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A friend is a present you give to your "Self": Avoidance of intimacy moderates the effects of friends on self-liking

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Abstract

The current research proposes that thinking about friends improves feelings about the self and does so differentially depending on avoidance of intimacy. Based on previous findings that individuals who avoid intimacy in relationships (avoidant individuals) contrast their self-concepts with primed friends whereas those who pursue intimacy in relationships (non-avoidant individuals) assimilate their self-concepts to primed friends [Gabriel, S., Carvallo, M., Dean, K., Tippin, B. D., & Renaud, J. (2005). How I see "Me" depends on how I see "We": The role of avoidance of intimacy in social comparison. *Personality and Social Psychology Bulletin, 31*, 156–157], we predicted that friends who embody negative aspects of self would lead avoidant individuals to like themselves more, whereas friends who embody positive aspects of self would lead non-avoidant individuals to like themselves more. A pretest determined that good friends were seen as more similar to positive and ideal aspects of the self, whereas friends about whom participants had more mixed feelings (ambivalent friends) were seen as more similar to disliked and feared aspects of the self. Four experiments supported the main hypotheses. In Experiment 1, non-avoidant individuals like themselves more when good friends were primed. In Experiment 2, avoidant individuals like themselves more when ambivalent friends were primed. In Experiment 3, non-avoidant individuals liked themselves better after thinking about a friend's positive traits, whereas avoidant individuals liked themselves better after thinking about a friend's positive traits, whereas avoidant individuals liked themselves better after thinking about a friend's negative traits. In Experiment 4, all individuals under self-esteem threat strategically brought friends to mind who would help them like themselves more.

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Introduction

Imagine a woman named Anna who has an awful day. Event after event reminds her of her deepest insecurities and fears about herself and chips away at her self-confidence. Her day starts with her boss yelling at her for not being careful enough at work, then a man she dated and liked doesn't return a phone call, and finally she fails to meet her goals at the gym. To whom does Anna reach

* Corresponding author. Fax: +1 716 645 3801. E-mail address: sgabriel@buffalo.edu (S. Gabriel). out to make herself feel better? If she is like most people, she will choose a friend (Fisher, 1982; Klinger, 1977). Which friend will Anna choose? Which friend will help Anna feel better about herself? Anna could call a friend whom she particularly admires and likes, one who is similar to her hopes and desires for herself. Such a friend might make Anna feel better through assimilative processes (e.g., Aron, Aron, Tudor, & Nelson, 1991). However, Anna might instead call a different friend to whom she feels superior, one who embodies negative traits that she wishes to avoid seeing in herself. Such a friend might improve Anna's feelings about herself via contrast effects (e.g., Stapel & Koomen, 2001). The current research proposes that the type of friend that will improve Anna's feelings about

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herself can be predicted by her propensity to avoid intimacy in friendships. Specifically, we propose that friends are useful for improving self-liking and that the degree to which individuals avoid intimacy in friendships moderates which friends are most helpful.

Avoidance of intimacy and social comparison

Self-concept shifts due to social comparison can either be contrastive (the self becomes less similar to the primed other) or assimilative (the self becomes more similar to the primed others). A growing literature suggests that when the perceiver has a close, intimate relationship with the target, assimilation effects are likely to occur and the perceiver finds him or herself feeling more similar to the target (Aron et al., 1991). However, when the perceiver is not close to the target, contrast effects become more likely and the perceiver sees him or herself feeling less similar to the target (Dijksterhuis et al., 1998). For example, when evaluating their performance on a novel task, people tend to assimilate the performance of a close friend but contrast the performance of an acquaintance (Pelham & Wachsmuth, 1995).

Although all people form relationships with others (Baumeister & Leary, 1995), they differ in their desire to pursue intimacy within those relationships (Bartholomew, 1990; Bowlby, 1973). Attachment theory accounts for these differences by asserting that individuals enter relationships with well-developed cognitive representations of the self and others. These cognitive representations, called internal working models of attachment, regulate various aspects of information processing that guide thoughts, feelings, and behavior during relationship interactions (Collins & Read, 1990). Although originally conceptualized as a way to understand primary attachment processes with significant attachment figures (such as parents or romantic partners), research has shown that the attachment system can influence a multitude of outcomes seemingly unrelated to primary attachment, such as responses to needy strangers (Kestenbaum, Farber, & Sroufe, 1989), volunteerism intended to benefit strangers (Gillath et al., 2005), intergroup bias (Mikulincer & Shaver, 2001), and social comparison processes (Gabriel, Carvallo, Dean, Tippin, & Renaud, 2005; Mikulincer, Orbach, & Iavnieli, 1998). One of the central aspects of the attachment behavioral system is the avoidance dimension. Individuals who are low in avoidance (hereafter referred to as non-avoidant) are comfortable with intimacy and seek it out in their close relationships. Conversely, individuals who are avoidant are not comfortable with intimacy and try to create mental and physical distance between themselves and their relationship partners (Edelstein & Shaver, 2004). In addition, avoidant individuals are often involved in relationships that are low in interdependence and commitment (Levy & Davis, 1988; Simpson, 1990). Thus, avoidant and nonavoidant individuals differ in their desire for, and comfort with, intimacy in their relationships.

When taken together, the avoidance component of attachment theory and the social comparison literature suggest that non-avoidant individuals will be more likely to assimilate the characteristics of primed friends into their self-concepts than avoidant individuals because of their comfort with closeness. On the other hand, avoidant individuals will be more likely than non-avoidant individuals to contrast their self-concepts away from the characteristics of primed friends because of the mental and physical distance they create between themselves and their relationship partners. Indeed, Gabriel and colleagues (2005) found that individuals with non-avoidant attachment styles define themselves as more similar to a primed friend (assimilation effect), whereas individuals with avoidant attachment styles define themselves as less similar to a primed friend (contrast effect). For example, thinking about a funny and extraverted friend would lead non-avoidant participants to describe themselves as more funny and extraverted than not thinking about the friend. Conversely, thinking about a funny and extroverted friend would lead avoidant individuals to see themselves as less funny and extraverted than they normally would. Gabriel and colleagues (2005) also found behavioral effects of thinking about friends. Specifically, thinking about a smart friend led non-avoidant individuals to perform better on an ostensible intelligence task (whereas avoidant individuals trended in the opposite direction). Thus, across several studies, avoidance of intimacy moderated the social comparison effects of friends.

