What You Want (and Do Not Want) Affects What You See (and Do Not See): Avoidance Social Goals and Social Events

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Two studies examined the influence of approach and avoidance social goals on memory for and evaluation of ambiguous social information. Study 1 found that individual differences in avoidance social goals were associated with greater memory of negative information, negatively biased interpretation of ambiguous social cues, and a more pessimistic evaluation of social actors. Study 2 experimentally manipulated social goals and found that individuals high in avoidance social motivation remembered more negative information and expressed more dislike for a stranger in the avoidance condition than in the approach condition. Results suggest that avoidance social goals are associated with emphasizing potential threats when making sense of the social environment.

Keywords: approach motivation; avoidance motivation; social memory; social motivation

he social environment is filled with information that is positive, negative, and (oftentimes) ambiguous. However, people may notice, remember, or interpret the same social information quite differently. What leads to one person's interpretation of a stranger's half-smile as flirtatious while another perceives the same smile as condescending? Previous research has shown that many internal and external factors influence differences in processing social information. For example, mood has been shown to bias person perception (Forgas & Bower, 2001; Schwarz & Clore, 1996) and numerous factors, such as information overload (Pratto & Bargh, 1991; Stangor & Duan, 1991) and task difficulty (Bodenhausen & Lichtenstein, 1987), have been shown to increase stereotypic preconceptions of others.

One important factor likely to influence processing of ambiguous social cues is the perceiver's motives and goals, that is, research has found that motivation can influence how social information is processed. For example, Maner and colleagues (2005) found that when participants were motivated by a self-protection goal, they perceived greater anger in the faces of outgroup members, and when motivated by a mate-search goal, male participants perceived more sexual arousal in attractive female targets. However, what has not been fully examined is the association between the manner in which goals and motives are framed and the processing of ambiguous social information. A long line of research on motives and goals has shown that in addition to the specific content of goals, a critical dimension is the focus of the goals. Specifically, social motives and goals may be focused on a rewarding or desired end state approach—or social motives and goals can be focused on a punishing, undesired end state—avoidance. We propose that when people strive to obtain positive social outcomes, they view the social world differently than when avoiding negative social outcomes.

Approach and Avoidance Motivation

Many areas of psychology have adopted a view of separate appetitive (i.e., approach) and aversive (i.e., avoidance) systems. Pavlov (1927) provided evidence of two reflexes, one orienting toward the stimulus and the other turning away from the stimulus. Schneirla (1959)

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also found evidence for this "towardness" and "awayness" distinction across diverse species, suggesting evolutionarily early phylogenic roots. In short, the approach system has been widely identified as associated with movement toward desired, positive outcomes, whereas the avoidance system has been associated with movement away from undesirable, negative outcomes (Carver, 1996; Gable, Reis, & Elliot, 2003).

There has been extensive research exploring the approach/appetitive and avoidance/aversive dimensions in motivation and self-regulation. For example, Carver and Scheier's (1990) model of self-regulation posits a feedback process such that information from the environment is compared to an internal reference, an output occurs, the environment is reevaluated and compared to the internal reference, and the process continues. Some feedback processes attempt to reduce the discrepancy between the input and the internal reference (discrepancy-reducing) and some feedback processes attempt to enlarge this discrepancy (discrepancyenlarging). Carver (1996) has equated these two systems with approach and avoidance processes, respectively. Elliot (1997) also has made the distinction between approach- and avoidance-focused achievement motivation, describing approach motives as those consisting of the need for achievement and avoidance motives as those focused on a fear of failure. Similarly, in his work on regulatory focus, Higgins (1998) distinguished between self-regulation of behavior that is focused on positive end states (promotion focus) and self-regulation of behavior that is focused on negative end states (prevention focus).

Activation of approach and avoidance motivational systems also has been associated with different social and emotional outcomes (Gable, Reis, & Elliot, 2000). For example, Gray's (1994) theory links the Behavioral Activation System (BAS) with feelings of hope and approach behaviors and activation of the Behavioral Inhibition System (BIS) with feelings of anxiety and avoidance behaviors (Gray, 1990). Gable et al. (2000) drew from Gray's theory and found that high BIS sensitivity was associated with more daily negative affect and high BAS sensitivity was predictive of increased daily positive affect. Other research in social motivation has found that people high on affiliative tendency (i.e., approach social motivation) were less anxious, elicited more positive affect from others, were more self-confident, and saw themselves as similar to others, whereas people high in sensitivity to rejection were less confident, more anxious, and were judged less positively by others than people low on sensitivity to rejection (Mehrabian & Ksionzky, 1974; Russell & Mehrabian, 1978).

The approach and avoidance distinction also has been useful in understanding interpersonal relationships and

social behavior. In particular, social motivation research has focused on the need for affiliation and the fear of rejection (Mehrabian, 1976; see also Boyatzis, 1975). Mehrabian (1976) found that people high in need for affiliation were less anxious, elicited more positive affect from others, were more self-confident, and saw themselves as similar to others. People high in sensitivity to rejection were less confident, more anxious, and were judged less positively by others than people low on sensitivity to rejection. Furthermore, in a recent series of longitudinal studies, Gable (2006) studied both social motives (e.g., hope for affiliation and fear of rejection) and short-term goals (e.g., I want to make new friends; I do not want to be lonely). She found that approach motives and goals were associated with more positive social attitudes, satisfaction with social bonds, and less loneliness, whereas avoidance social motives and goals were associated with more negative social attitudes, relationship insecurity, and loneliness. In sum, research has found that approach and avoidance motivation are associated with distinct outcomes and, in particular, avoidance motivation is associated with poorer social outcomes than approach motivation.

