

---

# Approach and Avoidance Motivation in the Social Domain

Andrew J. Elliot  
University of Rochester

Shelly L. Gable  
University of California—Los Angeles

Rachael R. Mapes  
University of Rochester

---

*This research put Gable's (in press) hierarchical model of approach-avoidance social motivation to empirical test using newly developed measures of friendship-approach and avoidance goals. The results from Study 1 supported the psychometric soundness of the new goal measures and showed the anticipated differential predictive patterns for the two goals. The results from Study 2 provided further evidence of the psychometric soundness of the new goal measures and provided support for the full hierarchical model in longitudinal analyses of subjective well-being and physical symptomatology. Implications of the present research for understanding motivation both within and beyond the social domain are discussed.*

---

**Keywords:** social; motivation; relationships; approach-avoidance; goals

**M**otivation is commonly defined as the “energization” and “direction” of behavior (Cofer & Appley, 1964; Heckhausen, 1991), that is, motivated behavior involves both the activation of motives,<sup>1</sup> values, or interests by internal or external cues and the guiding of these activated motives, values, or interests toward potentially satisfying objects, outcomes, or end states. Most models of motivation focus on one or the other of these basic components of motivation—either energization or direction.

In recent years, we (Elliot, 1997; Elliot & Church, 1997) have developed a hierarchical model of approach-avoidance motivation that seeks to account for both the energization and direction of behavior within the same conceptual framework. Initial work on the model focused on the domain of achievement motivation, and most extant research has been conducted within this

domain. However, the model also has been shown to be applicable across domains (Elliot & Sheldon, 1998; Elliot, Sheldon, & Church, 1997) and, most recently, it has been applied to the domain of social motivation (Gable, in press; Gable & Strachman, in press). The purpose of the present research is to put Gable's (in press) hierarchical model of approach-avoidance social motivation to empirical test using newly developed measures of friendship-approach and avoidance goals.

## *The Hierarchical Model of Approach-Avoidance Motivation*

The hierarchical model of approach-avoidance motivation is grounded in the basic premise that the specific goals that individuals pursue in their daily lives often emerge from their general, dispositional preferences and tendencies such as their motive dispositions (McDougall, 1908; Murray, 1938). In the model, motives are conceptualized as general, affectively based motivational tendencies that energize and orient behavior. Although these motives provide the impetus for behavior, they do not provide specific guidelines for how the motive that has been activated may be fulfilled. Thus, individuals often adopt more concrete, cognitively based

---

**Authors' Note:** This research was supported by a grant from the William T. Grant Foundation and a Friedrich Wilhelm Bessel Award from the Alexander von Humboldt Foundation to the first author. Thanks are extended to the members of the approach-avoidance motivation research group for their assistance in various aspects of this work. Correspondence should be addressed to Andrew J. Elliot, Department of Clinical and Social Sciences in Psychology, University of Rochester, Rochester, NY 14627; e-mail: andye@prodigal.psych.rochester.edu.

PSPB, Vol. 32 No. 3, March 2006 378-391

DOI: 10.1177/0146167205282153

© 2006 by the Society for Personality and Social Psychology, Inc.

goals that help direct behavior toward or away from specific motive-relevant possibilities. Accordingly, motives and goals work in tandem in the motivational process. Motives energize behavior and distally influence outcomes by prompting the adoption of specific goals; goals, in turn, direct behavior and exert a proximal influence on outcomes (Elliot, 1997; Elliot & Church, 1997).

Although motives and goals are central to the hierarchical model, they are not the only focus. Other upper-level constructs such as biologically based temperaments also are viewed as important energizers of behavior<sup>2</sup> (Elliot & Thrash, 2002), and other lower-level constructs such as strategies and plans also are viewed as important directors of behavior (Elliot & Church, 2003). In addition, the model highlights the role of upper-level constructs as distal and lower-level constructs as proximal predictors of outcomes, but it also acknowledges that upper-level constructs sometimes influence outcomes directly without the assistance of lower-level constructs (see Elliot & Sheldon, 1998).

The distinction between approach and avoidance motivation is central to the hierarchical model. Approach motivation entails the energization or direction of behavior with regard to positive stimuli (objects, events, or possibilities), whereas avoidance motivation entails the energization or direction of behavior with regard to negative stimuli (Lewin, 1926). This approach-avoidance distinction has a long and rich history in conceptual analyses of motivation (for reviews, see Elliot, 1999; Higgins, 1997), and it is applicable to constructs at both the upper and lower levels of the hierarchical model.

As noted above, the hierarchical model has primarily been tested within the achievement motivation domain. Achievement motives have been the upper-level construct of central interest in this work, specifically, hope for success (an approach motive) and fear of failure (an avoidance motive). A host of studies have demonstrated that hope for success positively predicts the adoption of approach-based achievement goals, whereas fear of failure positively predicts the adoption of avoidance-based achievement goals (Conroy, 2004; Cury, Da Fonseca, Rufo, & Sarrazin, 2002; Elliot & Church, 1997; Thrash & Elliot, 2002; VandeWalle, 1997). Several studies have additionally documented achievement motives as distal and achievement goals as proximal predictors of an assortment of outcomes. Approach goals typically lead to positive outcomes in this research, whereas avoidance goals lead to negative outcomes (Elliot & McGregor, 1999; Halvari & Kjormo, 1999; Tanaka & Yamauchi, 2001). Other work has shown similar patterns with temperaments, rather than motives, as the upper-level construct (Day, Radosevich, & Chasteen, 2003; Elliot &

Thrash, 2002; Heimpel, Wood, & Elliot, in press; see Elliot, 1999, for additional details on the model).

#### *The Hierarchical Model Within the Social Domain*

As noted earlier, Gable (in press) has recently developed a hierarchical model of approach-avoidance social motivation. In the model, approach and avoidance social motives—hope for affiliation and fear of rejection—represent upper-level, affectively based, dispositional constructs that energize appetitive and aversive relational behavior, respectively. Approach and avoidance social goals are lower-level cognitive representations that direct individuals toward potential positive relational outcomes (e.g., trying to deepen one's relationships) or away from potential negative relational outcomes (e.g., trying to avoid conflict in one's relationships), respectively. These goals are flexible forms of regulation that may take on diverse manifestations; they may focus on a specific relationship or relationships in general, they may focus on close relationships or acquaintances, and they may focus on a variety of different relational concerns (see Dowson & McInerney, 2003; Sorkin & Rook, 2004). Hope for affiliation is posited to prompt the adoption of social-approach goals, whereas fear of rejection is posited to prompt the adoption of social-avoidance goals. Social-approach and avoidance goals are posited to have differential predictive utility in that approach goals are hypothesized to primarily lead to positive outcomes, whereas avoidance goals are hypothesized to primarily lead to negative outcomes (for conceptual parallels, see Finch, Okun, Barrera, Zautra, & Reich, 1989; Uchino, Holt-Lunstad, Smith, & Bloor, 2004). Social motives are posited to be distal predictors of outcomes, and social goals are posited to be proximal predictors, although it is acknowledged that social motives can exert a direct influence on outcomes in some instances. Approach and avoidance temperaments (e.g., Behavioral Approach System [BAS] sensitivity and Behavioral Avoidance System [BIS] sensitivity) are also posited as upper-level constructs in the model (Gable, in press; see Gable & Strachman, in press, for additional details on the model).

The hierarchical model of approach-avoidance social motivation is quite new and has just begun to be put to empirical test. Gable (in press) conducted three studies to examine several different aspects of the model. In Study 1, hope for affiliation was shown to be a positive predictor of social-approach goals, whereas fear of rejection was shown to be a positive predictor of social-avoidance goals. Social goals turned out to be somewhat weak predictors of outcomes, most likely because the social goal measures used in the study were limited in several respects (for details, see Gable, in press). In Study 2, BAS sensitivity was shown to be a positive predictor of



social-approach goals, whereas BIS sensitivity was shown to be a positive predictor of social-avoidance goals and social-approach goals. Social-approach goals were found to positively predict social satisfaction and the frequency of positive social events and to negatively predict loneliness; social-avoidance goals were found to positively predict loneliness and the impact of negative social events and, contrary to predictions, to negatively predict social satisfaction and the frequency of positive social events, and to positively predict the impact of negative social events. BIS sensitivity, but not BAS sensitivity, evidenced a direct relationship with a few of the outcome variables. In Study 3, the motive to goal findings of Study 1 were replicated, as were several of the goal to outcome findings of Study 2. The motive to outcome results were mixed because motives had a direct influence on outcomes in some instances but not others. Although the social goal measures used in Studies 2 and 3 produced largely supportive results, they, similar to the measures used in Study 1, proved to be limited in that they were cumbersome to administer (comprising 74 items) and, most important, they yielded an extremely high correlation between the approach and avoidance goal measures ( $r_s = .77$  and  $.78$  in the two studies).