In summary, previous research demonstrates that avoidant individuals contrast their self-concepts away from friends' characteristics, while non-avoidant individuals assimilate these characteristics into their self-concepts. However the consequences of this process for feelings about the self have not yet been explored. Can thinking about friends improve self-regard by influencing the self-concept, and if so, does this process work equally well for avoidant and non-avoidant individuals? The current research aims to address these questions.

Avoidance of intimacy, friendship, and self-liking

Given what is known about avoidance of intimacy and assimilation and contrast effects, might one be able to predict what type of friend will help an individual feel better about him or herself? The self-concept contains both positive components (liked and ideal attributes) and negative components (disliked and feared attributes; Higgins, 1987; Markus & Nurius, 1986). We propose that because non-avoidant individuals assimilate the characteristics of primed friends into their self-concepts, friends who embody liked and ideal aspects of self should lead non-avoidant people to feel better about themselves.

Only non-avoidant individuals assimilate the characteristics of primed friends; avoidant individuals view themselves as less similar to primed friends (Gabriel et al., 2005). Thus, one might predict that avoidant individuals would benefit from friends who are viewed as uniformly

negative. For example, an avoidant a person who worries about being a failure and shallow would be expected to benefit from having a friend who is perceived as a shallow failure because of the tendency to contrast the self-concept away from friends. The difficulty of such a hypothesis is that one is unlikely to be riend someone who is seen as uniformly negative. However, most people have ambivalent friends about whom they have a mix of both positive and negative feelings (Uchino, Holt-Lunstad, Uno, & Flinders, 2001). Although positive feelings make the relationships possible, negative feelings tend to be more salient (Pratto & John, 1991), dominate perceptions of the relationship partner (Anderson, 1965; Fiske, 1980; Skowronski & Carlston, 1987), and moderate the effects of the relationships on the self (Holt-Lunstad, Uchino, Smith, Olson-Cerny, & Nealey-Moore, 2003). Therefore, we predict that avoidant individuals benefit from having friends whom they perceive as embodying some of their positive, but also their negative traits (i.e., their disliked and feared attributes). Comparing themselves to ambivalent friends should make avoidant individuals feel less similar to their feared and disliked aspects of self because the negative traits of relationship partners dominate social perception. This, in turn, should help avoidant individuals feel better about themselves.

But how will friends who embody positive self-aspects affect avoidant individuals? Similarly, how will friends who embody negative self-aspects affect non-avoidant individuals? One possibility is that avoidant individuals will feel bad about themselves after thinking about friends who embody positive self-aspects and non-avoidants will feel bad about themselves after thinking about friends who embody negative self-aspects. After all, contrasting oneself to a high standard and assimilating a low standard should have negative effects on the self-concept. However, much research has found a robust propensity for protecting the self from negative information (e.g., Ditto & Lopez, 1992; Kunda, 1990; Liberman & Chaiken, 1992; Sedikides, 1993) and has indicated that negative effects of social comparison are considerably less robust than positive effects (Gabriel et al., 2005). Therefore, it was difficult to predict whether good friends and ambivalent friends would have negative effects or no effects on avoidant individuals and non-avoidant individuals, respectively.

Hypotheses and overview of experiments

In summary, the current research proposes that the propensity to avoid intimacy in friendship moderates whether thinking about friends will improve feelings about the self via assimilation or contrast effects. Specifically, because non-avoidant individuals come to view themselves as more similar to primed friends (Gabriel et al., 2005), thinking about friends who embody ideal and liked aspects of self should lead them to feel better about the self. On the other hand, because avoidant individuals come to see themselves as less similar to primed friends (Gabriel et al., 2005), thinking about friends who embody negative aspects of self

should lead avoidant individuals to feel better about the self

A pretest examined the hypotheses that good friends embody ideal and liked aspects of self, whereas ambivalent friends are as similar to feared and disliked aspects of self as they are to positive aspects of self. Experiment 1 tested the hypothesis that good friends lead non-avoidant individuals to feel better about the self. Experiment 2 tested the hypothesis that ambivalent friends lead avoidant individuals to feel better about the self. Experiment 3 tested the hypothesis that avoidant individuals like themselves better after thinking about the negative, as compared to the positive, traits of a particular friend whereas non-avoidant individuals like themselves better after thinking about the positive, as compared to the negative, traits of a particular friend. Experiment 4 examined the implications for friendship processes by examining whether avoidant and non-avoidant individuals under self-esteem threat differ in which type of friend they strategically bring to mind to bolster the self.

Pretest: Similarity of good and ambivalent friends to the self

Methods

Participants

One-hundred and thirty-four undergraduates at SUNY, University at Buffalo participated for partial fulfillment of a research requirement. The majority of the participants were Caucasian (57%); the remainder was predominantly African American and Asian. The median age of participants was 20.¹

Procedures

As participants arrived in the lab, an experimenter led them to private computer cubicles. After reading and signing the consent form, participants were told that they would be answering a number of questions about themselves and close others on the computer. They were reminded that all of their responses would be completely confidential and anonymous.

First, participants supplied the first name of a good friend (a good friend was defined as a friend the participant liked a great deal) and of an ambivalent friend (an ambivalent friend was defined as a friend the participant had mixed feelings about). Participants then listed the good friend's positive and negative attributes and the ambivalent friend's positive and negative attributes separately. Next participants' feared and ideal selves were assessed using a technique adopted from Markus and Nurius (1986). Specif-

¹ Only data from individuals born in the United States was analyzed in the pre-test and all three experiments. The participants pool at SUNY, University at Buffalo conations a large number of foreign students, most from Asian countries. Because social comparison processes tend to differ greatly between Eastern and Western cultures (Chung & Mallery, 1999; Lockwood, Marshall, & Sadler, 2005; White & Lehman, 2005), a decision was made to only include American born students.

ically, participants were asked to list attributes that made up their feared self and their ideal self separately. The feared self was defined as comprising attributes the individual hoped to avoid developing, whereas the ideal self was defined as comprising attributes the individual hoped and wished to develop.

After participants described their feared and ideal selves, their perceptions of the similarity between their good friend and their ideal and feared selves were assessed. In order to do this, we adopted Aron, Aron, & Smollan's (1992) Inclusion of Other in the Self-Scale. This scale involves providing participants with a series of overlapping circles that vary from completely separate (circle 1) to almost completely overlapping (circle 7) and asking them to indicate which pair of circles best represents their relationship with another person. In the current study, participants were asked to reflect on what they had written about the negative traits of their good friend and about their feared selves and indicate which circle best represented the similarity between those two. Participants were then asked to reflect on what they had written about the positive traits of their good friend and about their ideal self and indicate which circle best represented the similarity between the two. The same technique was used to assess similarity between the ambivalent friend and the ideal and feared selves.