It seems that, paradoxically, despite attempts to avoid negative social outcomes, individuals with strong avoidance social motives and goals feel more anxious, rejected, and lonely. In other words, why are the people that fear rejection the most also the ones that feel the most rejected and lonely? The answer may lie in how avoidance motives influence the processing of general social information. Indeed, previous motivation research has shown that avoidance motivation is associated with an increased sensitivity to negative information. For example, Derryberry and Reed (1994) found that people with strong approach motivation were biased toward positive cues in a visual target detection task, whereas people with strong avoidance motivation were biased toward negative cues. Higgins and Tykocinski (1992) found that after reading a scenario including both positive and negative outcomes, and then rewriting the scenario from memory, promotion-regulated individuals remembered more events related to positive outcomes, whereas preventionregulated individuals remembered more events related to negative outcomes. And more recently, Gomez and Gomez (2002) showed that approach motivation (BAS) predicted the processing of positive (but not negative) emotional information and avoidance motivation (BIS) predicted the processing of negative (but not positive) emotional information. The focus of the current research is social information that could be construed in different ways, such as the ambiguous social information people encounter daily. The current studies expanded on previous sensitivity research and suggest that in addition to focusing more on negative information, individuals with

strong avoidance social goals also put a more negative spin on ambiguous social stimuli than do those with weaker avoidance goals.

Moreover, it was predicted that approach social goals would have little effect on processing ambiguous social events because only avoidance social goals have been associated with reactivity to social stimuli. Gable (2006) found that the association between avoidance motivation and negative social outcomes was mediated by a different process than the association between approach motivation and positive social outcomes. Avoidance motivation was mediated by a differential reactivity process such that people with stronger avoidance motivation reacted more strongly to the occurrence of negative events. In contrast, approach motivation was mediated by a differential exposure process such that people with stronger approach motivation experience more positive events but do not react more strongly when positive events occur than do those with weaker approach motivation. Thus, approach social goals are associated with experiencing and actively engaging in more positive social events, and this process was not hypothesized to be involved in the current studies. However, in their study of emotional stimuli, Gomez and Gomez (2002) found that approach motivation (BAS) was associated with positively interpreting ambiguous words and remembering more positive words. Specifically, they had participants fill in missing letters of ambiguous words and coded them for positive and negative valence and then asked participants to remember words from a list, including 20 positive, 20 negative, and 20 neutral words. The purpose of their study was to examine emotional stimuli (e.g., cheerful, calm, nervous), and consequently, these results are difficult to generalize to social events. Thus, although we note the possibility of an association between approach social goals and positively interpreting and remembering ambiguous stimuli, we predict that avoidance social goals will be more strongly associated with these processes.

Current Studies

Two studies examined the hypotheses. The first study tested the association between individual differences in avoidance social goals and memory for and interpretation and evaluation of an ambiguous social scenario; the second study experimentally manipulated social goals to evaluate a possible causal association between avoidance motivation and negative processing of ambiguous information. In addition, most social motivation research has examined dispositional motives, the underlying wishes and desires that people possess, and have rarely examined the goals, or short-term cognitive constructs, representing areas in life toward which a person currently directs his or her energies. To address this distinction,

Study 1 focused on short-term social goals and Study 2 examined the interaction between motives and goals.

STUDY 1

Participants were asked to read an ambiguous essay and then rewrite the essay word-for-word from memory. The essay included positive, negative, and neutral social events, and participants' reproduced essays were coded for memory recall and emotional tone (as an assessment of interpretation). Participants also evaluated the actors of the essay to assess the influence of social goals on overall evaluation. We predicted that avoidance social goals would be associated with remembering more negative social events, remembering positive and neutral events less positively, and evaluating the actors in the essay more pessimistically.

Method

PARTICIPANTS

One hundred and one (71 women, 30 men) undergraduate students participated and were given experimental credit for their introductory psychology course. Participants were of diverse ethnicity (32 Asian or Pacific Islander, 2 Black, 20 Hispanic, 34 White, 13 Other), which reflected, approximately, the ethnic composition of the university community. Forty-five percent identified as not being in an exclusive romantic relationship, 9% were in a casual dating relationship, and 45% were in an exclusive romantic relationship. The average length of exclusive relationships was 15.8 months.

PROCEDURE

Participants completed questionnaires assessing their approach and avoidance social goals (Elliot, Gable, & Mapes, 2006), general motivation (BIS/BAS: Carver & White, 1994), and mood (PANAS: Watson, Clark, & Tellegen, 1988). Next, participants were given an essay and were instructed to read the essay and turn it over when finished reading. Participants were given the essay without the knowledge that they would be asked to rewrite it later. When participants turned over the essay, the experimenter took the essay from the participants and gave them a blank sheet of paper and instructed them to "rewrite the essay word-for-word." After rewriting the essay, participants answered a series of questions evaluating the actors of the essay. Participants were then thoroughly debriefed and given credit.

MEASURES

Approach and avoidance social goals. Elliot and colleagues' (2006) Approach and Avoidance Social Goals

Scale consists of eight items (four avoidance and four approach statements). The items assess both friendships and close relationships. Examples of avoidance statements are, "I will be trying to avoid getting embarrassed, betrayed, or hurt by any of my friends" and "I will be trying to make sure that nothing bad happens to my close relationships." Examples of approach statements are, "I will be trying to deepen my relationships with my friends this quarter" and "I will be trying to enhance the bonding and intimacy in my close relationships." Participants responded on a 7-point scale (1 = not at all true of me and 7 = very true of me) about what they would be trying to do throughout the next few months; alphas were .71 for the approach social goals subscale and .83 for the avoidance social goals subscale. The correlation between the two subscales was r = .20, p < .05.

General approach and avoidance motivation. General motivational tendencies were assessed to evaluate their role in social processing. Carver and White's (1994) Behavioral Inhibition System (BIS) and Behavioral Activation System (BAS) scales were used to measure individual differences in dispositional general (as opposed to social) approach and avoidance motivation (BAS and BIS, respectively). The BIS/BAS measure is a 20-item scale based on Gray's conceptualization of aversive and appetitive systems. A single unidimensional scale consisting of 7 items reflects BIS sensitivity. The remaining 13 items make up three subscales reflecting BAS sensitivity. The Reward-Responsiveness subscale (BAS-RR) has items describing positive responses to the occurrence of a reward, the Drive subscale (BAS-D) consists of 4 items describing the willingness to approach positive outcomes, and the Fun Seeking subscale (BAS-FS) consists of 4 items reflecting the willingness to try new things. For the present research, all three subscales were relevant to the conceptualization of BAS dispositions and therefore all 13 items were combined to provide a single, total BAS score ($\alpha s = .83$ for BAS and .80 for BIS in the present study). Example items include, "I worry about making mistakes" (BIS) and "I will often do things for no other reason than that they might be fun" (BAS). We predicted that BIS would be correlated with avoidance social goals and BAS with approach social goals. A test of these correlations showed that BIS was positively correlated with avoidance social goals (β = .41, p < .001); however, BAS was not correlated with approach goals.