#### *The Present Research*

The present research had three primary aims. The first aim was to develop shorter and more modestly correlated measures of social-approach and avoidance goals that would afford optimal testing of the various aspects of the hierarchical model. More precisely, our aim was to examine a specific type of social goals, namely, friendship goals. Friendships are a central arena in which social motives are channeled into daily goal pursuits and friendship processes are clearly linked to important adaption and well-being outcomes (Hays, 1988; Rook & Sorkin, 2003).

The second aim of our research was to test the links between our new friendship goal measures and important relational outcomes: relationship satisfaction, loneliness, and the frequency and impact of positive and negative relational events. Friendship-approach goals focus on positive possibilities and are thus presumed to be most directly applicable to the presence or absence of positively valenced outcomes, whereas relationship avoidance goals focus on negative possibilities and are thus presumed to be most directly applicable to the presence or absence of negatively valenced outcomes (Gable, in press). The positive focus of friendship-approach goals is posited to evoke appetitive thoughts, feelings, and behaviors in relationships that draw people into more satisfying relationships; the negative focus of friendship-avoidance goals is posited to evoke aversive thoughts, feelings, and behaviors in relationships that

keep others at a distance and produce conflict. Therefore, we hypothesized that friendship-approach goals would be a positive predictor of relationship satisfaction, whereas friendship-avoidance goals would be a positive predictor of loneliness. Loneliness has been conceptualized as both the absence of a positive relational state and the presence of a negative relational state (Perlman & Peplau, 1981), which leads us to expect that friendship-approach goals also may negatively predict loneliness (Gable, in press).

With regard to the frequency of social events, friendship-approach goals are likely to facilitate an appetitive immersion into social situations that helps create positive social interactions, whereas friendship-avoidance goals are likely to produce a wariness and protectiveness in social situations that results in negative social interactions (Gable, in press). As such, friendship-approach goals are hypothesized to be a positive predictor of positive social event frequency, whereas friendship-avoidance goals are hypothesized to be a positive predictor of negative social event frequency. With regard to the impact of social events, prior research has found that negative, relative to positive, events are more salient and potent (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; David, Green, Martin, & Suls, 1997) and that those high in avoidance motivation are particularly reactive to negative events (Gable, Reis, & Elliot, 2000). As such, friendship-avoidance goals are hypothesized to be a positive predictor of the impact of negative social events.

The third aim of our research was to test the full hierarchical model in the context of well-being outcomes, specifically subjective well-being (SWB) and physical symptomatology. Hope for affiliation is posited to orient individuals toward the acquisition of social rewards (Veroff & Veroff, 1980) and to prompt the adoption of specific relational goals directed toward such outcomes; fear of rejection is posited to orient individuals away from social punishments (Mehrabian, 1994) and to prompt the adoption of specific relational goals directed away from such outcomes (Gable, in press). Thus, hope for affiliation is expected to be a positive predictor of friendship-approach goals, whereas fear of rejection is expected to be a positive predictor of friendship-avoidance goals. These goals, in turn, are posited to exert a proximal influence on SWB and physical symptoms. Social connection is widely regarded to be a basic psychological need that individuals require for well-being (Baumeister & Leary, 1995; Deci & Ryan, 2000); thus, the pursuit of friendship goals is likely to have an important impact on well-being (Hays, 1988). Friendship-approach goals are focused on acquiring positive relational possibilities, and this positive focus is presumed to be most directly relevant to SWB, which is primarily positive in nature. Friendship-avoidance goals are focused

on avoiding negative relational possibilities, and this negative focus is presumed to be most directly relevant to physical symptomatology, which is inherently negative in nature. As such, friendship-approach goals are hypothesized to be a positive predictor of SWB, whereas friendship-avoidance goals are hypothesized to be a positive predictor of physical symptoms.

Two studies were conducted in the present research to accomplish the aforementioned aims. The first study pursued the first two aims, whereas the second study pursued the third aim. In Study 1, the friendship-approach and friendship-avoidance goal measures were constructed and their psychometric properties were examined. Friendship goals were tested as predictors of relationship satisfaction, loneliness, and the frequency and impact of positive and negative relational events. Social desirability biases were assessed and controlled for in the analyses. In Study 2, the psychometric properties of the friendship-approach and friendship-avoidance goal measures were examined again. Social motives were tested as predictors of friendship goal adoption, and friendship goals were tested as longitudinal predictors of psychological and physical well-being throughout a 3.5-month period. Several alternative predictor variables were assessed and controlled for in the analyses. The main and interactive effects of gender were examined in both studies. No predictions were made a priori for gender, but given that gender differences sometimes emerge in the domain of social motivation, it was deemed important to test for such possibilities.

## STUDY 1

### Method

#### PARTICIPANTS AND PROCEDURE

One hundred and fifty-seven (41 men, 116 women) undergraduates participated in the study in return for extra course credit. The average age of participants was 19.44 years old, with a range of 17 to 28, and the study was restricted to unmarried individuals. Participants were provided with an envelope containing the questionnaire packet for the study. They completed the questionnaire packet at home and returned it within 1 week.

#### MEASURES<sup>3</sup>

**Friendship goals.** Several pilot studies were conducted prior to the research reported herein. The objective of the pilot work was to devise items that would form brief, but reliable and face valid, indexes of friendship-approach and friendship-avoidance goals. An initial pool of items was drafted on the basis of an extensive reading of the social motivation literature and careful consideration of a large sampling of undergraduates' idiographic social goals. These items were tested and

TABLE 1: Study 1: Descriptive Statistics and Reliabilities

Variable	M	SD	Possible Range	Observed Range	Cronbach's $\alpha$
Friendship-approach goals	22.83	4.55	4-28	4-28	.88
Friendship-avoidance goals	19.78	5.15	4-28	7-28	.75
Relationship satisfaction	18.39	4.31	5-25	5-25	.90
Loneliness	45.20	14.33	20-100	20-80	.95
Frequency of positive relational events	21.88	4.66	0-32	5-31	.73
Frequency of negative relational events	24.70	4.49	0-32	1-28	.80
Impact of positive relational events	0	1	—	-3.51-2.60	—
Impact of negative relational events	0	1	—	-2.09-2.94	—
Social desirability	5.20	3.41	0-20	0-17	.74

NOTE: The impact of positive relational events and the impact of negative relational events represent residualized variables.

revised throughout the series of pilot studies. At the completion of the pilot work, four items were selected to represent each of the two goals in the Relationship Goals Questionnaire: Friendship Version (see Table 2 for items).

In completing the items for this study, participants were instructed to focus on their typical goals for their friendships; thus, each item began with, "I am . . ." (e.g., "I am trying to deepen my relationships with my friends"). Participants responded to the items on a 1 (*not at all true of me*) to 7 (*very true of me*) scale.

**Relationship satisfaction.** The Satisfaction With Social Bonds scale, a relationship-based version of the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), was used to assess relationship satisfaction (e.g., "My social life is close to my ideal"). Participants responded to the five items on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale and responses were summed to form the relationship satisfaction index.

**Loneliness.** The UCLA Loneliness measure (Russell, Peplau, & Cutrona, 1980) was used to assess loneliness (e.g., "How often do you feel isolated from others?"). Participants responded to the 20 items on a 1 (*never*) to 5 (*very often*) scale, and responses were summed to form the loneliness index.