Our next goal was to assess participants' perceived similarity between their actual liked self and the friends' positive traits and their actual disliked self and their friends' negative traits. Thus, participants described their liked selves (i.e., things they liked about their current selves) and their disliked selves (i.e., things they dislike about their current selves). Next, they were asked to reflect on what they had written and assess the similarity between their liked selves and the positive traits of their friends and their disliked selves and the negative traits of their friends. The adaptation of the Inclusion of Others in the Self-Scale was again used for this purpose.

Next, participants indicated how much time they spent with each friend on a 7-point scale. Participants then answered questions that were unrelated to the current study and completed a demographics questionnaire. Avoidance of intimacy was assessed by having participants complete Bartholomew and Horowitz's (1991) 4-item attachment scale by picking which of the four styles most accurately described them and indicating on a scale from 1 (not at all) to 9 (extremely) the extent to which each of four paragraphs described their general relationship styles. The four paragraphs corresponded to the attachment styles of secure, dismissive, preoccupied, and fearful. The wording of Bartholomew and Horowitz (1991) descriptions was slightly modified so that they referred to friendships. For example, "it is easy for me to become emotionally close to others," became "it is easy for me to become emotionally close to friends." Participants completed the measure either after all other measures (including the measures which were unrelated to the study) or in a separate experimental session. Because the specific time of measurement of avoidance of intimacy did not affect responses or differentially relate to other variables, it will not be discussed further.

Results

The goals of the pretest were to examine whether good friends were seen as similar to the ideal and liked selves and whether ambivalent friends were seen as similar to the feared and disliked selves. In order to test those hypotheses, perceived similarity of the friends to the various aspects of self were entered into a 2 (Valence of Trait: Positive or Negative) × 2 (Type of Trait: Actual (*liked, disliked*) or Imagined (*ideal, feared*)) × 2 (Friend: Good or Ambivalent) repeated measures model analysis of variance (ANOVA).

The ANOVA yielded a number of significant findings. There were significant main effects for Valence of Trait F(1,133) = 71.034; p < .001, and Friend F(1,133) =35.322; p < .001. In addition there were significant twoway interactions between Valence of Trait and Friend F(1, 133) = 84.354; p < .001 and Type of Trait and Friend F(1, 133) = 6.663; p = .011. However, all of those effects were further qualified by a significant three-way interaction between Type of Trait, Valence of Trait, and Friend F(1, 133) = 12.7087; p = .001 (see Fig. 1). Positive aspects of good friends were seen as more similar to the ideal self than positive aspects of ambivalent friends, t(133) = -9.21; p < .001; r = .62, whereas negative aspects of ambivalent friends were seen as more similar to the feared self than negative aspects of good friends, t(133) = 5.85; p < .001; r = .45. Similarly, positive aspects of good friends were seen as more similar to the liked self than ambivalent friends, t(133) = -10.02; p < .001; r = .66, whereas negative aspects of ambivalent friends were seen as marginally more similar to the disliked self than good friends, t(133) = 1.76; p = .08; r = .15.

Next, good friends and ambivalent friends were examined separately. As predicted, a main effect for Valence of Trait indicated that good friends were seen as much more similar to positive aspects of self than negative aspects of self F(1,133) = 179.000; p < .0001. However, the same main

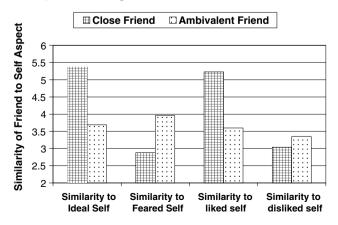


Fig. 1. Similarity of good and ambivalent friends to ideal, liked, disliked and feared selves.

effect was not significant for ambivalent friends F(1,133) = .001; p = .970. As predicted, ambivalent friends were seen as equally similar to positive and negative aspects of self.

Finally, we wished to examine whether avoidance of intimacy moderated perceptions of similarity of friends to the self. Avoidance of intimacy was assessed by subtracting ratings of the degree to which the secure and preoccupied styles described participants from ratings of the degree to which the fearful and dismissing styles described them (Griffin & Bartholomew, 1994). Correlational analyses revealed that avoidance did not predict the amount of time spent with the ambivalent friend, p = .75, or the close friend, p = .95. Because the main finding of the pretest was that participants perceived close friends and ambivalent friends as differing in similarity to liked, disliked, ideal, and feared aspects of self, we computed difference scores in perceived similarity of each friend to each aspect of self by taking the absolute value of the difference between perceived similarity of the ambivalent friend and perceived similarity of the close friend, and then examined the correlation between avoidance of intimacy and each difference score. Avoidance of intimacy was not related to perceptions of the differences between the two friends' similarity to disliked (p = .425), liked (p = .399), or ideal (p = .197), aspects of self, but was marginally related to perceptions of the differences between friends' similarity to feared aspects of self r = -.160; p = .066. Lower avoidance predicted slightly higher perceived difference between the two friends in terms of similarity to the feared self. Examination of the means revealed that this was due to slight differences in perceptions of similarity of the feared self to both the close and ambivalent friends.

Discussion

Good friends were seen as more similar to positive aspects of self than ambivalent friends, whereas ambivalent friends were seen as more similar to negative aspects of self than good friends. Good friends were defined by stronger similarity to positive aspects of self than to negative aspects of self whereas ambivalent friends were defined by equal similarity to both positive and negative aspects of self. These effects were generally not moderated by avoidance of intimacy. In addition, all participants were able to think of a good friend and an ambivalent friend, indicating that these are relationships that most people have.

Thus, the pretest set the stage for testing our main hypotheses that avoidance of intimacy moderates the effects of friends on feelings about the self. The pre-test confirmed that good friends are perceived as embodying liked and ideal aspects of the self. Therefore, non-avoidant individuals, who come to view themselves as more similar to primed friends, should like themselves more when good friends are primed as compared to when they are not. Experiment 1 tested this hypothesis. In addition, the pretest indicated that ambivalent friends are seen as higher than good friends on feared and disliked aspects of self and

equally similar to positive and negative aspects of self. Because negative information about others is more salient than positive (e.g., Anderson, 1965), avoidant individuals, who come to view themselves as less similar to primed friends, should like themselves more when ambivalent friends are primed as compared to when they are not. Experiment 2 tested this hypothesis.