Mood. The PANAS (Watson et al., 1988) was used to assess mood. It consists of 20 positive and negative adjectives (e.g., interested, excited, frustrated, upset) and asks participants to rate how each of the adjectives corresponds to how they are feeling "right now" on a 1 to 5 Likert-type scale ($1 = not \ at \ all \ and \ 5 = extremely; \ \alpha = .80$).

Essay. The essay given to participants described a typical Saturday night in which a dating couple goes to a party, socializes with others, and returns home together. The essay was written in first-person format and gender matched (e.g., women received essays in which the narrator was a woman), and included a mix of positive, negative, and neutral events. The essay was pretested on a similar population to ensure that positive, negative, and neutral social events were included in the essay. An example of a positive event was "he greeted me with a hug," an example of a negative event was "he was talking to a girl I did not know," and an example of a neutral statement was "It was around 10:30 at night."

Evaluation of actors. Four questions were asked regarding the actors involved in the essay. The questions were phrased as likelihoods and asked about the actors' behavior in the essay and possible future behavior. In particular, participants were asked if they thought the actors in the essay would engage in the same negative behaviors in the future and if the positive behaviors in the essay were done for negative reasons (e.g., guilt). Participants rated these questions on a scale from 1 to 9 (where $1 = not \ very \ likely$ and $9 = very \ likely$). The four questions were summed to create a pessimistic evaluation variable ($\alpha = .74$).

Coding of essay. Essays were divided by gender and given to coders that were the same gender as the participant. Hence, there was a female coding team (two coders) for the female participants and a male coding team (two coders) for the male participants. This was done to alleviate any gender stereotypes or scripts that may interfere with an objective evaluation. For example, because the men read an essay in which the woman drove home from the party and the woman read an essay in which the man drove home from the party, a gender script may have been violated. First, both teams coded all events in the original essay as positive, negative, or neutral. Next, each statement of the essay was split into fragments. There were a total of 51 fragments and each fragment was coded on three criteria: (a) Was the fragment included in the rewritten essay? (b) If yes, was the fragment reproduced exactly as the original essay? and (c) If not, what was the tone of the new rewritten fragment on a Likert-type scale of 1 to 5 (1 = more negative, 3 = same as original, 5 = more positive). In addition, coders noted whether there were extra statements not in the original essay and the tone of these extra statements, if any. Weighted kappa (Cohen, 1968) was computed to determine interrater reliability for the included variable. This analysis yielded a coefficient of $\kappa w = .85 \ (p < .01)$ for men and $\kappa w = .77 \ (p < .01)$ for women. Disagreements between coders were resolved by a third coder. An intraclass correlation coefficient (ICC,

TABLE 1: Study 1: Regression Analyses Assessing Memory and Interpretation of Statements Controlling for Total Memory

Predictor	Pos. Memory	Neg. Memory	Neut. Memory	Pos. Interpret	Neg. Interpret	Neut. Interpret
Approach goals	15	.08	.10	.12	.05	.20*
Avoidance goals	17*	.19*	.01	27**	04	28**
Avoidance goals: With NA in model		$.19^{\dagger}$		26**		28**
Avoidance goals: With BIS/BAS in model		.26*		27**		32**

NOTE: Pos. = positive; Neg. = negative; Neut. = neutral; NA = negative affect; BIS/BAS = Behavioral Inhibition System/Behavioral Activation System. $^{\dagger}p < .10. *p < .05. **p < .01.$

Shrout & Fleiss, 1979) was computed to determine the interrater reliability for the rewritten fragment variable and yielded a .75 (p < .05) for men and a .70 (p < .05) for women. Ratings for the two coders were averaged to create one score for each variable. The variables created included positive memory, negative memory, neutral memory, tone of positive statements, tone of negative statements, and tone of neutral statements. In addition, the three memory totals (positive, negative, and neutral) were summed to create a "total memory of the essay" variable.

Results

TOTAL MEMORY OF ESSAY

First, we examined participants' total memory or the total number of statements remembered by the participant. A regression analysis showed that approach social goals and avoidance social goals were significantly correlated, F(1, 99) = 4.29, p < .05, $R^2 = .04$, $\beta = .20$, SE = .05, p < .05, and therefore, all regression analyses included both simultaneously as predictors. A multivariate regression including both social goals was regressed on participants' total memory and showed that neither social goal was a significant predictor, F(2, 94) = 1.29, p = ns, $R^2 = .03$, approach, $\beta = -.05$, SE = 1.11, p = ns; avoidance, $\beta = -.14$, SE = .55, p = ns. However, in all further analyses, we still included total memory as an additional predictor in the regression equations to control for individual differences in overall memory.

MEMORY AND REPRODUCING STATEMENTS

Memory and interpretation for positive, negative, and neutral statements were analyzed with multivariate regression (with goals and total memory entered together in one step). For approach social goals, results showed that they predicted reproducing neutral statements more positively, F(3, 92) = 3.28, p < .05, $R^2 = .10$, $\beta = .20$, SE = .05, p < .05. There were no other significant correlations for approach social goals and memory or reproducing of statements. These results show that approach social goals were associated with processing neutral social information with a positive view.

Multivariate regression analysis showed that avoidance social goals were associated with remembering more negative statements, F(3, 91) = 7.98, p < .001, $R^2 = .21$, $\beta = .19$, SE = .17, p = .05, and fewer positive statements, F(3, 91) = $4.04, p < .01, R^2 = .12, \beta = -.17, SE = .07, p < .05$. Avoidance social goals also were significantly associated with reproducing neutral and positive statements less positively, neutral F(3, 92) = 3.28, p < .05, $R^2 = .10$, $\beta = -.28$, SE = .01, p < .01, positive F(3, 89) = 3.22, p < .05, $R^2 = .10$, $\beta = -.27$, SE = .03, p < .01. In short, avoidance social goals influenced the way social information was remembered such that negative information was more salient than positive information. Furthermore, avoidance social goals were associated with processing neutral information negatively, thus showing that avoidance goals also are associated with skewing objectively positive and neutral information to be more negative (see Table 1).