**Frequency and impact of relational events.** Gable's (in press) Social Events Checklist was used to assess the frequency and importance of positive and negative relational events. Eight positive relational events ("I had especially good interactions with friend(s) or



TABLE 2: Studies 1 and 2: Friendship Goal Items and Their Loadings

Friendship Goal Item	Loadings	
	Friendship-approach	Friendship-avoidance
1. Trying to deepen my relationships with my friends.	.90/.85	
2. Trying to move toward growth and development in my friendships.	.85/.86	
3. Trying to enhance the bonding and intimacy in my close relationships.	.82/.75	
4. Trying to share many fun and meaningful experiences with my friends.	.79/.62	
5. Trying to avoid disagreements and conflicts with my friends.		.86/.73
6. Trying to stay away from situations that could harm my friendships.		.83/.84
7. Trying to avoid getting embarrassed, betrayed, or hurt by any of my friends.		.64/.66
8. Trying to make sure that nothing bad happens to my close relationships.		.60/.65

NOTE: The items in Study 1 were set in a general context and were preceded by "I am . . ." The items in Study 2 were set in a semester-long context and were preceded by "I am trying . . ." and followed by ". . . this semester." The first loading for each item is the primary factor loading from the exploratory factor analysis; the second loading for each item is the latent variable loading from the confirmatory factor analysis.

acquaintance(s)") and eight negative relational events ("I felt left out or rejected by a friend or family member") are presented in the measure. Participants report the frequency that the event occurs during an average week (0 = *event does not occur* to 4 = *event occurs often [more than 5 or 6 times]*) and, when it occurs, the extent to which it is important (0 = *not applicable, event does not occur* to 4 = *when event occurs it is extremely important*). Responses to the positive event frequency items were summed to form the positive event frequency index, and responses to the negative event frequency items were summed to form the negative event frequency index. Responses to the positive event importance items were summed and the positive event frequency scores were residualized from this total to form the positive event impact index; a parallel procedure was used with the negatively valenced items to form the negative event impact index.

**Social desirability.** The Impression Management subscale of Paulhus's (1991) Balanced Inventory of Desirable Responding was used to assess social desirability (e.g., "I always obey laws, even if I'm unlikely to get caught"). In the measure, participants rate each item on a 1 (*not true*) to 7 (*very true*) scale and, after reverse-scoring, receive one point for each extreme (6 or 7) response. The 20 items are then summed to form the social desirability index.

### Results and Discussion

#### EXPLORATORY FACTOR ANALYSIS (EFA), RELIABILITIES, MEANS, AND INTERCORRELATION

An EFA was conducted on the eight friendship goal items using principal-components extraction with varimax rotation. The rotated factor pattern matrix revealed two factors with an eigenvalue exceeding unity (a parallel analysis also yielded two factors; see O'Connor, 2000) and the factor solution accounted for 67% of the total variance. Factor 1 accounted for 47.4% of the variance and comprised the four friendship-

approach goal items (eigenvalue = 3.79). The second factor accounted for 19.8% of the variance and consisted of the four friendship-avoidance goal items (eigenvalue = 1.58). Across the two factors, the average primary factor loading was .79 (maximum of .90, minimum of .60) and the average secondary factor loading was .18 (maximum of .43, minimum of -.02). Participants' responses on the items for each factor were summed to form the friendship-approach and friendship-avoidance goal indexes. The Cronbach's alphas for the friendship-approach and friendship-avoidance goal scales were .88 and .75, respectively. Thus, clearly the two goal measures represent empirically separable and internally consistent constructs.

The means were 22.83 and 19.78 for friendship-approach and friendship-avoidance goals, respectively. The Pearson Product Moment correlation between friendship-approach goals and friendship-avoidance goals was .40,  $p < .01$ .

#### FRIENDSHIP GOALS AS PREDICTORS OF RELATIONSHIP OUTCOMES

Simultaneous multiple regression analyses were conducted to examine the friendship goals as predictors of the outcome variables. The main and interactive influences of gender (men = -1, women = +1) also were investigated in all analyses. Two sets of analyses were conducted. The basic regression model used in the first set of analyses was composed of friendship-approach goals, friendship-avoidance goals, gender, and the Friendship Goal  $\times$  Gender interactions. The interaction product terms were constructed using mean deviated main effects (Aiken & West, 1991) and significant interactions were interpreted by generating predicted values from the regression equations (Cohen & Cohen, 1983).

In the second set of analyses, we controlled for social desirability. Specifically, we removed the social desirability variance from the friendship goal measures and each

outcome measure and reran the first set of analyses using these residualized variables.

*Relationship satisfaction.* Regressing relationship satisfaction on the basic model yielded an overall effect for the basic model,  $F(5, 149) = 2.69, p < .05, R^2 = .08$ . Friendship-approach goals were a positive predictor of relationship satisfaction,  $F(1, 149) = 8.21, p < .01 (\beta = .26)$ . No other significant findings were obtained.

*Loneliness.* Regressing loneliness on the basic model yielded an overall effect for the basic model,  $F(5, 149) = 3.31, p < .01, R^2 = .10$ . Friendship-approach goals were a negative predictor of loneliness,  $F(1, 149) = 12.43, p < .01 (\beta = -.32)$ , and friendship-avoidance goals were a marginally significant positive predictor,  $F(1, 149) = 2.82, p < .10 (\beta = .15)$ . No other significant findings were obtained.

*Frequency and impact of relational events.* Regressing positive event frequency on the basic model yielded an overall effect for the basic model,  $F(5, 150) = 4.97, p < .01, R^2 = .14$ . Friendship-approach goals were a positive predictor of the frequency of positive events,  $F(1, 150) = 12.51, p < .01 (\beta = .31)$ . No other significant findings were obtained.

Regressing negative event frequency on the basic model yielded an overall effect for the basic model,  $F(5, 150) = 4.73, p < .01, R^2 = .14$ . Friendship-approach goals were a negative predictor of the frequency of negative events,  $F(1, 150) = 9.15, p < .01 (\beta = -.26)$ , and friendship-avoidance goals were a positive predictor,  $F(1, 150) = 5.19, p < .05 (\beta = .19)$ . Gender also attained significance,  $F(1, 150) = 6.56, p < .05 (\beta = -.22)$ , indicating that men experienced more negative events than did women. The Friendship-Avoidance Goals  $\times$  Gender interaction also attained significance,  $F(1, 150) = 7.38, p < .01 (\beta = -.24)$ ; the predicted values indicated no gender difference at low friendship-avoidance goal adoption ( $\hat{Y}$  for men = 13.86,  $\hat{Y}$  for women = 13.78) but that men ( $\hat{Y} = 16.58$ ) experienced more negative event frequency than did women ( $\hat{Y} = 11.78$ ) at high friendship-avoidance goal adoption. No other significant findings were obtained.

Regressing positive event impact on the basic model yielded no significant findings. Regressing negative event impact on the basic model yielded an overall effect for the basic model,  $F(5, 150) = 3.38, p < .01, R^2 = .10$ . Friendship-avoidance goals were a positive predictor of the impact of negative events,  $F(1, 150) = 7.60, p < .01 (\beta = .24)$ . No other significant findings were obtained.

#### ANALYSES CONTROLLING FOR SOCIAL DESIRABILITY

The analyses were then repeated using the residualized variables that controlled for social desirability. As can be seen in Table 3, these analyses yielded results that were the same as those obtained in the initial

analyses. Thus, the observed results cannot be accounted for by social desirability.

In sum, the factor analytic, reliability, and correlational data all supported the psychometric soundness of the new measures of friendship-approach and friendship-avoidance goals. The goal items loaded as hypothesized on two factors, the two goal measures were internally consistent, and the correlation between the two goals was of moderate magnitude. Results from the regression analyses indicated that friendship-approach goals were a positive predictor of relationship satisfaction and the frequency of positive relational events and were a negative predictor of loneliness and the frequency of negative relational events. Friendship-avoidance goals were a positive predictor of loneliness (marginally), the frequency of negative relational events, and the impact of negative relational events. The results also revealed that men experienced more negative relational events than did women. Nearly all of the results were observed across gender, with the exception that friendship-avoidance goals interacted with gender in predicting negative relational event frequency.

In Study 2, we again investigated the psychometric properties of the friendship goal measures and also put the full hierarchical model to test by examining social motives as predictors of friendship goals, and friendship goals, in turn, as proximal predictors of SWB and physical symptoms. Several alternative predictor variables were assessed and controlled for in testing the hierarchical model: harm avoidance (an aversive affective disposition, conceptually and empirically associated with neuroticism [Stewart, Ebmeier, & Deary, 2005], that could produce a negative response bias [see Watson & Clark, 1984]), self-esteem (a global positive self-evaluation [Baumeister, 1998] that could produce a self-enhancing response bias [see Baumeister, Tice, & Hutton, 1989]), and interdependent self-construal (a view of the self as inextricable from relational others [Singelis, 1994]) that has been linked to both avoidance goal pursuit and low well-being [Elliot, Chirkov, Kim, & Sheldon, 2001; Heine & Lehman, 1999]).