Experiment 1

Overview. The goal of the first experiment was to examine whether thinking about good friends increases positive feelings about the self for non-avoidant individuals. It was predicted that non-avoidant participants would have more positive feelings about themselves after writing about a good friend.

Methods

Participants and design

One-hundred and fourteen undergraduates at SUNY, University at Buffalo (60% male) participated for partial fulfillment of a research requirement. The majority of participants were Caucasian (80%); the remainder was predominantly African American and Asian. The median age of participants was nineteen. Six participants did not follow directions and were dropped from further analyses. The experiment employed a 2 (Prime: Friend or Control) × 2 (Avoidance of Intimacy: Non-avoidant or Avoidant) between-subjects design.

Materials and procedures

Before coming to the laboratory, participants completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965) during a mass testing session in their introductory psychology course. Pretest self-esteem was utilized as a covariate to diminish the error variance caused by a priori differences in feelings about the self.

As participants arrived at the laboratory, they were led to individual computer stations where they signed a consent form and were told that they would be filling out questionnaires and answering questions about themselves and others on the computer. They were first asked to provide the first name of a good friend. The computer then randomly assigned them to either the friendship or the control condition. Participants in the friendship condition were asked to write about the good friend for 8 minutes. In order to recreate the experience of being in the company of a good friend, participants were asked to recall and write about a time they spent the friend that was typical of the times that they spent together (Gabriel et al., 2005). Participants in the control condition wrote about everything that they had done the day before (Bodenhausen, Kramer, & Süsser, 1994).

Next, all participants completed items adopted from the Positive and Negative Affect Schedule (PANAS) to assess mood (Watson, Clark, & Tellegen, 1988). Specifically, participants were presented with each mood descriptor one at

a time and were asked to indicate on a 7-point scale (anchored at "not at all" to "extremely") the extent to which each mood descriptor was applicable to their current state. Three positive and three negative mood items were used.

The main dependent variable, self-liking, was assessed with three items. Because the pretest found that good friends were linked to both positive aspects of the current self and ideal aspects of self, a measure of self-attitudes that encompassed both of those components was desired. To tap into similarity to the ideal self, participants own assessments of their global similarity to their ideal self was collected to measure momentary changes in self-discrepancy (Heppen & Ogilvie, 2003). Specifically, participants were asked to list the attributes that comprised their actual and ideal selves separately. Afterwards, they were presented with the seven overlapping circles adopted from Aron, Aron, and Smollan's (1992) Inclusion of the Other in the Self-Scale. One circle was labeled "Actual Self" and the other "Ideal Self". Participants were asked to choose the circle that best represented the relationship between their ideal and actual selves. The second and third items were designed to tap into positive feelings about the current self. Specifically, participants were asked how comfortable they currently felt with who they were and how happy they currently were with who they were on scales ranging from 1 (not at all) to 7 (extremely).

Next, liking for the friend was assessed. Participants were asked how much they liked, admired, and were proud of the friend on scales ranging from 1 (not at all) to 7 (extremely). Participants then completed a number of questionnaires that were not relevant to the current study before completing the same attachment measure used in the pretest. Finally, participants completed a demographics questionnaire, were debriefed, and thanked for their participation.

Results

Scale computation

Mood was calculated by reverse scoring the three negative items and averaging the six items designed to measure mood ($\alpha = .77$).² Self-liking scores were calculated by computing the mean of agreement with the statements "Right now, I feel very happy with who I am," "Right now, I feel very comfortable with who I am," and the self-discrepancy question ($\alpha = .85$). Feelings towards the friend were computed by averaging responses to questions asking participants how much they liked, admired, and were proud of their friend ($\alpha = .66$).

Our primary hypothesis was that avoidance would moderate the effects of close friends on self-liking. We examined this hypothesis using multiple regression analyses recommended by Aiken and West (1991). For all analyses the predictor variables were (a) avoidant attachment style, (b)

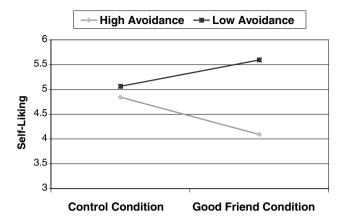


Fig. 2. Self-liking as a function of avoidance of intimacy and good friend.

experimental condition (represented as a dichotomous variable (0 = control; 1 = friend activation), (c) the interaction of avoidant attachment and experimental condition, (d) self-esteem, and (e) anxious attachment style.³ All continuous predictors were centered at their means (as were all continuous predictors in subsequent analyses). Our analyses for self-liking revealed the predicted Avoidance × Close Friend interaction, $\beta = -.208$, t(102) = -2.017, p = .046, $f^2 = .05$ (see Fig. 2). Tests of the simple effects of condition revealed a marginal effect for individuals low (i.e., 1 standard deviation below the mean) in avoidance. These individuals reported marginally higher levels of self-liking in the close friend condition than in the control condition ($\beta = .201$, p = .077, $f^2 = .03$). Individuals high in avoidance (i.e., two standard deviations above the mean)⁵ displayed the opposite, albeit non-significant, pattern ($\beta = -.284$, $p = .115, f^2 = .03).^6$

 $^{^2}$ In Experiments 1 and 2, we reverse scored the negative mood items and averaged all six to form one measure of mood because they had adequate reliability and factor analyses suggested they formed one factor.

³ Anxious attachment style was obtained by summing participants' secure and preoccupied attachment ratings and subtracting participants' dismissing and fearful ratings (Griffin & Bartholomew, 1994).

 $^{^4}$ Effects are described as marginally significant if they have p values greater than .05 but less than .10.

⁵ When discussing what values of the moderator to use to probe an interaction, Aiken and West (1991) state "... the investigator is free to choose any value within the full range of Z [the moderator]. In some cases, theory, measurement considerations, or previous research may suggest interesting values of Z [the moderator] that should be chosen (page 12)". In the absence of any rational for utilizing other levels at which to probe an interaction, Aiken and West (1991) suggest using values 1 standard deviation above and below the mean. This assumes that approximately half of the population is affected by the independent variable one way, whereas the other half is affected the other way. In the case of the current experiments, previous research (i.e. Gabriel, Carvallo, Bartak, & Shafir, 2007; Gabriel et al., 2005) utilizing a categorical measure of avoidance of attachment, has found that only about 25% of the population (those who are very high in avoidance) show the contrast effects predicted in the current research. Thus, in all four experiments, slopes for individuals high in avoidance were tested at two standard deviations above the mean. This allows us the power to find the contrast effects, where they may exist, while acknowledging that a smaller portion of the population exhibits those contrasts effects.