EVALUATION

The actor evaluation questions were examined to determine the influence of social goals on pessimism/negativity in evaluation. A regression analysis including both approach and avoidance social goals, F(2, 98) = 2.09, p < .13, $R^2 = .04$, showed that approach social goals did not significantly predict a pessimistic evaluation ($\beta = .07$, SE = .20, p = ns), whereas avoidance social goals significantly predicted a more pessimistic evaluation of the actors in the essay ($\beta = .20$, SE = .10, p < .05).

MOOD

Because a possible alternative explanation may be that mood influenced the memory and interpretation results, positive affect (PA) and negative affect (NA) were evaluated as predictors and as covariates for the avoidant social goal results. First, two separate regression analyses were performed (one for PA and one for NA) with both approach and avoidance social goals as simultaneous predictors. The results showed that neither approach social goals nor avoidance social goals were associated with PA, F(2, 98) = 1.09, p = ns, $R^2 = .02$, approach, $\beta = .12$, SE = .07, p = ns, avoidance, $\beta = -.12$, SE = .14, p = ns. The results for NA, F(2, 98) = 3.11, p < .05, $R^2 = .06$, showed no association for approach social goals ($\beta = -.05$, SE = .14, p = ns),

however, avoidance social goals were positively associated with NA ($\beta = .27$, SE = .07, p < .05).

Also, PA and NA were each separately regressed onto all the dependent variables from the previous analyses. The results for PA showed that it was not associated with memory for negative or positive statements, negative, $F(1, 97) = .05, p = ns, R^2 = .001, \beta = -.02, SE = .28, p = ns;$ positive, F(1, 97) = .11, p = ns, $R^2 = .001$, $\beta = .03$, SE = .47, p = ns, or reproducing neutral and positive statements less positively, neutral, F(1, 98) = .17, p = ns, $R^2 = .002$, $\beta = .04$, SE = .02, p = ns; positive, F(1, 95) = 1.05, p = ns, $R^2 = .01$, $\beta = -.11$, SE = .04, p = ns. Similarly, the results for NA showed that it was not associated with memory for negative or positive statements, negative, F(1, 97) =.12, p = ns, $R^2 = .001$, $\beta = .03$, SE = .27, p = ns; positive, $F(1, 97) = .94, p = ns, R^2 = .01, \beta = -.10, SE = .45, p = ns,$ or reproducing neutral and positive statements less positively, neutral, F(1, 98) = .02, p = ns, $R^2 = .00$, $\beta = -.01$, SE = .02, p = ns; positive, F(1, 95) = .07, p = ns, $R^2 = .04$, $\beta = .03$, SE = .04, p = ns.

Due to the significant correlation between avoidance social goals and NA, analyses for avoidance social goals were redone including NA as an additional predictor. First, for the memory of negative statements, when NA was included, F(4, 90) = 5.93, p < .001, $R^2 = .21$, the beta coefficient remained the same (.19), although the significance reduced slightly (from p = .05 to p = .08), $\beta =$.19, SE = .17, p = .08. In addition, when NA was added to the regression equation for reproducing neutral and positive statements less positively, the results remained significant, neutral, F(4, 91) = 2.78, p < .05, $R^2 = .11$, $\beta = -.28$, SE = .01, p < .01; positive, F(4, 88) = 2.66, p < .01.05, $R^2 = .11$, $\beta = -.26$, SE = .03, p < .01. Furthermore, avoidance social goals remained associated (although now marginally significant) with a pessimistic evaluation of the essay when NA was included, F(3, 97) = 1.52, p < .21, $R^2 = .05$, $\beta = .18$, SE = .10, p < .10. Overall, mood was not a good predictor of the social processing variables examined and could not explain the association between avoidance social goals and memory, interpretation, and pessimistic evaluation.

GENERAL MOTIVATION

General approach/avoidance motivation (BIS/BAS) also was examined to determine if the results were a function of general approach and avoidance motivation dispositions rather than social goals, per se. Regression analyses, including BIS, BAS, and total memory (except when regressed on evaluation), entered in one step showed that neither BIS nor BAS were significantly associated with memory, reproduction of essay, or pessimistic evaluation (all ps > .19). However, there was one exception such that BIS significantly predicted a more pessimistic evaluation of the actors in the essay, F(2, 98) = 1.99, p < .05, $R^2 = .04$, $\beta =$.20, SE = .27, p < .05.

BIS and BAS also were added as additional predictors to the avoidance social goals and memory, reproduction, and evaluation regression analyses. A regression analysis with approach and avoidance social goals, total memory, BIS, and BAS entered all in one step showed that the association between avoidance social goals and memory for negative statements, F(5, 89) = 5.29, p <.001, $R^2 = .23$, $\beta = .26$, SE = .18, p < .05, reproducing neutral statements less positively, F(5, 90) = 2.62, p < .05, $R^2 = .13$, $\beta = -.32$, SE = .02, p < .01, and for reproducing positive statements less positively, F(5, 87) = 1.91, p < .10, $R^2 = .04$, $\beta = -.27$, SE = .03, p < .01, all remained significant. Overall, BIS and BAS were unrelated to memory and reproducing statements, thus showing that social goals are more proximal predictors of social information processing than general motivational dispositions.

GENDER

Gender also was evaluated as a predictor and a covariate for the avoidant social goals results. First, independent sample t tests showed that gender was not a significant predictor of approach social goals; however, it marginally predicted avoidance social goals, t(99) = 1.89, p < .10, such that women were higher in avoidance social goals than men (women: M = 5.53, SE =.13; men: M = 5.12, SE = .17). In addition, t tests showed that gender was not associated with memory for negative statements, t(97) = .43, p = ns; however, gender was significantly associated with memory for positive statements, t(97) = 6.02, p < .01, such that men remembered more positive statements than did women (men: M =10.72, SE = .54; women: M = 7.21, SE = .30). To test whether men remembered more of the essay than did women, a t test was performed with total memory as the outcome and found no difference, t(95) = .49, p = ns. Gender was not associated with reproducing positive or neutral statements less positively or with a more pessimistic evaluation (ps > .32).