#### STUDY 2

##### Method

##### PARTICIPANTS AND PROCEDURE

Two hundred and fifty-seven (92 men, 165 women) undergraduates participated in the study in return for extra course credit. The average age of participants was 19.48 years old, with a range of 18 to 29, and the study was restricted to unmarried individuals.

The study was conducted in multiple sessions throughout the course of a semester-long period. During the 1st day of the semester, participants completed a



TABLE 3: Study 1: Friendship Goals as Predictors of Relational Outcomes

	Relationship Satisfaction	Loneliness	Freq. of Pos. Relational Events	Freq. of Neg. Relational Events	Imp. of Pos. Relational Events	Imp. of Neg. Relational Events
Friendship-approach goals	.26**/.25**	-.32**/-.31**	.31**/.31**	-.26**/-.26**	.02/.01	-.10/-.09
Friendship-avoidance goals	-.07/-.07	.15†/.14†	-.04/-.05	.19*/.19*	.14/.14	.24**/.24**

NOTE: Freq. = frequency; pos. = positive; neg. = negative; imp. = impact. The tabled values are standardized regression coefficients. Values preceding the slash are from analyses that did not control for social desirability; values following the slash are from analyses that did control for social desirability. All analyses controlled for gender and gender interactions.

† $p \leq .10$ . \* $p < .05$ . \*\* $p < .01$ .

packet containing the harm avoidance questionnaire in a large group session. They then received a questionnaire packet containing the social motive and self-esteem questionnaires and were instructed to complete them at home in 2 days. Participants returned the completed questionnaires 3 days later, at which time they completed the interdependent self-construal measure and the Time 1 (T1) well-being questionnaire in a large group session. At the end of this session, participants were provided with the friendship goals questionnaire, which they completed at home and returned 2 days later. During the last week of the semester, approximately 3.5 months after completing the T1 well-being questionnaire, participants completed the same questionnaire again at Time 2 (T2) in a large group session.

#### MEASURES<sup>a</sup>

**Social motives.** The affiliation subscale of Jackson's (1974) Personality Research Form was used to assess hope for affiliation (e.g., "I go out of my way to meet people"). Participants responded no (0) or yes (1) to each item, and responses to the 16 items were summed to form the hope for affiliation index. Mehrabian's (1994) Sensitivity to Rejection measure was used to assess fear of rejection (e.g., "I am very sensitive to any signs that a person might not want to talk to me"). Participants responded to each of the 24 items on a 1 (*very strong disagreement*) to 7 (*very strong agreement*) scale and responses were summed to form the fear of rejection index.

**Friendship goals.** The friendship goals scales from Study 1 were used in this study. The focus was on participants' goals for the semester-long period; thus, each item began with, "I will be ..." and ended with "... this semester" (e.g., "I will be trying to deepen my relationships with my friends this semester"). Participants' responses to the items were summed to form the friendship-approach and friendship-avoidance goal indexes.

**SWB.** The SWB index was composed of items that assessed participants' positive affect, negative affect, and life satisfaction "during the past few days." Mackinnon et al.'s (1999) Short Positive and Negative Affect Schedule was used to assess positive affect (e.g., enthusiastic) and negative affect (e.g., distressed). Participants

TABLE 4: Study 2: Descriptive Statistics and Reliabilities

Variable	M	SD	Possible Range	Observed Range	Cronbach's $\alpha$
Hope for affiliation	10.13	3.76	0-16	0-16	.82
Fear of rejection	97.89	15.61	24-168	57-150	.79
Friendship-approach goals	23.25	4.02	4-28	6-28	.85
Friendship-avoidance goals	18.60	5.39	4-28	5-28	.81
T1 SWB	0	2.16	—	-6.43-4.40	.84
T2 SWB	0.02	2.29	—	-7.58-4.73	.88
T1 physical symptoms	30.93	10.80	13-91	13-73	.77
T2 physical symptoms	31.29	11.97	13-91	13-79	.84
Harm avoidance	15.2	7.08	0-35	1-32	.87
Self-esteem	3.45	1.14	1-5	1-5	—
Interdependent self-construal	57.95	7.8	12-84	28-77	.70

NOTE: T1 = Time 1; T2 = Time 2; SWB = subjective well-being. The T1 and T2 SWB measures represent standardized composite variables.

responded to each of the five positive affect and five negative affect items on a 1 (*not at all*) to 7 (*very frequently*) scale. Diener et al.'s (1985) Satisfaction With Life Scale was used to assess life satisfaction (e.g., "I am satisfied with my life"). Participants responded to each of the five items on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. A SWB index was created by individually summing participants' scores for the positive affect, negative affect, and life satisfaction items and then summing the standardized scores for positive affect and life satisfaction and subtracting the standardized score for negative affect.

**Physical symptomatology.** Elliot and Sheldon's (1998) 13-item Physical Symptoms Scale was used to assess participants' physical symptoms during the "past few days." This measure draws from a number of other brief symptom inventories (Derogatis & Spencer, 1982; Emmons, 1992; Pennebaker, 1982) and assesses the following symptoms: headaches, coughing/sore throat, shortness of breath, stiff/sore muscles, chest/heart pain, faintness/dizziness, acne/pimples, stomach ache/pain, runny/congested nose, hot or cold spells, nausea or upset stomach, feeling weak in parts of your body, numbness or

tingling in parts of your body. Several of these symptoms have been specifically identified as precursors to serious diseases such as ulcers, heart disease, asthma, and arthritis (Friedman & Booth-Kewley, 1987). Participants responded to each of the items on a 1 (*not at all*) to 7 (*very frequently*) scale and responses were summed to form the physical symptoms index.

*Alternative predictor variables.* Harm avoidance was assessed with the 40-item measure from Cloninger's (1987) Tridimensional Personality Questionnaire. Participants responded on a true (1)/false (0) scale and responses were summed to form the harm avoidance index. Self-esteem was assessed with Robins, Hendin, and Trzesniewski's (2001) Single-Item Self-Esteem Scale. Participants responded on a 1 (*not very true of me*) to 5 (*very true of me*) scale. Singelis's (1994) 12-item Self-Concept Scale was used to assess interdependent self-construal ("My happiness depends on the happiness of those around me"). Participants responded on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale and responses were summed to form the interdependent self-construal index.

### Results and Discussion

#### CONFIRMATORY FACTOR ANALYSIS (CFA), RELIABILITIES, MEANS, INTERCORRELATION, AND ATTRITION

A CFA was conducted on the eight friendship goal items using AMOS 4 (Arbuckle, 1994). The analysis was conducted on the variance-covariance matrix, and the solution was generated on the basis of maximum-likelihood estimation. Following Hoyle and Panter's (1995) recommendation, both absolute (Goodness of Fit Index [GFI], Adjusted Goodness of Fit Index [AGFI]) and incremental (Comparative Fit Index [CFI], Root Mean Square Error of Approximation [RMSEA]) indexes were used to evaluate the fit of the model to the data. The hypothesized model that was tested simply designated that the items for each goal load on their respective latent variables. The results from the analysis supported the hypothesized model,  $\chi^2(19, N = 257) = 43.33$ ,  $p < .01$ , GFI = .96, AGFI = .93, CFI = .97, RMSEA = .071. All latent variable variances and factor loadings were significant, and the average factor loading was .75 (maximum of .85, minimum of .62; see Table 2). The Cronbach's alphas for the friendship-approach and friendship-avoidance goal measures were .88 and .75, respectively.

The means were 23.07 and 18.52 for friendship-approach and friendship-avoidance goals, respectively. The Pearson Product Moment correlation between friendship-approach goals and friendship-avoidance goals was .41,  $p < .01$ .

*t* tests were conducted to determine whether participants who did and did not complete the longitudinal

study systematically differed on any variables. No significant differences were observed.