⁶ In addition to the interaction, self-esteem was a significant covariate, $\beta = .539$, t(102) = 6.732, p < .001. Not surprisingly, participants high in self-esteem liked themselves more than those low in self-esteem.

Finally, we wished to examine two variables and the interaction of one variable with condition that may inform the findings and thus require further consideration. First, we examined the relationship between our two independent variables and feelings about the friend. Although all participants were asked to list a good friend, perhaps non-avoidant participants liked the good friend more than avoidant participants. None of the main effects or interactions were significant (all ps > .2). Thus, avoidance did not relate to attitudes towards friends and priming did not affect liking for the friend. Second, mood was examined. It is possible that writing about time spent with a good friend would affect mood differentially for individuals with different levels of avoidance of intimacy and thus might affect feelings about the self. When mood was examined using the same technique that was used for liking of the friend, none of the main effects or interactions were significant (all ps > .3). Hence, writing about a friend did not affect mood. Third, some theoretical models (e.g., self-verification theory; Swann, 1990) would argue that self-esteem should result in the highly similar effects. To examine that possibility, the regression was repeated adding the self-esteem × friend interaction. That interaction was not significant (p = .804)and the interaction of interest remained significant. Thus, the effects were not driven by the interaction of self-esteem and condition.

Discussion

The first experiment examined the effects of primed good friends on attitudes about the self. Recall, that the pretest provided evidence that good friends are seen as embodying liked aspects of the self and ideals for the self. Because nonavoidant individuals come to view themselves as similar to primed friends (Gabriel et al., 2005), friends who embody positive aspects of self should lead them to experience higher self-regard. As predicted, individuals low in avoidance who wrote about a good friend felt better about themselves than similar individuals who did not write about a good friend. Individuals high in avoidance displayed the opposite, albeit non-significant pattern; they felt worse about themselves when thinking about good friends as compared to control. Finally, we examined three alternative explanations for the effects and found no evidence that the effects were driven by attachment confounds with mood, liking of friends or self-esteem.

Experiment 2

Overview. The pretest found that ambivalent friends are seen as similar to the feared self and the disliked self. Thus,

the second experiment was designed to test whether ambivalent friends lead highly avoidant individuals to like themselves more.

Methods

Participants and design

One-hundred thirty-nine undergraduates at SUNY, University at Buffalo (70% male) participated for partial fulfillment of a research requirement. The majority of participants were Caucasian (83%); the remainder was predominantly African American and Asian. The median age of participants was 18. Six participants did not follow directions and were dropped from further analyses.

Materials and procedures

The second experiment followed the exact same procedure as the first experiment, with two notable exceptions. First, in the friendship condition, instead of writing about a good friend, participants wrote about an ambivalent friend. Specifically, participants were asked to think about a friend about whom they had mixed feelings, some positive and some negative, and then were asked to recall and write about a time spent with that friend that was prototypic of their friendship. Second, participants rated the similarity of the actual self to the feared self instead of evaluating the similarity of the actual self to the ideal self.

Results

Scale computation

Mood was calculated by reverse scoring the three negative items and averaging the six items designed to measure mood ($\alpha = .79$). Feelings towards the friend were computed by averaging responses to questions asking participants how much they liked, admired, and were proud of their friend ($\alpha = .83$). Self-liking was calculated by computing the mean of agreement with the statements "Right now, I feel very happy with who I am," "Right now, I feel very comfortable with who I am," and the reverse scored self-discrepancy item ($\alpha = .69$).

Our primary hypothesis was that ambivalent friends should lead individuals high in avoidance to feel better about themselves. As in Study 1, we conducted a multiple regression analysis predicting self-liking from avoidant attachment style, experimental condition (0 = control; 1 = ambivalent friend), the interaction of avoidant attachment and experimental condition, self-esteem, and anxious attachment style. As predicted, the interaction between condition and avoidance was significant, $\beta = .243$, p = .018, $f^2 = .04$ (see Fig. 3). Test of simple effects of condition revealed that high avoidance participants in the friend condition reported significantly higher levels of self-liking than high avoidance participants in the control condition ($\beta = .347$, p = .048, $f^2 = .03$). Conversely, low avoidance participants in the friend condition reported

⁷ Although some research has found that shifts in self-discrepancies are accompanied by shifts in mood (Higgins, 1987), we did not predict changes in mood because we did not select participants who were especially high in self-discrepancy and we did not make the discrepancies salient before measuring mood (Higgins, 1989).

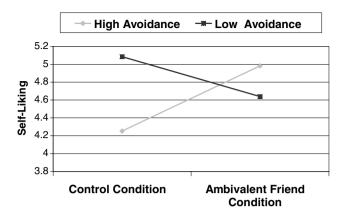


Fig. 3. Self-liking as a function of avoidance of intimacy and ambivalent friend.

lower levels of self-liking than low avoidance participants in the control condition ($\beta = -.213$, p = .051, $f^2 = .03$).⁸

Finally, we wished to examine the possible effects of liking of the friend, mood, and the interaction of self-esteem and condition. The multiple regression was repeated using liking of the friend and then mood as the primary dependent variables. None of the main effects or interactions were significant for liking of the friend (all ps > .3) or mood (all ps > .4). Finally, the multiple regression was repeated adding the self-esteem × friend interaction. That interaction was not significant (p = .473) and the interaction of interest remained significant.

Discussion

In Experiment 2, highly avoidant individuals who had written about an ambivalent friend liked themselves more as compared to avoidant individuals in the control condition. Conversely individuals low in avoidance liked themselves less after thinking about the ambivalent friend. One limitation of the first two experiments is that it is possible that the friends thought of by the individuals high versus low in avoidance differed in some important way other than their similarity to positive versus negative self-aspects. Although we measured liking of the friends and were able to ensure that it was not driving the effects, it is always possible that there is another, unmeasured variable that played an important role. To address that concern a third experiment was run in which only the valence of the friends' traits was manipulated. It was predicted that individuals high in avoidance would feel better about the self after thinking about a friend's negative traits, whereas individuals low in avoidance would feel better about the self after thinking about a friend's positive traits.

Experiment 3

Methods

Participants and design

One-hundred and thirty-five undergraduates at SUNY, University at Buffalo (48% male) participated for partial fulfillment of a research requirement. The majority of participants were Caucasian (82%); the remainder was predominantly African American and Asian. The median age of participants was 18. Four participants did not follow directions and were dropped from further analyses.