Gender also was controlled in the regression analyses evaluating avoidant social goals and reproducing neutral and positive statements and showed that when gender was added to the equation, the interpretation results remained significant: neutral, F(4, 89) = 3.49, p < .01, $R^2 =$.13, $\beta = -.34$, SE = .01, p < .01; positive, F(4, 88) = 2.45, $p < .05, R^2 = .10, \beta = -.25, SE = .03, p < .01.$ In addition, when gender was added to the regression analyses evaluating avoidance social goals and memory of negative and positive statements, the results for negative statements remained significant, F(4, 90) = 6.21, p < .001, $R^2 = .22$, $\beta = .22$, SE = .17, p < .05; however, the results for positive statements reduced to nonsignificance, F(4, 90) = 17.14, p < .001, $R^2 = .43$, $\beta = -.02$, SE = .24, p = ns. Gender also

was added in the analysis for pessimistic evaluation and avoidance social goals, and the results were reduced to marginally significant, F(3, 97) = 1.42, p = ns, $R^2 = .04$, $\beta = .19$, SE = .10, p = .06. Overall, gender was not a significant and consistent contributor to the results for negative memory, reproducing statements, or pessimistic evaluation; however, gender was relevant to the negative correlation between avoidance social goals and memory of positive statements.^{2,3}

Discussion

Study 1 showed that avoidance social goals were associated with more memory of negative information and less memory of positive information, negative biases in interpretation, and pessimistic evaluation of social events. Approach social goals were correlated only with interpreting neutral events positively, indicating that approach social goals played only a small role in processing social information about a third party. The results of this study suggest that stronger avoidance social goals were related to processing relatively ambiguous and typical social events with a negative valence. To further examine the social processing associated with avoidance social goals, Study 2 experimentally manipulated social goal orientation and used a more active social situation involving an anticipated meeting of a stranger. However, social goal manipulation may be difficult because people are likely to have strong social goals and motives of their own. Thus, it may be easier to induce avoidance social goals in someone who is high in dispositional avoidance motivation than in someone who is low on this motive. However, because Study 1 examined general motivational tendencies (e.g., BIS/BAS) and found that they were not influential for social processing, Study 2 focused on domain-specific motivation. Thus, in Study 2, we assessed dispositional social avoidance motivation (i.e., fear of rejection) and examined its interaction with the manipulated goal condition.

STUDY 2

The procedure for Study 2 included two conditions: approach and avoidance social goal manipulation. It was predicted that participants in the avoidance condition would remember more negative words describing another participant with whom they anticipated interacting and evaluate this other participant more negatively. Furthermore, we expected that dispositional social motivation would interact with the social goal manipulation such that the negative memory and evaluation would be greatest for participants high in dispositional social avoidance motivation and in the avoidance social goal condition.

Method

PARTICIPANTS

Eighty-nine (68 women, 21 men) undergraduate participants completed this study and were given course credit for their introductory psychology course in exchange for their participation. Participants were of diverse ethnicity (39 Asian or Pacific Islander, 2 Black, 11 Hispanic, 30 White, 7 Other), which reflected, approximately, the ethnic composition of the university community. Fifty-three percent identified as not being in a romantic relationship, 11% were in a casual dating relationship, and 35% were in an exclusive romantic relationship. The average length of exclusive relationships was 14.8 months.

PROCEDURE

Participants were told that this study was about first impressions and how motivation is involved in getting to know someone. They were told that they would be meeting another student later on in the study and having a conversation with him or her but first they will write a brief self-description and exchange this description with the person they would meet. Participants were told that because we are studying motivation and first impressions, we would like to give them a goal to keep in mind throughout the study. Participants were randomly assigned to either the approach or avoidance condition. Experimenters read participants goals from the script. The approach group was instructed to "have a good time, show their good qualities, and make a good impression," whereas the avoidance group was instructed to "not have a bad time, not show their bad qualities, and not make a bad impression." In other words, the approach group was given a goal directed toward obtaining rewards in the social situation and the avoidance group was given a goal directed away from receiving social punishments. Participants were reminded of their appropriate set of goals three additional times during the study and were asked to repeat the goals back to the experimenter each time. If the participant repeated the goal incorrectly, they were asked to repeat it again until it was correct.

Participants were then asked to describe themselves by circling words from a list of adjectives and writing a brief self-description. These questionnaires were then ostensibly given to the "other participant" and participants were given the other participant's adjective list and self-description. Every participant received the same adjective list and self-description. The adjectives circled by the other participant were social, domineering, lively, anxious, impatient, extraverted, articulate, aggressive, selfish, and outspoken. Ten words (including five negative words) were circled to prevent the participant from remembering all of the words. The other participant's

self-description was purposely created to be gender neutral and all participants read the following description:

I am a third-year student at UCLA and I'm originally from Los Angeles. I'm usually very outgoing but can be shy when first meeting someone. I enjoy going out with friends and going to movies. I mostly like to hang out with people who enjoy the same stuff as me. I like being outdoors and going on hikes through the mountains around my house. I also like going to the basketball games and enjoy reading. I live pretty far away so the traffic prevents me from socializing a lot. I look forward to graduating and moving out of Los Angeles.

Participants read the adjective list and self-description of the other participant and then these materials were taken away and the participant was asked to list from memory the adjectives that were circled on the other participant's adjective list. Next, participants were asked to write a short note "about what you think of this person." Participants were told that the other participant would see this note and write a note about the participant as well. The experimenter then evaluated the participant for possible suspicion regarding the ostensible other participant and the materials. Participants were thoroughly debriefed and told that there would not be an interaction with another person.

MEASURES

Fear of rejection and hope for affiliation. Individual differences in approach and avoidance social motivation were measured with two methods. A semiprojective measure called the Multi-Motive Grid (MMG) technique developed by Schmalt (1999) was used to measure fear of rejection and hope for affiliation. The MMG contains 14 TAT-type ambiguous pictures followed by a series of statements about the picture used to measure hAff and fRej. Participants indicated whether the statement describes the way they would think or feel in the situation depicted in the picture. Previous research has established good internal and test-retest reliability of the MMG and provided evidence of external validity (Sokolowski, Schmalt, Langens, & Puca, 2000). Example statements are, "Feeling good about meeting other people" and "Being afraid of being rejected by others." Twelve statements comprise the hAff scale and 12 statements comprise the fRej scale. In the present study, alpha was .80 for the hAff scale and .80 for the fRej scale.