#### OVERVIEW OF ANTECEDENT AND CONSEQUENCE ANALYSES

Simultaneous multiple regression analyses were conducted to examine the antecedents and well-being consequences of friendship-approach and friendship-avoidance goals. The main and interactive influences of gender (men = -1, women = +1) also were investigated in all analyses. Two basic regression models were utilized: an antecedent model and a consequence model. The antecedent model was composed of hope for affiliation, fear of rejection, gender, and the Social Motive  $\times$  Gender interactions. The consequence model was composed of all of the variables in the antecedent model in addition to friendship-approach goals, friendship-avoidance goals, gender, the Friendship Goal  $\times$  Gender interactions, and the T1 outcome variable. Thus, the antecedent model examined the influence of social motives on friendship goal adoption, whereas the consequence model examined the influence of friendship goal adoption on well-being outcomes with the influence of social motives controlled. The consequence model also may be construed as a test of the effects of social motives on well-being outcomes with friendship goals controlled; this perspective also will be considered in interpreting the results from the consequence analyses. As in Study 1, the interaction product terms were constructed using mean deviated main effects, and significant interactions were interpreted by generating predicted values from the regression equations.

#### ANTECEDENT ANALYSES: SOCIAL MOTIVES AS PREDICTORS OF FRIENDSHIP GOALS

*Friendship-approach goals.* Regressing friendship-approach goals on the antecedent model yielded an overall effect for the basic model,  $F(5, 246) = 8.13$ ,  $p < .01$ ,  $R^2 = .14$ . Need for affiliation was a positive predictor of friendship-approach goals,  $F(1, 246) = 24.35$ ,  $p < .01$  ( $\beta = .30$ ). Gender was also a significant predictor of friendship-approach goals,  $F(1, 246) = 6.11$ ,  $p < .05$  ( $\beta = .15$ ), indicating that women were more likely to adopt these goals than were men. The Need for Affiliation  $\times$  Gender interaction also attained significance,  $F(1, 246) = 5.04$ ,  $p < .05$  ( $\beta = .14$ ); the predicted values indicated no gender difference at low need for affiliation ( $\hat{Y}$  for men = 18.23,  $\hat{Y}$  for women = 18.39) but that women ( $\hat{Y} = 20.15$ ) adopted more friendship-approach goals than did men ( $\hat{Y} = 17.79$ ) at high need for affiliation. No other significant findings were obtained.

*Friendship-avoidance goals.* Regressing friendship-avoidance goals on the antecedent model yielded an overall effect for the basic model,  $F(5, 246) = 5.57$ ,  $p < .01$ ,  $R^2 = .10$ . Fear of rejection was a positive predictor of



**TABLE 5: Study 2: Social Motives as Predictors of Friendship Goals**

	Friendship-approach Goals	Friendship-avoidance Goals
Hope for affiliation	.30**/.29**/.29**/.28**	.09/.06/.09/.03
Fear of rejection	.10/.04/.04/.03	.29**/.28**/.24**/.32**

NOTE: The tabled values are standardized regression coefficients. Values preceding the slash are from the primary analysis; values following the dash are from analyses controlling for harm avoidance, self-esteem, and interdependent self-construal, respectively. All analyses controlled for gender and gender interactions.

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

**TABLE 6: Study 2: Friendship Goals as Predictors of  $\Delta$  Subjective Well-Being and  $\Delta$  Physical Symptoms**

	$\Delta$ Subjective Well-Being	$\Delta$ Physical Symptoms
Friendship-approach goals	.16*/.16*/.18*/.15*	-.04/-.04/-.03/-.04
Friendship-avoidance goals	.02/.02/.02/.01	.14*/.14*/.13*/.13*

NOTE: The tabled values are standardized regression coefficients. Values preceding the slash are from the primary analysis; values following the slash are from analyses controlling for harm avoidance, self-esteem, and interdependent self-construal, respectively. All analyses controlled for gender and gender interactions.

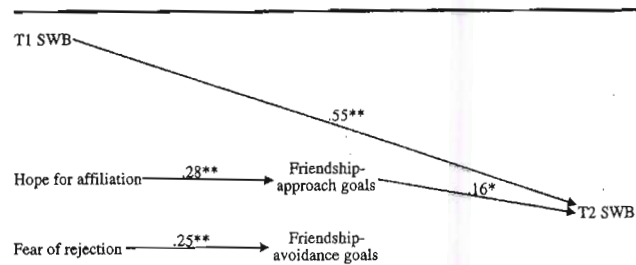
\* $p < .05$ . \*\* $p < .01$ .

friendship-avoidance goals,  $F(1, 246) = 21.21, p < .01$  ( $\beta = .29$ ). No other significant findings were obtained.

**CONSEQUENCE ANALYSES: FRIENDSHIP GOALS AS PREDICTORS OF WELL-BEING OUTCOMES CONTROLLING FOR SOCIAL MOTIVES**

**SWB.** Regressing T2 SWB on the consequence model yielded an overall effect for the basic model,  $F(10, 224) = 13.24, p < .01, R^2 = .37$ . T1 SWB was a positive predictor of T2 SWB,  $F(1, 224) = 79.58, p < .01$  ( $\beta = .52$ ). Friendship-approach goals also were a positive predictor of T2 SWB,  $F(1, 224) = 6.26, p < .05$  ( $\beta = .16$ ).<sup>5</sup> No other significant findings were obtained.

**Physical symptomatology.** Regressing T2 physical symptoms on the consequence model yielded an overall effect for the basic model,  $F(10, 227) = 10.79, p < .01, R^2 = .32$ . T1 physical symptoms was a positive predictor of T2 physical symptoms,  $F(1, 227) = 70.36, p < .01$  ( $\beta = .47$ ). Friendship-avoidance goals also were a positive predictor of T2 physical symptoms,  $F(1, 227) = 4.59, p < .05$  ( $\beta = .14$ ). Gender also was a significant predictor,  $F(1, 227) = 7.54, p < .01$  ( $\beta = .16$ ), indicating that women had a

**Figure 1 Study 2: The full hierarchical model for subjective well-being.**

NOTE: The path values are standardized coefficients from the structural equation modeling analyses. Only theoretically central variables are included in the figure in the interest of presentational clarity. T1 = Time 1; T2 = Time 2; SWB = subjective well-being.

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

greater increase in physical symptoms than did men. No other significant findings were obtained.<sup>6</sup>

**ANALYSES CONTROLLING FOR ALTERNATIVE PREDICTORS**

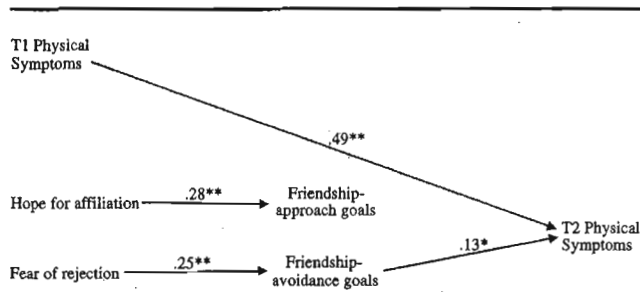
The analyses were then repeated using residualized variables that controlled for harm avoidance, self-esteem, or interdependent self-construal. As can be seen in Tables 5 and 6, these analyses yielded results that were the same as those obtained in the initial analyses. Thus, the observed results cannot be accounted for by any of these alternative predictor variables.

**STRUCTURAL EQUATION MODELING (SEM) ANALYSES  
TESTING THE FULL HIERARCHICAL MODEL**

SEM was used to examine the paths of the antecedent and consequence models simultaneously for each outcome variable and to assess the fit of the full hierarchical model to the observed data. Conceptually peripheral but significant bidirectional relationships among the source variables were incorporated into the model and, following prior research, the measurement errors of the two friendship goal variables were allowed to correlate (see Elliot & Church, 1997). The same procedures used in the CFA reported above were used in these analyses.

**SWB.** In the SWB analysis, the standardized parameter estimates obtained were highly similar to those obtained in the regression analyses, and all significant findings in the regression analyses remained significant in the SEM analysis (see Figure 1). In addition, the analysis revealed that the model provided an acceptable fit to the data,  $\chi^2(11, N = 235) = 22.66, p < .05$ , GFI = .97, AGFI = .93, CFI = .95, RMSEA = .067.