Materials and procedures

Before coming to the laboratory, participants completed the attachment questionnaire and the self-esteem measure during a mass testing session in their introductory psychology course.

As participants arrived at the laboratory, they were led to individual computer stations where they signed a consent form and were told that they would be filling out questionnaires and answering questions about themselves and others on the computer. They were first asked to provide the first name of a friend. They were instructed to think of a friend about whom they liked most traits but who also had some traits that were negative. By using those instructions, we hoped most participants would choose a friend who was somewhere in between a good friend and an ambivalent friend and thus could be primed to be thought of in either a positive or negative manner. The computer then randomly assigned them to either the positive or negative traits condition. Participants in the positive traits condition were asked to write about the friend's positive traits for 8 minutes. Participants in the negative traits condition were asked to write about the friend's negative traits for 8 minutes.

The main dependent variable, self-liking, was assessed by computing the mean of the two self-liking questions used in the first two experiments, similarity to the ideal self, and the reverse scored similarity to the feared self. Similarity to the feared self was revere scored and averaged with the other three self-liking items ($\alpha = .60$). Mood was not examined in this experiment or in Experiment 4, because it was not found to be a factor in either of the first two experiments.

Results

Our primary hypothesis was that participants low in avoidance would like themselves more after thinking about positive, relative to negative, traits of their friend. Conversely, individuals high in avoidance would like themselves more after thinking about negative, relative to positive, traits of their friend. To test this hypothesis, we conducted a multiple regression analysis predicting self-liking from avoidant attachment style, experimental condition (0 = friend's negative traits; 1 = friend's positive traits), the

⁸ In addition to the interaction, self-esteem was also a significant covariate, $\beta = .492$, t(127) = 6.307, p < .001. Participants with higher self-esteem reported higher self-liking.

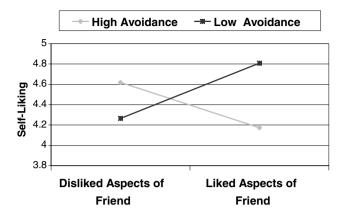


Fig. 4. Self-liking as a function of avoidance of intimacy and traits of friend.

interaction of avoidant attachment and experimental condition, self-esteem, and anxious attachment style. The analysis revealed the predicted Avoidance × Friend Activation p = .009. interaction, $\beta = -.282$, t(125) = -2.650, $f^2 = .05$ (see Fig. 4). Tests of the simple effects of condition revealed a significant effect for individuals low in avoidance. These individuals reported higher levels of self-liking in the liked aspects of friend condition than in the disliked aspects of friends condition ($\beta = .306$, p = .004, $f^2 = .07$). Conversely, there was a marginal effect for individuals high in avoidance, who liked themselves slightly more after thinking about negative, relative to positive, traits of their friend, $(\beta = -.279, p = .092, f^2 = .02)$.

Discussion

Experiment 3 asked participants to think about a friend about whom they had both negative and positive feelings and then primed half of the participants with the friends' negative traits and half with the friends' positive traits. As predicted, individuals high in avoidance liked themselves more after thinking about their friends' negative traits whereas individuals low in avoidance liked themselves more after thinking about their friends' positive traits. By asking participants to think of a friend before priming either the negative or positive traits, Experiment 3 was able to manipulate only the currently salient positivity or negativity of the friends' traits, bolstering our explanation that avoidance moderates how individuals are affected by friends because of the friends similarity to negative versus positive aspects of self. Thus, Experiment 3 provided further evidence that avoidance of intimacy moderates whether friends with positive or negative traits improve feelings about the self.

In summary, the first three experiments and the pretest provided evidence that friends differentially affect avoidant and non-avoidant individuals. Non-avoidant individuals like themselves more when thinking of good friends (whom the pretest indicates were similar to positive aspects of self) whereas avoidant individuals like themselves more when thinking about ambivalent friends (whom the pretest indicated were as similar to negative aspects of self as they were to positive).

The final experiment examines the implication of the moderating role of attachment avoidance on how friends affect the self for friendship preferences. Because friends with negative qualities make highly avoidant individuals feel better about themselves, they should be more drawn to those friends. Conversely, because friends with positive qualities make individuals low in avoidance feel better about themselves, they should be more drawn to those friends. Experiment 4 examines whether avoidance of intimacy moderates the tendency to strategically utilize friends to protect the self. It was hypothesized that avoidance of intimacy would moderate friendship preference when the self was threatened (Murray, Griffin, Rose, & Bellavia, 2003; Vohs & Heatherton, 2001). Non-avoidant individuals under self-threat should prefer friends who are relatively more similar to positive self-aspects as compared to similar individuals not under threat. Conversely, avoidant individuals under threat should prefer friends who are relatively less similar to positive self-aspects as compared to similar individuals not under threat.

Experiment 4

Methods

Participants and design

Participants were 347 undergraduate students (52% male) enrolled in an introductory psychology class at SUNY, University at Buffalo who participated in partial fulfillment of a research requirement. The median age was 18. Seventy-nine percent of participants were Caucasian, with the remainder predominantly Asian and African American.

Procedures

Participants were told that they were participating in an experiment examining personality and friendship. The experiment was administered on computers situated inside individual cubicles, which allowed for complete privacy of the participants' responses.

First, participants were instructed to write a paragraph describing their actual self, a paragraph describing their ideal self (i.e., what they hoped and wished they might become), and a paragraph describing their feared self (i.e., what they feared they might become). Next, participants completed a series of questionnaires. These measures included the measure of adult attachment and a number of filler questionnaires assessing a wide variety of constructs. After completing the questionnaires, participants were told that the questionnaires they just completed actually comprised a personality test measuring their "surgency," a construct unfamiliar to the participants (Cavallo & Gabriel, 2006). In actuality, the questionnaires were not a personality test, and participants were given a bogus interpretation

of surgency for the purposes of the experiment. Participants were told that while the computer calculated their surgency score, they would get the opportunity to read about surgency and what its implications are. The computer then led participants to an ostensible website that described surgency and its consequences. On the website was an article that described surgency as predicting future success. Specifically, participants read that high levels of surgency predicted high levels of future success, while low levels of surgency predicted low levels of success. After reading the article about surgency, participants were given their surgency score. Participants in the no threat condition were told that "Your score is 89. The average score of University at Buffalo students is 67 out of 100. Your surgency score falls in the highest 15% of students". Participants in the threat condition were told that "Your score is 67. The average score of University at Buffalo students is 89 out of 100. Your surgency score falls in the lowest 15% of students".