Approach and avoidance social motivation also was measured with traditional self-report measures. Approach social motivation was measured with Jackson's (1974) Need for Affiliation scale, which has 16 statements with a true-false response style. An example statement is, "I choose hobbies that I can share with other people." Higher scores indicate more hope for affiliation, and

reliability of the Need for Affiliation scale in the present study was beta = .82. Avoidance social motivation was measured with Mehrabian's (1976) Fear of Rejection Scale. This scale contains 25 items and uses a 1 to 7 response scale. The reliability for this scale was β = .84 in the present study. An example statement is, "I would be very hurt if a close friend contradicted me in public." Higher scores indicated more fear of rejection.

A principal component analysis including the hope for affiliation and fear of rejection subscales from the MMG, the self-report need for affiliation scale, and the self-report fear of rejection scale was performed with a Varimax rotation. Two components were extracted. Component 1 included the MMG fear of rejection and Mehrabian's fear of rejection scale with factor loadings of .82 and .83, respectively. Component 2 included the MMG hope for affiliation scale and Jackson's need for affiliation scale with factor loadings of .77 and .74, respectively. Therefore, two composite scales were created by first standardizing all four scales and then summing the means of the two fear of rejection scales to create an avoidance motivation composite and then summing the means of the two hope for affiliation scales to create an approach motivation composite.

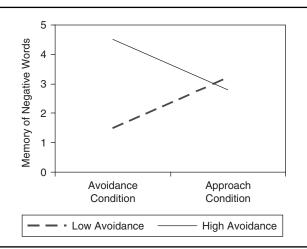
CODING METHOD FOR NOTE

Two coders (one man and one woman) blind to the condition of the participant each coded the 89 notes. Coders counted how many times participants mentioned something they currently disliked or thought they would dislike about the other participant. For example, one participant stated, "It sounds like you can be mean sometimes" and another participant stated, "We are almost complete opposites and this person is not someone I would normally interact with." The first statement would be coded as one dislike and the second statement coded as two dislikes. Coders agreed 100% of the time. Overall, 15% of participants reported one dislike, 3% reported two dislikes, and 7% reported three or more dislikes.

Results

MEMORY OF NEGATIVE WORDS

To examine the association between manipulated condition and approach and avoidance disposition on memory of negative words, hierarchical regression analyses were performed. The first step included the main effects for the condition, the centered approach and avoidance motive composites, and total memory of the word list; the second step included both two-way interactions—the centered approach composite and condition—and the centered avoidance composite and condition; and the third step included the three-way interaction between the two motive composites and condition.



Study 2: The interaction between dispositional avoidance motivation and manipulated condition on memory of negative words from "other participant's" self-description.

The results of the first step, F(4, 84) = 17.11, p < .001, $R^2 = .45$, showed a main effect for total memory, $\beta = .67$, SE = .05, p < .01. There were no main effects for condition or the approach and avoidance composites. The second step, F(6, 82) = 12.58, p < .001, $R^2 = .48$, showed a significant interaction between the avoidance composite and condition, $\beta = -.23$, SE = .16, p < .05, such that in the avoidance social goals condition, participants high on dispositional avoidance remembered more negative words, whereas participants low on dispositional avoidance remembered fewer negative words (see Figure 1). There was no interaction for the approach composite. The third step, F(7, 81) = 11.18, p < .001, $R^2 = .49$, showed the three-way interaction to be nonsignificant; however, the interaction between the avoidance composite and condition remained significant, $\beta = -.22$, SE = .15, p = .05. The simple effects of the avoidance condition showed that the high dispositional avoidance slope was marginally significantly different from the low dispositional avoidance slope, F(3, 43) = 18.84, p < .001, $R^2 =$.57, $\beta = .16$, SE = .10, p = .10. When gender also was added to Step 1 of the regression equation, the results showed no significant main effect for gender and the interaction between avoidance composite and condition remained significant in the third step, F(8, 80) = 9.70, p < .001, $R^2 = .49$, $\beta = -.23$, SE = .16, p < .05.

EVALUATION OF OTHER PARTICIPANT

The same hierarchical regression analysis was performed (without total memory) to examine the note written to the other participant, which was coded for number of ideas expressing dislike as a proxy for evaluation of the other participant. The first step showed a main effect of condition on expressing dislike, F(3, 85) =1.45, p = ns, $R^2 = .05$, $\beta = -.22$, SE = .12, p = .05, such that participants wrote more ideas of dislike when in the avoidance condition than in the approach condition. There were no significant two-way or three-way interactions; however, this main effect of condition remained significant when controlling for two-way and three-way interactions in Step 2 and Step 3 of the regression equation. When gender also was added to Step 1 of the equation, the main effect of condition remained significant, F(4, 84) = 1.44, p < .10, $R^2 = .10$, $\beta = -.22$, SE = .12, p < .05, and again, there were no significant interactions between the avoidance composite or approach composite and condition for expression of dislike.

CONDITION AND DISPOSITION INCONGRUENCY

While performing the experiment, we noted some difficulty on the part of the participants when repeating their randomly assigned goals back to the experimenter. To further examine this, experimenters noted whether the participants changed the goal when repeating it (e.g., participants given avoidance social goals changing them to approach goals). Descriptive analyses showed that 18 of the 89 participants changed the goal when asked to repeat their goals. To evaluate the influence of dispositional motivation on changing the given goal, we used a bivariate logistic regression analysis with "changing of the goal" as the criterion and dispositional avoidance motivation and dispositional approach motivation as the predictors. Each predictor was run in a separate model. For avoidance motivation, the overall model test was marginally significant, $\chi^2(1) = 3.54$, N = 89, p < .10, indicating good model fit. The parameter estimate (b) for avoidance motivation was -.53 (SE = .29, Wald = 3.28, p = .06). The resulting odds ratio was .59 (95% CI, .34 to 1.04). The results showed a significant interaction for participants high in dispositional avoidance. Regression analyses of the simple effects showed that for participants in the avoidance condition, avoidance motivation was negatively associated with changing goal, $F(2, 44) = 1.59, p = ns, R^2 = .07, \beta = -.26, SE = .05, p < .10.$ In the approach condition, avoidance motivation was positively associated with changing goal; however, this effect was not statistically significant^{5,6} (see Figure 2).