**Physical symptomatology.** Likewise, in the physical symptoms analysis, the standardized parameter estimates obtained were highly similar to those obtained in the regression analyses, and all significant findings in the regression analyses remained significant in the SEM



**Figure 2** Study 2: The full hierarchical model for physical symptoms. NOTE: The path values are standardized coefficients from the structural equation modeling analyses. Only theoretically central variables are included in the figure in the interest of presentational clarity. T1 = Time 1; T2 = Time 2.

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

analysis (see Figure 2). The analysis revealed that the model provided an acceptable fit to the data,  $\chi^2(12, N = 235) = 20.95$ ,  $p = .05$ , GFI = .98, AGFI = .94, CFI = .96, RMSEA = .056.

In sum, the factor analytic, reliability, and correlational data all supported the new measure of friendship-approach and friendship-avoidance goals in the same way that they did in Study 1. Results from the regression and SEM analyses indicated that hope for affiliation was a positive predictor of friendship-approach goals and fear of rejection was a positive predictor of friendship-avoidance goals. Friendship-approach goals, in turn, were a positive predictor of longitudinal change in SWB. Friendship-avoidance goals, in turn, were a positive predictor of longitudinal change in physical symptoms. SEM analyses testing the full hierarchical model yielded supportive results. In addition, the results revealed that women were more likely to adopt friendship-approach goals than were men, and women experienced a greater increase in physical symptoms than did men. The results were observed across gender, with the exception that hope for affiliation interacted with gender in predicting friendship-approach goals.

#### GENERAL DISCUSSION

The present research had three aims, each of which was accomplished in the studies reported herein. The first aim was to develop psychometrically sound measures of approach and avoidance goals in the social domain. Study 1 reported the development of brief, internally consistent, moderately correlated measures of friendship-approach and friendship-avoidance goals, and an exploratory factor analysis supported the two-factor structure of the items. Study 2 provided additional data supportive of the measures, including confirmatory factor analytic data. The development of these new goal measures allowed us to optimally test the hierarchical

model of approach-avoidance motivation in the social domain.

The second aim of the present research was to test a component of the hierarchical model—the link between friendship goals and relational outcomes. The results from Study 1 clearly attested to the differential predictive utility of friendship-approach and friendship-avoidance goals. Friendship-approach goals were a positive predictor of relationship satisfaction and the frequency of positive relational events and were a negative predictor of loneliness and the frequency of negative relational events. Friendship-avoidance goals, on the other hand, were a positive predictor of loneliness, the frequency of negative relational events, and the impact of negative relational events. All of these relationships were observed while controlling for social desirability.

The third aim of the present research was to test the predictive utility of the friendship goal measures with regard to overall well-being and to do so in the context of the full hierarchical model. The results from Study 2 clearly supported both the relevance of friendship goals to overall well-being and the specific predictions generated from the hierarchical model. Hope for affiliation was a positive predictor of friendship-approach goals, whereas fear of rejection was a positive predictor of friendship-avoidance goals. Friendship-approach goals, in turn, were a positive predictor of longitudinal change in SWB, whereas friendship-avoidance goals, in turn, were a positive predictor of longitudinal change in physical symptoms. Social motives had no direct impact on the outcome variables over and above the impact of friendship goals. Thus, the data indicated that social motives exerted a distal influence on well-being by prompting friendship goal adoption, and friendship goals, in turn, exerted a proximal influence on well-being. All of these relationships were observed controlling for harm avoidance, self-esteem, and interdependent self-construal.

The development of friendship-approach and friendship-avoidance goal measures in the present work has implications far beyond the research reported herein. Despite the obvious importance of social goals in self-regulation (Berscheid, 1994; Klinger, 1977), the conceptualization and operationalization of such goals has received minimal scholarly attention (see Fitzsimmons & Bargh, 2003; Sanderson & Cantor, 2001; Urdan & Maehr, 1995). Social goal measures that focus on the approach-avoidance distinction are all but nonexistent (see Gable, in press). The measures developed herein appear to have adequate reliability and validity and are quite economical in that they comprise just four items per scale. Of importance, although the goal items in the present work focused on friendships, by simply replacing the focal target, these goal items may be used more



broadly to focus on a specific friendship, a close relationship, or relationships in general (see Elliot & Church, 1997, and Elliot & McGregor, 1999, for an analog in the achievement domain). It is our hope that the availability of these measures will spur on additional work in the important yet overlooked area of approach-avoidance social motivation in general and approach-avoidance social goals in particular.

A clear and important message emerging from the present research is that friendship-avoidance goals are poor regulators of social behavior because they were linked to negative outcomes both in the social domain and in general. Friendship-avoidance goals focus on a negative possibility, and this negative focus is presumed to evoke a host of processes likely to degrade the quality of social interactions and hamper the development of social bonds. Such processes are undoubtedly broad in scope and likely include perceptual processes (e.g., threat appraisals), attentional processes (e.g., heightened vigilance for negative cues or feedback), mental control processes (e.g., concentration difficulties), memory processes (e.g., biased search for and recall of negative information), emotional processes (e.g., anxiety), and behavioral processes (e.g., avoiding or escaping from social situations). Friendship-approach goals are presumed to evoke a set of processes reciprocal to those delineated above and, therefore, to facilitate social interactions and bonds. Subsequent work linking friendship goals (and social goals more generally) to such processes, and examining the mediational role of such processes, should be high on the future research agenda.

In highlighting the costs of friendship-avoidance goals and the benefits of friendship-approach goals we do not mean to convey that social-approach goals are preferable in any and all instances. On the contrary, there are some social situations in which avoidance may be the optimal form of regulation. For example, pursuit of an avoidance goal such as "avoid getting hurt" may be most sensible when interacting with a person who has shown insensitivity or untrustworthiness in prior encounters. Likewise, in the early stages of mending a broken relationship or working through a painful conflict, an avoidance goal such as "don't do anything upsetting" may be most efficacious. At the same time, it should be noted that social-avoidance goals, by their very nature, can at best serve the protective role of providing the absence of a negative social outcome and cannot provide the presence of a positive social outcome. Thus, although social-avoidance goals may be preferable in some instances or for a short period of time, in general, social-approach goals are optimal in that they enable individuals to acquire the presence of positive social out-

comes that help fulfill their affiliative needs and facilitate their overall well-being.

In the past two decades, goal constructs have become central, if not predominant, explanatory constructs in psychologically oriented models of motivation (Carver & Scheier, 1998; Dweck, 1986; Elliot, *in press*; Kruglanski, 1996; Locke & Latham, 1990; for a review, see Austin & Vancouver, 1996). Although goals certainly deserve an important place in motivational accounts behavior, the hierarchical model highlights the need to attend to additional, upper level constructs that can explain why goals are adopted in the first place. In the present research, we demonstrated that friendship goals emerge from social motives, and research by Gable (*in press*) has shown that social goals also emerge from underlying temperaments. Social motives and temperaments represent affectively based sources of social goals, but social goals likely emerge from other sources as well, such as attachment histories (Mikulincer & Shaver, 2003), rejection sensitivities (Downey, Freitas, Michaleis, & Khouri, 1998), and implicit theories of relationships (Knee, 1998). Additional empirical work is needed to explore these possibilities. Furthermore, Hill (1987) has shown that hope for affiliation may encompass different types of relational desires, such as emotional support and positive stimulation. It would be interesting in future work to examine whether these different aspects of hope for affiliation have a differential influence on social goal adoption, and it also may be fruitful to extend this differentiated analysis of social motivation to the goal level as well (see the achievement goal literature for a parallel [Dweck, 1986]).

In the present research, social motives were shown to exert their influence on outcomes distally through their impact on friendship goal adoption. It is important to highlight, however, that this motive to goal to outcome sequence is not the *only* way in which motives operate. Motives may be activated and serve as direct regulators of behavior without prompting the adoption of lower-level goals (Elliot, McGregor, & Thrash, 2002; McClelland, 1985). Indeed, this direct regulation of behavior is likely the norm early in the developmental process, before infants and young children have experienced the maturation and socialization that enables them to monitor and direct their affectively based propensities in strategic fashion. From the standpoint of the hierarchical model, motives can and often do prompt goal adoption, and when they do, goals serve the role of proximal director of behavior. However, motives also can influence behavior directly, without the aid of goals, and two interesting avenues for future research are (a) to examine the conditions under which motives do and do not prompt goal adoption (see Heckhausen, 1991) and (b) to investigate similarities and differences in the quality of behav-

ior emerging from motives alone versus goals undergirded by motives (see McClelland, Koestner, & Weinberger, 1989).