After receiving their surgency score, participants were asked a few follow-up questions about surgency. Next, participants were asked to think about a friend. They were asked to write a paragraph about a friend of their choosing and describe a time they spent with that person. After describing their friend, they were asked to rate how similar their friend was to their actual self, ideal self, and feared self. For this rating, participants were asked to think back to the paragraphs they wrote previously about their actual, ideal, and feared selves, and rate the similarity to their friend using modified versions of the Inclusion of Other in the Self Scale (Aron et al., 1992). Participants were also asked indicated how close they were to the friend on a scale from 1 (not at all) to 7 (extremely). Finally, participants completed a manipulation check and were fully debriefed.

Results

Our primary hypothesis was that avoidance of intimacy would moderate which friends participants bring to mind when their self-esteem is threatened. To examine this hypothesis, perceived similarity of the friends to the feared self was subtracted from perceived similarity of the friends to the ideal self and a multiple regression analysis was run on the outcome. We were able to utilize a difference score because exploratory analyses revealed that the two variables used in the difference score (similarity-to-ideal and similarity-to-feared) moved in opposite directions as a result of the dependent variables and that the effects were roughly equivalent in magnitude (Blanton, Jaccard, Gonzeles, & Christie, 2006; cf. Carver, 1989). Thus, analyses of the difference score are presented for pedagogical purposes, as a means of showing the aggregate pattern.

As in the previous studies, the predictors included in the analyses were avoidant attachment style, experimental condition (0 = no-threat; 1 = self-threat), the interaction of avoidant attachment and experimental condition, self-esteem, and anxious attachment style. This analysis

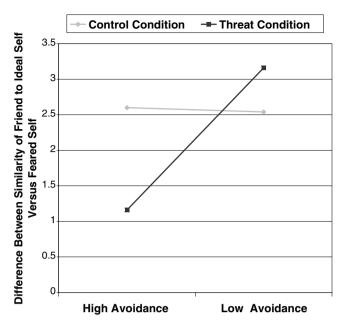


Fig. 5. Similarity of friend to self-aspects as a function of avoidance of intimacy and feedback.

revealed the predicted Avoidance × Friend Activation interaction, $\beta = .187$, t(341) = 2.585, p < .01, $f^2 = .02$ (see Fig. 5). In the no threat condition, avoidance levels did not significantly predict similarity of the friend to self aspects, p = .919. This was not surprising given the relative ease with which all participants were able to think of good and ambivalent friends in the pretest and in Experiments 1 and 2. However, we predicted that utilization of different friends would emerge when the self was threatened. As predicted, when under threat, similarity of the friend to self aspects was predicted by low avoidance ($\beta = -.268$, p < .001, $f^2 = .04$). High Avoidance predicted smaller differences between similarity to the ideal versus feared selves (see Fig. 5).

Finally, we wished to examine the possible effects of closeness to the friend, and the interaction of self-esteem and condition. The multiple regression analysis was repeated using closeness to the friend as the primary dependent variables. None of the main effects or interactions were significant (all ps > .17). Finally, the multiple regression analysis was repeated adding the self-esteem × friend interaction. That interaction was not significant (p = .215) and the interaction of interest remained significant.

Discussion

Although the pretest and the first two experiments suggested that avoidants and non-avoidants both have friends whom they perceive as similar to positive aspects of self and to negative aspects of self, Experiment 4 suggests that avoidance of intimacy determines which friends are utilized when the self is threatened. When told they had performed poorly on a test predictive of future success, avoidants and

non-avoidants brought friends to mind who would be most helpful in bolstering the self. Non-avoidant participants brought to mind friends who were viewed as more similar to positive, relative to negative, aspects of self. Conversely, avoidant participants brought to mind friends were more similar to negative, relative to positive, aspects of self. Thus, under threat conditions, avoidance of intimacy impacts which friends are valued.

General discussion

"Some of the finest friendships are between people of different dispositions. The mind is often attracted by perfections it lacks itself."

Unknown

The current research proposed that friends improve feelings about the self and do so differentially based on avoidance of intimacy. For non-avoidant individuals (who assimilate friends), friends who embody positive and desired aspects of self lead to positive feelings about the self. On the other hand, avoidant individuals (who contrast friends and thus see themselves as less similar to friends) benefit from friends who also embody negative and undesirable aspects of self. In order to test those hypotheses, a pretest was done to determine which friends might be good assimilation standards and which good comparison standards. The pretest indicated that "good" friends were seen as embodying desirable traits whereas "ambivalent" friends were seen as embodying undesirable traits. As predicted, the first two experiments provided evidence that good friends lead non-avoidant individuals to feel better about themselves and avoidant individuals to feel worse. Conversely, ambivalent friends lead avoidant individuals to feel better about themselves and non-avoidants to feel worse. Experiment 3 had participants think of a friend who had both positive and negative traits and primed participants with either the positive or negative traits. Highly avoidant individuals felt better about themselves after thinking about a friend who embodied negative traits whereas non-avoidant individuals felt better about themselves after thinking about a friend who embodied positive traits. Finally, Experiment 4 demonstrated the implications of the moderating role of avoidance of intimacy for friendship processes by demonstrating that avoidants and nonavoidants strategically brought to mind different friends when their self-esteem was threatened. After a self-esteem threat, non-avoidant participants brought to mind friends who were viewed as more similar to positive, relative to negative, aspects of self. Conversely, avoidant participants brought to mind friends were more similar to negative, relative to positive, aspects of self.

The current research increases understanding of the benefits of friendship. Previous research has established that friends are important to most people. For example, friends matter more to people than most other social relationships and are socialized with the most, encompassing 58% of social networks and the majority of social interaction (Fisher, 1982; Klinger, 1977). That large amount of social interaction is not surprising given that people report enjoying time spent with friends more than time spent alone, with family, or with spouses (Larson & Bradney, 1988). Indeed, friends are related to a plethora of positive outcomes: they provide a unique source of happiness in people's lives, above and beyond that accounted for by marriage and family (Argyle, 1987); and are related to psychological well-being and more positive feelings about the self (Bukowski, Newcomb, & Hoza, 1994; Kumashiro & Sedikides, 2005; Newcomb & Bagwell, 1995). The current research contributes to a growing literature on the form and function of friendship (e.g., Fehr, 2004; Kumashiro & Sedikides, 2005; Mussweiler & Ruter, 2003), by demonstrating the circumstances under which friends increase self-liking. It is possible that these effects would occur with other relationship partners, in addition to friends. For example, avoidance of intimacy appears to moderate the effects of romantic partners on the self in much the same way as it does friends (Gabriel et al., 2007). Thus, it is possible that family member and romantic partners may affect the self in a similar way. However, previous findings suggest that it is unlikely that the effects of mere acquaintances or strangers would be moderated by avoidance of intimacy because those relationships do not have enough intimacy on which to vary (Gabriel et al., 2005).