Discussion

The purpose of Study 2 was to examine the interaction between dispositional social motivation and manipulated social goals and their influence on memory and evaluation of social information. When participants high in dispositional avoidance motivation were given avoidance social goals, they remembered more negative descriptors of their interaction partner, whereas participants low in dispositional avoidance remembered fewer negative words. Moreover, participants given avoidance social goals expressed more dislike for the other participant

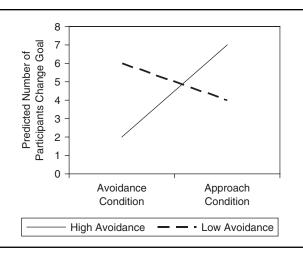


Figure 2 Study 2: Number of participants that changed their randomly assigned goals as a function of their dispositional motivation and condition.

even though they believed that the other participant was going to be aware of their opinions. Of interest, we found an interaction between dispositional avoidance motivation and condition for memory of negative words. However, the condition effect held when controlling for the two-way and three-way interactions, and this shows that the manipulated condition affected expression of dislike regardless of the dispositional strength of social avoidance motivation. In addition, similar to Study 1, results also found that approach social motives and goals did not play a large role in the type of social processing targeted in these studies. Overall, the results of Study 2 further suggest an association between avoidance social motives and goals and interpreting social stimuli with a negative valence.

An additional result emerged that suggests that social goals may be somewhat challenging to manipulate in the short term. When participants were given a social goal that was not congruent with their dispositional social motivation, they were more likely to change the goal when repeating it back to the experimenter. This suggests that it may be more difficult to manipulate social goals than, for example, achievement goals (Elliot & Harackiewicz, 1996) and that dispositional motives may interact with short-term goals to be influential in novel social situations (e.g., meeting a stranger).

GENERAL DISCUSSION

Avoidance Social Motive and Goals

Gable (2006) found that avoidance social goals were linked to outcomes such as loneliness and anxiety about existing social relationships. The current studies

explored some of the possible mechanisms linking avoidance goals and poor social outcomes and found that avoidance social motives and goals affected memory for and interpretation and evaluation of general or ambiguous social stimuli. Specifically, Study 1 showed that avoidance social motives and goals were associated with remembering more negative events and fewer positive events, interpreting positive and neutral events with a negative tone, and evaluating others pessimistically. Furthermore, Study 2 found an interaction between dispositional approach and avoidance social motives and experimentally manipulated goals. Individuals high in avoidance social motivation remembered more negative information and expressed more dislike for a stranger in the avoidance condition than in the approach condition. In short, avoidance social motives and goals were associated with interpreting relatively mundane and ambiguous social stimuli through a negative lens, starting with memory for basic facts about the interaction and continuing with the evaluation of the people involved in these scenarios.

From the present research, it is not known if avoidance social goals lead people to attend differentially to information in the environment, that is, do people with strong avoidance goals notice negative or threatening information more readily than those with weak avoidance goals (i.e., is this an encoding process), or do people with differing goal strengths have a bias in how they recall information (i.e., is this a retrieval process)? Previous research outside of the social domain points to the former explanation. For example, several studies have shown that high trait anxiety (which is closely linked to avoidance motivation, Gable et al., 2003) is associated with increased attention to threatening cues (e.g., Mathews & Macleod, 1994), and other work (e.g., Derryberry & Reed, 1994) has linked both approach and avoidance motivation to attention to positive incentives and punishments, respectively. In addition, the relatively brief time between initial exposure to the essay and recall also suggests that what we are tapping here is an encoding process rather than a bias in retrieval. However, the differences in interpretation seem to be more associated with a retrieval process because new information was added. Although previous research certainly suggests differences in attention, the current set of studies could not disentangle this question and, thus, future research is needed.

Regardless of whether differences in memory stem from encoding, and differences in interpretation stem from retrieval, they both may still underlie expectations that are carried into future interactions with the relationship partner or into similar social contexts. For example, many studies have shown that individuals show a confirmation bias (e.g., Devine, Hirt, & Gehrke, 1990;

Evett, Devine, Hirt, & Price, 1994, Zuckerman, Knee, Hodgins, & Miyake, 1995). In this regard, avoidance social goals may be associated with seeking out information that is consistent with a negatively biased perception and changing inconsistent information by reproducing positive and neutral information with a negative valence.

Moreover, there is extensive research showing that people's expectations may influence the cognition and behavior of others, such as work on self-fulfilling prophecy (Snyder, Tanke, & Berscheid, 1977). Avoidance goals may influence social interactions through similar processes, such that expecting negative outcomes also may influence the behavior of others and the social interaction itself, as work by Downey and colleagues has shown (Downey, Freitas, Michaelis, & Khouri, 1998). This could explain why rejectionsensitive individuals are judged less positively by others (Mehrabian & Ksionzky, 1974; Russell & Mehrabian, 1978). In other words, negative perceptions of the social environment may actually create a hostile social environment. There also is evidence that other interaction goals may moderate these processes. For example, research has shown that when motivated to form an accurate impression, perceivers avoided creating self-fulfilling prophecies by engaging in effortful information-gathering behaviors. Specifically, the accuracy goal allowed the target to behave in a "true fashion" (Biesanz, Neuberg, Judice, & Smith, 1999; Neuberg, 1989).

In short, memory and interpretation are important in social interactions because, as Neuberg (1996) summarized, expectancy-confirmation processes can bias future interactions in the way information is gathered from the target, behavior toward the target, interpretation of ambiguous signals, and through behavior elicited from the target. Of course, the present studies focused only on a single social (and largely hypothetical) social interaction. Future research is needed to determine whether avoidance social goals lead to negative expectancies and self-fulfilling prophecies in ongoing interactions via negatively biased memory of previous interactions.