The results obtained in the present research clearly supported our hypotheses, but it is important to acknowledge that our studies did not directly test the causal nature of the posited relations. Despite controlling for a potential source of bias in Study 1, and both baseline values of the outcome variables and potential sources of bias in Study 2, the data remain correlational, and definitive causal statements are not warranted.

To date, the hierarchical model of approach-avoidance motivation has been applied most vigorously within the achievement domain, and the present work joins that of Gable (in press) in seeking to document the applicability of the model within the social domain. In some respects, achievement and social connection are similar in that both represent basic psychological needs that energize people's behavior (Deci & Ryan, 2000; Elliot et al., 2002), and both represent pervasive concerns that individuals focus on in their daily self-regulatory efforts (Emmons, 1999; Little & Chambers, 2004). These fundamental similarities suggest that the basic premises of the hierarchical model will be the same across the achievement and social domains. Of course, achievement and social connection are also different in many ways, and these differences suggest that the specific processes operative within the hierarchical model may vary (in quality or quantity) to some degree across domains. For example, whereas single-minded and persistent dedication to goals may produce positive outcomes in the achievement domain, the dyadic nature of relationships likely require more open and flexible goal pursuit for positive outcomes to accrue. The extent and nature of the similarities and differences across domains will become clear as additional research is conducted on the model in the social domain. We hope and expect a great deal of cross-fertilization across the achievement and social domains as research within each domain proceeds apace.

Throughout the years, achievement and social motivation have typically been studied separately from each other, despite the fact that they are often intertwined in everyday life. However, recent work, particularly in the social-personality area, is beginning to redress this artificial separation. For example, Shah (2003) has shown that individuals' competence valuation and actual performance on an achievement task are enhanced by subliminal exposure to the name of someone who would want them to do well on the task. Baumeister, Twenge, and Nuss (2002) have shown that priming social exclusion leads to performance decrements on an intelligence test. Our own work (Elliot & Reis, 2003; Elliot & Thrash, 2004; McGregor & Elliot, 2005) has demon-

strated that it is when individuals are concerned about social rejection by important others that their achievement pursuits turn from approaching success to avoiding failure. The achievement and social domains are arguably the two most central domains of daily life, and motivational models would do well to not only examine the similarities and differences across these domains but to also document the systematic ways in which achievement and social motivation commingle in daily life.

## NOTES

1. The term "need" may replace the term "motive" throughout the present discourse without changing the meaning of our conceptual analysis. In our view, needs are motives that have roots in a person's inherent psychological makeup (Elliot, McGregor, & Thrash, 2002). Social motivation is presumed to be part of this inherent makeup (Baumeister & Leary, 1995), so in this context, the need and motive constructs are synonymous.

2. Goals and other lower-level constructs are posited to emerge from other sources as well, including more cognitive antecedents such as self-theories (Elliot & McGregor, 1999), competence perceptions (Elliot & Church, 1997), and appraisals of the environment (Church, Elliot, & Gable, 1999).

3. See Table 1 for descriptive statistics and reliabilities.

4. See Table 4 for descriptive statistics and reliabilities.

5. Examining each indicator of SWB separately revealed the following significant findings: friendship-approach goals were a positive predictor of T2 life satisfaction ( $\beta = .14, p < .05$ ) and T2 positive affect ( $\beta = .16, p < .05$ ), and friendship-avoidance goals were a positive predictor of T2 negative affect ( $\beta = .14, p < .05$ ).

6. In addition to the analyses of central interest, we conducted additional analyses to examine the direct influence of social motives on the well-being outcomes. Specifically, T2 SWB and physical symptoms were regressed on the antecedent model with the appropriate T1 well-being variable included in the equation. The only significant social motive finding to emerge from these analyses was a significant positive influence of hope for affiliation on T2 SWB ( $\beta = .13, p < .05$ ).

## REFERENCES

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Arbuckle, J. (1994). *AMOS 4* [Computer software]. Chicago: Smallwaters.
- Austin, J., & Vancouver, J. (1996). Goal constructs in psychology: Structure, process, and content. *Psychological Bulletin*, 120, 338-375.
- Baumeister, R. F. (1998). The self. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 680-740). New York: McGraw-Hill.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5, 323-370.
- 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., & Hutton, D. G. (1989). Self-presentation motivations and personality differences in self-esteem. *Journal of Personality*, 57, 547-579.
- Baumeister, R. F., Twenge, J. M., & Nuss, C. K. (2002). Effects of social exclusion on cognitive processes: Anticipated aloneness reduces intelligent thought. *Journal of Personality and Social Psychology*, 83, 817-827.
- Berscheid, E. (1994). Interpersonal relationships. *Annual Review of Psychology*, 45, 79-129.



