 149-174.
Murray, H. A. (1954). Toward a classification of interaction. In T. Parsons & E. A. Shils (Eds.), *Toward a general theory of action* (pp. 434-464). Cambridge, MA: Harvard University Press.
Myers, D. (1992). *The pursuit of happiness.* New York: Morrow.
O'Neil, R., Welsh, M., Parke, R. D., Wang, S., & Strand, C. (1997). A longitudinal assessment of the academic correlates of early peer acceptance and rejection. *Journal of Clinical Child Psychology, 26*, 290-303.
Pelham, B. W., & Swann, W. B. (1989). From self-conceptions to self-worth: On the sources and structure of global self-esteem. *Journal of Personality and Social Psychology, 57*, 672-680.
Pietromonaco, P. R., & Feldman Barrett, L. (1997). Working models of attachment and daily social interactions. *Journal of Personality and Social Psychology, 73*, 1409-1423.
Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*, 151-161.
Rosenberg, M. (1965). *Society and the adolescent self-image.* Princeton, NJ: Princeton University Press.
Ruiz-Belda, M.-A., Fernandez-Dols, J.-M., Carrera, P., & Barchard, K. (2003). Spontaneous facial expressions of happy bowlers and soccer fans. *Cognition and Emotion, 17*, 315-326.
Sampson, R. J., & Laub, J. H. (1993). *Crime in the making: Pathways and turning points through life.* Cambridge, MA: Harvard University Press.
Scherer, K. R., Summerfield, A. B., & Wallbott, H. G. (1983). Cross-national research on antecedents and components of emotion: A progress report. *Social Science Information, 22*, 355-385.
Shepperd, J. A., & Arkin, R. M. (1990). Shyness and self-presentation. In W. Crozier (Ed.), *Shyness and embarrassment: Perspectives from social psychology* (pp. 286-314). New York: Cambridge University Press.
Shrauger, J., & Schoeneman, T. J. (1979). Symbolic interactionist view of self-concept: Through the looking glass darkly. *Psychological Bulletin, 86*, 549-573.
Simpson, J. A. (1987). The dissolution of romantic relationships: Factors involved in relationship stability and emotional distress. *Journal of Personality and Social Psychology, 53*, 683-692.

Snodgrass, S. E. (1985). Women's intuition: The effect of subordinate role on interpersonal sensitivity. *Journal of Personality and Social Psychology, 49*, 146-155.
Stevens, L. E., & Fiske, S. T. (1995). Motivation and cognition in social life: A social survival perspective. *Social Cognition, 13*, 189-214.
Strube, M. J. (1988). The decision to leave an abusive relationship: Empirical evidence and theoretical issues. *Psychological Bulletin, 104*, 236-250.
Tafarodi, R. W., & Swann, W. B., Jr. (1995). Self-liking and self-competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment, 65*, 322-342.
Tajfel, H. (1970). Experiments in intergroup discrimination. *Scientific American, 223*, 96-102.
Tidwell, M.-C. O., Reis, H. T., & Shaver, P. R. (1996). Attachment, attractiveness, and social interaction: A diary study. *Journal of Personality and Social Psychology, 71*, 729-745.
Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology, 81*, 1058-1069.
Twenge, J. M., Catanese, K. R., & Baumeister, R. F. (2003). Social exclusion and the deconstructed state: Time perception, meaninglessness, lethargy, lack of emotion, and self-awareness. *Journal of Personality and Social Psychology, 85*, 409-423.
Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The Panas Scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.
Williams, D. R., Takeuchi, R. L., & Adair, R. K. (1992). Marital status and psychiatric disorders among Blacks and Whites. *Journal of Health and Social Behavior, 33*, 140-157.
Williams, K. D., Cheung, C. K. T., & Choi, W. (2000). Cyberostracism: Effects of being ignored over the internet. *Journal of Personality and Social Psychology, 79*, 748-762.
Williams, K. D., Shore, W. J., & Grahe, J. E. (1998). The silent treatment: Perceptions of its behaviors and associated feelings. *Group Processes & Intergroup Relations, 1*, 117-141.
Wilson, E. O. (1978). *On human nature*. Cambridge, MA: Harvard University Press.

Received May 17, 2005
Revision accepted October 15, 2005