However, negative biases also may have served as protection from possible future rejection, particularly in Study 2. Participants with avoidance goals believe that rejection is possible and want to distance themselves from that outcome. This may include distancing themselves from a relationship with the other participant. Similar to the way romantic partners only allow themselves to become attached when they believe their partner is committed (Murray, Holmes, & Griffin, 2000; Murray, Holmes, Griffin, Bellavia, & Rose, 2001), participants may have viewed the other participant negatively so that any rejection would not hurt as much.

Approach Social Motive and Goals

Why did approach social goals play such a small role in memory and interpretation of social information? Previous research has shown that approach motivation is associated with outcomes, such that those with strong approach social goals report less loneliness, more satisfaction with their social ties, and higher subjective wellbeing (Elliot et al., 2006; Gable, 2006). However, Gable (2006) has suggested (and found evidence) that one mechanism linking approach goals and outcomes is a "differential exposure" process such that people with stronger approach motivation experience more social positive events but do not react more strongly when positive events occur—an idea consistent with earlier work in general approach motivation (Gable et al., 2000). The current experimental paradigm constrained participants from creating positive social events in a manner parallel to exposure processes found in other naturalistic studies. However, the results from Study 1 indicated that approach social goals were associated with reproducing neutral statements more positively. This is similar to a finding by Gomez and Gomez (2002) such that approach motivation (BAS) was associated with positively interpreting ambiguous emotional words. Perhaps one mechanism by which people with strong approach social goals engage in more positive events is by seeing potential social rewards in ambiguous stimuli. Future research is needed to explore the exact mechanisms associated with approach social goals and differential exposure to positive events.

Concluding Comments

The current research points to some of the mechanisms that may help explain why avoidance motivation has been shown to be associated with poorer social and emotional outcomes. Individuals who try to avoid social threats, such as rejection, embarrassment, and hostility from others, may be hypersensitive to their occurrence and process the social environment with an emphasis on negative information. Paradoxically, this predisposition likely perpetuates and enhances the need to avoid negative outcomes. However, this is not to say that avoidance goals are not adaptive in some situations. Rather, it is likely that what could be maladaptive is a chronic tendency to adopt avoidance goals or a tendency to adopt avoidance goals in situations with low threat. The current studies gave all participants the same stimuli from which to draw an evaluation of another person, and these stimuli were intended to be ambiguous, mundane, and typical of social situations. Adopting avoidance goals in threat-rich situations (e.g., when dealing with a hostile boss) and approach goals in reward-rich situations (e.g., when meeting a potential romantic partner for the first time) is likely to be the most adaptive and beneficial for the individual. Future research may benefit from exploring whether some individuals are more or less capable of adopting different social goals and if this flexibility contributes to social functioning.

Although it is likely that approach and avoidance goals are linked to social outcomes through several mediating processes, the current studies suggest that avoidance social motives and goals affect memory for and interpretation of social information. Moreover, this work adds to the literature suggesting that the approach and avoidance distinction is important in social motivation. Not only does the content of goals (e.g., achievement, social) influence how people notice, remember, and interpret the social environment but the manner in which these motives and goals are framed—avoiding threats or approaching rewards—also matters.

NOTES

- 1. Due to the diversity of the population, differences in approach and avoidance social goals by ethnicity, specifically Asian and Caucasian, were examined. Independent t tests found identifying as Asian versus the other groups was not correlated with approach or avoidance social goals. Similarly, identifying as Caucasian versus the other groups also was not correlated with goals (ps > .45).
- 2. To examine a possible interaction between avoidance social goals and gender for these outcomes, hierarchical regression analyses were performed. The first step included the main effects for approach and avoidance social goals, gender, and total memory. The second step included the two-way interaction between avoidant social goals and gender. The results showed no significant interaction between gender and avoidance social goals for memory, reproducing statements, or pessimistic evaluation (ps > .21).
- 3. Because the essay was about a romantic couple, relationship status (exclusive/casual vs. not in a relationship) also was evaluated as a predictor and covariate for these results. Independent sample t tests showed that relationship status was not associated with memory for negative statements, t(97) = 1.56, p = ns, memory for positive statements, t(97) = -.02, p = ns, or total memory of the essay, t(97) = .65, p = ns. Relationship status also was not associated with reproducing positive or neutral statements less positively or with a more pessimistic evaluation (ps > .54). In addition, relationship status was added as a predictor in the regression analyses evaluating avoidant social goals and memory, reproducing of statements, and pessimistic evaluation, and all results remained significant. Independent sample t tests also showed that relationship status did not significantly predict differences for approach and avoidance social goals (ps > .15).
- 4. One hundred and eleven participants completed the study. Because the procedure included deception, participants were evaluated for suspicion before debriefing. Participants who thought there was not another person in the study (e.g., did not believe the cover story) were considered suspicious. Twenty-two expressed suspicion and were consequently removed from analyses. The 22 suspicious participants were compared to the remaining 89 nonsuspicious participants on demographic variables and showed no differences.
- 5. If a participant changed the goal, the experimenter corrected the participant to put them into their condition. The memory results were rerun with these 18 participants removed and the interaction between the avoidance composite and condition was marginally significant in the second step, F(6, 64) = 14.76, p < .001, $R^2 = .58$, $\beta = -.18$, SE = .18, p < .10, and nonsignificant in the third step, $F(7, 63) = 13.25, p < .001, R^2 = .60, \beta = -.15, SE = .16, p = .15.$ The effect of condition on the evaluation of the note also was examined and showed a marginally significant main effect of condition, F(3, 67) =1.07, p = ns, $R^2 = .05$, $\beta = -.23$, SE = .13, p < .10.

6. Because relationship status may influence perceptions of meeting a stranger, relationship status was examined through the same process as in Study 1 (see Note 3). Independent sample t tests showed that relationship status was not associated with memory for negative words, t(86) = -.80, p = ns, or expression of dislike, t(86) = -.05, p = -.05ns. In addition, when relationship status was added as a predictor in the regression analyses evaluating memory and evaluation, both results remained significant. Independent sample t tests also showed that relationship status was not significantly associated with the approach and avoidance motivation composites (ps > .46).

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