- Carver, C., & Scheier, M. (1998). *On the self-regulation of behavior*. Cambridge, UK: Cambridge University Press.
- Church, M. A., Elliot, A. J., & Gable, S. L. (1999). Perceived classroom environment, achievement goals, and achievement outcomes. *Journal of Educational Psychology*, 93, 43-54.
- Cloninger, C. R. (1987). Neurogenetic adaptive mechanisms in alcoholism. *Science*, 236, 410-416.
- Cofer, C. N., & Appley, M. H. (1964). *Motivation: Theory and research*. New York: John Wiley.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Conroy, D. E. (2004). The unique psychological meanings of multidimensional fears of failing. *Journal of Sport and Exercise Psychology*, 26, 484-491.
- Cury, F., Da Fonseca, D., Rufo, M., & Sarrazin, P. (2002). Perceptions of competence, implicit theory of ability, perception of motivational climate, and achievement goals: A test of trichotomous conceptualization of endorsement of achievement motivation in the physical education setting. *Perceptual & Motor Skills*, 95, 233-244.
- David, J. P., Green, P. J., Martin, R., & Suls, J. (1997). Differential roles of neuroticism, extraversion, and event desirability for mood in daily life: An integrative model of top-down and bottom-up influences. *Journal of Personality and Social Psychology*, 73, 149-159.
- Day, E. A., Radosevich, D. J., & Chasteen, C. S. (2003). Construct- and criterion-related validity of four commonly used goal orientation instruments. *Contemporary Educational Psychology*, 28, 434-464.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
- Derogatis, L., & Spencer, P. (1982). *The Brief Symptom Inventory*. Baltimore: Psychometric Research.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71-75.
- Downey, G., Freitas, A. L., Michaleis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Rejection sensitivity and rejection by romantic partners. *Journal of Personality and Social Psychology*, 75, 545-560.
- Dowson, M., & McInerney, D. M. (2003). What do students say about their motivational goals? Towards a more complex and dynamic perspective on student motivation. *Contemporary Educational Psychology*, 28, 91-113.
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41, 1040-1048.
- Elliot, A. J. (1997). Integrating "classic" and "contemporary" approaches to achievement motivation: A hierarchical model of approach and avoidance achievement motivation. In P. Pintrich & M. Maehr (Eds.), *Advances in motivation and achievement* (Vol. 10, pp. 143-179). Greenwich, CT: JAI.
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34, 149-169.
- Elliot, A. J. (in press). The goal concept in psychology. In J. Shah & W. Gardner (Eds.), *Handbook of motivational science*. New York: Guilford.
- Elliot, A. J., Chirkov, V., Kim, Y., & Sheldon, K. M. (2001). A cross-cultural analysis of avoidance (relative to approach) personal goals. *Psychological Science*, 12, 505-510.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 72, 218-232.
- Elliot, A. J., & Church, M. A. (2003). A motivational analysis of defensive pessimism and self-handicapping. *Journal of Personality*, 71, 369-396.
- Elliot, A. J., & McGregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 76, 628-644.
- Elliot, A. J., McGregor, H. A., & Thrash, T. M. (2002). The need for competence. In E. Deci & R. Ryan (Eds.), *Handbook of self-determination research* (pp. 361-387). Rochester, NY: University of Rochester Press.
- Elliot, A. J., & Reis, H. T. (2003). Attachment and exploration in adulthood. *Journal of Personality and Social Psychology*, 85, 317-331.
- Elliot, A. J., & Sheldon, K. M. (1998). Avoidance personal goals and the personality-illness relationship. *Journal of Personality and Social Psychology*, 75, 1282-1299.
- Elliot, A., Sheldon, K., & Church, M. (1997). Avoidance personal goals and subjective well-being. *Personality and Social Psychology Bulletin*, 23, 915-927.
- Elliot, A. J., & Thrash, T. M. (2002). Approach-avoidance motivation in personality: Approach and avoidance temperaments and goals. *Journal of Personality and Social Psychology*, 82, 804-818.
- Elliot, A. J., & Thrash, T. M. (2004). The intergenerational transmission of fear of failure. *Personality and Social Psychology Bulletin*, 30, 957-971.
- Emmons, R. A. (1992). Abstract versus concrete goals: Personal striving level, physical illness, and psychological well-being. *Journal of Personality and Social Psychology*, 62, 292-300.
- Emmons, R. A. (1999). *The psychology of ultimate concerns*. New York: Guilford.
- Finch, J. F., Okun, M. A., Barrera, M., Zautra, A. J., & Reich, J. W. (1989). Positive and negative social ties among older adults: Measurement models and the prediction of psychological distress and well-being. *American Journal of Community Psychology*, 17, 585-605.
- Fitzsimmons, G. M., & Bargh, J. A. (2003). Thinking of you: Nonconscious pursuit of interpersonal goals associated with relationship partners. *Journal of Personality and Social Psychology*, 84, 148-164.
- Friedman, H., & Booth-Kewley, S. (1987). The "disease-prone personality": A meta-analytic view of the construct. *American Psychologist*, 42, 539-555.
- Gable, S. L. (in press). Approach and avoidance social motives and goals. *Journal of Personality*.
- Gable, S. L., Reis, H. T., & Elliot, A. J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology*, 78, 1135-1149.
- Gable, S. L., & Strachman, A. N. (in press). Approaching social rewards and avoiding social punishments: Appetitive and aversive social motivation. In J. Shah & W. Gardner (Eds.), *Handbook of motivational science*. New York: Guilford.
- Halvari, H., & Kjormo, O. (1999). A structural model of achievement motives, performance approach and avoidance goals and performance among Norwegian Olympic athletes. *Perceptual and Motor Skills*, 24, 675-689.
- Hays, R. B. (1988). Friendship. In S. Duck & D. Hay (Eds.), *Handbook of personal relationships* (pp. 391-408). Oxford, UK: Wiley.
- Heckhausen, H. (1991). *Motivation and action* (P. Leppman, Trans.). New York: Springer-Verlag.
- Heimpel, S., Elliot, A. J., & Wood, J. (in press). Temperament, self-esteem, and personal goals: An approach-avoidance analysis. *Journal of Personality*.
- Heine, S. J., & Lehman, D. R. (1999). Culture, self-discrepancies, and self-satisfaction. *Personality and Social Psychology Bulletin*, 25, 915-925.
- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280-1300.
- Hill, C. A. (1987). Affiliation motivation: People who need people... but in different ways. *Journal of Personality and Social Psychology*, 52, 1008-1018.
- Hoyle, R. H., & Panter, A. T. (1995). *Structural equation modeling: Concepts, issues, and applications*. Thousand Oaks, CA: Sage.
- Jackson, D. (1974). *Manual for the Personality Research Form*. Port Huron, MI: Research Psychologist's Press.
- Klinger, E. (1977). *Meaning and void: Inner experiences and the incentives in people's lives*. Minneapolis: University of Minnesota Press.
- Knee, C. R. (1998). Implicit theories of relationships: Assessment and prediction of romantic relationship initiation, coping, and longevity. *Journal of Personality and Social Psychology*, 74, 360-370.
- Kruglanski, A. W. (1996). Goals as knowledge structures. In P. Gollwitzer & J. Bargh (Eds.), *The psychology of action* (pp. 599-618). New York: Guilford.
- Lewin, K. (1926). Untersuchungen zur Handlungs- und Affektpsychologie. I: Vorbemerkungen über die psychischen Kräfte und Energien und über die Struktur der Seele [Investigations into action and affect psychology. I: Preface to the psycho-

- logical forces and energies and the structure of the soul]. *Psychologische Forschung*, 7, 294-329.
- Little, B. R., & Chambers, N. C. (2004). Of human doings and well-beings. In W. Cox & E. Klinger (Eds.), *Handbook of motivational counseling* (pp. 65-82). Chichester, UK: Wiley.
- Locke, E., & Latham, G. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.
- Mackinnon, A., Jorm, A. F., Christensen, H., Korten, A. E., Jacomb, P., & Rodgers, B. (1999). A short form of the Positive and Negative Affect Schedule: Evaluation of factorial validity and invariance across demographic variables in a community sample. *Personality and Individual Differences*, 27, 405-416.
- McClelland, D. C. (1985). *Human motivation*. Cambridge, UK: Cambridge University Press.
- McClelland, D. C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? *Psychological Review*, 96, 690-702.
- McDougall, W. (1908). *An introduction to social psychology*. New York: Methuen.
- McGregor, H. A., & Elliot, A. J. (2005). The shame of failure: Examining the link between fear of failure and shame. *Personality and Social Psychology Bulletin*, 31, 218-231.
- Mehrabian, A. (1994). Evidence bearing on the Affiliative Tendency (MAFF) and Sensitivity to Rejection (MSR) scales. *Current Psychology: Developmental, Learning, Personality, Social*, 13, 97-116.
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. Zanna (Ed.), *Advances in experimental social psychology*. San Diego, CA: Academic Press.
- Murray, H. (1938). *Explorations in personality*. New York: Norton.
- O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instruments, and Computers*, 32, 396-402.
- Paulhus, D. L. (1991). Measurement and control of response bias. In *Measures of personality and social psychological attitudes* (Vol. 1, pp. 17-59). San Diego, CA: Academic Press.
- Pennebaker, J. (1982). *The psychology of physical symptoms*. New York: Springer-Verlag.
- Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. In S. Duck & R. Gilmour (Eds.), *Personal relationships in disorder* (pp. 31-56). New York: Guilford.
- Robins, R. W., Hendin, K. 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.
- Rook, K. S., & Sorkin, D. H. (2003). Fostering social ties through a volunteer role: Implications for older-adults' psychological health. *International Journal of Aging and Human Development*, 57, 313-337.
- Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence. *Journal of Personality and Social Psychology*, 39, 472-480.
- Sanderson, C. A., & Cantor, N. (2001). The association of intimacy goals and marital satisfaction: A test of four mediational hypotheses. *Personality and Social Psychology Bulletin*, 27, 1567-1577.
- Shah, J. (2003). The motivational looking glass: How significant others implicitly affect goal appraisals. *Journal of Personality and Social Psychology*, 85, 424-439.
- Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, 20, 580-591.
- Sorkin, D. H., & Rook, K. S. (2004). Interpersonal control strivings and vulnerability to negative social exchanges in later life. *Psychology and Aging*, 19, 555-564.
- Stewart, M. E., Ebmeier, K. P., & Deary, I. J. (2005). Personality correlates of happiness and sadness: EPQ-R and TPQ compared. *Personality and Individual Differences*, 38, 1085-1096.
- Tanaka, Y., & Yamauchi, H. (2001). A model for achievement motives, goal orientations, intrinsic interest, and academic achievement. *Psychological Reports*, 88, 123-135.
- Thrash, T. M., & Elliot, A. J. (2002). Implicit and self-attributed achievement motives: Concordance and predictive validity. *Journal of Personality*, 70, 729-755.
- Uchino, B. N., Holt-Lunstad, J., Smith, T. W., & Bloor, L. (2004). Heterogeneity in social networks: A comparison of different models linking relationships to psychological outcomes. *Journal of Social and Clinical Psychology*, 23, 123-139.
- Urdan, T., & Maehr, M. (1995). Beyond a two-goal theory of motivation and achievement: A case for social goals. *Review of Educational Research*, 65, 213-243.
- VandeWalle, D. (1997). Development and validation of a work domain goal orientation instrument. *Educational and Psychological Measurement*, 57, 995-1015.
- Veroff, J., & Veroff, J. B. (1980). *Social incentives: A lifespan developmental approach*. New York: Academic Press.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*, 96, 465-490.

Received December 31, 2004

Revision accepted July 26, 2005