As the current research has shown, most people have friends about whom they have ambivalent feelings. Nonetheless, that ambivalence does not keep the friendships from being close and the friends for being relied upon for social support and the like (Holt-Lunstad et al., 2003; Uchino et al., 2001). However, unlike highly positive relationships, which have generally positive effects on the self (e.g., Argyle, 1987; Bukowski et al., 1994; Newcomb & Bagwell, 1995), ambivalent relationships tend to be associated with negative outcomes such as greater interpersonal stress, higher cardiovascular reactivity during acute stress, and high ambulatory systolic blood pressure during interactions (Holt-Lunstad et al., 2003; Uchino et al., 2001). Those negative effects make it difficult to understand why anyone would maintain ambivalent relationships. The current research suggests ambivalent friends may have important self-enhancing effects for about a quarter of the population (avoidant individuals). Thus, although the relationships may lead to more strife and difficulty, they may also increase self-liking for some people.

In the current research, avoidance of intimacy was assessed as a personality variable. However, most people have different attachment styles with different relationships (Baldwin & Fehr, 1997; Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996). For example, an individual may have a secure style with one friend and an avoidant style with another friend. Thus, it might be possible that even an individual with a dispositional non-avoidant style might benefit from having an ambivalent friend if he or she had

an avoidant style with that person. Similarly, individuals with dispositional avoidant styles might benefit from having good friends with whom they have non-avoidant styles. Further research will be necessary to examine that possibility.

By focusing on temporal changes in self-attitudes, the current model compliments recent work on attachment that implements social-cognitive methodologies to examine temporary, short-term effects of attachment activation. For example, priming thoughts of others who function as secure bases activates one's secure base schema, which then temporarily shifts feelings about the world and self (e.g., Baldwin, 1994; Cohen, Towbes, & Flocco, 1988; Mikulincer, Hirschberger, Nachmias, & Gillath, 2001; Mikulincer & Shaver, 2001). Nonetheless, there are important differences between past research on priming attachment security and the current model. First, there is no reason to believe that activating a friend necessarily activates a secure base. Relationships can be close and intimate without functioning as secure bases (Mikulincer, Gillath, & Shaver, 2002). Second, priming a secure base functions the same way for people regardless of attachment style (Mikulincer & Shaver, 2001), whereas the current research demonstrates a crucial moderation of attachment style. Third, a secure base explanation does not explain why the same friend is able to make individuals feel both better and worse about themselves (Experiment 4). Finally, a secure base explanation does not explain why avoidant individuals like themselves more after thinking about ambivalent friends, who seem unlikely to serve as secure bases for anyone.

The current work also compliments past work by Mikulincer and his colleagues that examined how attachment style moderates the perceived similarity between the self and others (Mikulincer & Horesh, 1999; Mikulincer et al., 1998). That research argues that different self-regulation styles related to attachment style lead to differences in perceived self-other similarity. Specifically, avoidant people's deactivating strategy leads to an underestimation of their similarity to others (Mikulincer et al., 1998) and a projection of the negative traits they wish to avoid onto others (Mikulincer & Horesh, 1999). Thus it is possible to imagine many interesting interplays between those findings and the ones detailed in this manuscript. However, any links between the two bodies of work should be made with caution and much further research because of differences in the measurement of attachment, the dependent variables, and, perhaps most importantly, the targets. Specifically, the studies detailed by Mikulincer and colleagues examined perceptions of strangers, not of friends. Indeed, none of our studies found evidence that avoidance moderated perceptions of similarity of ambivalent friends (who improved highly avoidants feelings about themselves) to negative self-aspects. Furthermore, although not significant, the pretest suggested the opposite pattern—avoidance predicted less perceived similarity between the ambivalent friend and negative self-aspects. Nonetheless, both manuscripts (and the studies of Gabriel et al., 2005, 2007; and Mikulincer et al., 1998) describe interesting ways in which avoidance influences social comparison and perceptions of others and thus suggest how important an understanding of attachment style may be for a full understanding of social comparison and vice versa.

At first glance, our results may seem at odds with research on Self-Evaluation Maintenance (SEM). According to SEM theory, friends who embody traits that are central to the self-concept are threatening (Tesser, 1988). In the current research, non-avoidant individuals felt better about the self when thinking about friends who embodied ideal and liked aspects of self (some of which are likely to be central to the self-concept). However, our findings are actually consistent with more recent research demonstrating that inclusion of others in the self can moderate SEM effects (e.g., Gardner, Gabriel, & Hochschild, 2002). Specifically, when a close friend is included in the self, classic SEM effects no longer occur; instead of comparing themselves to friends on central traits, individuals bask in their friends' reflected glory (Gardner et al., 2002). Similarly, when romantic partners are included in the self, individuals can readily bask in the reflected glory of their partner's achievements, even in domains highly relevant to the self (Lockwood, Dolderman, Sadler, & Gerchak, 2004). Because inclusion of others in the self is an integral component of relationship intimacy (Aron et al., 1991), our finding that individuals who pursue intimacy in relationships (non-avoidant individuals) feel better about themselves when thinking about good friends is not inconsistent with current SEM theory.

Finally, the effects found in the current studies are highly consistent with the social comparison effects found in our past work. Specifically, we have found avoidance moderates the effects of friends on the self such that avoidant individuals come to see themselves as less similar to their friends when thinking about them whereas non-avoidant individuals come to see themselves as more similar (Gabriel et al., 2005). Those findings are highly consistent with the current findings that avoidance moderates the effects of friends on self-liking. Thus, we propose that avoidants individuals like themselves more after thinking about friends who embody positive traits because those assimilate the friends' positive aspects onto their perceptions of themselves. Conversely, avoidant individuals like themselves more after thinking about friends who embody negative traits because they contrast the friends' negative aspects away from perceptions of themselves. Further research will be necessary to directly examine that proposed mechanism.

Conclusions

Although friendship plays an integral role in most people's social lives, social psychological research into the precise benefits of friendship has been relatively sparse. The current research brings us closer to understanding the importance of friendship by demonstrating that friends increase self-liking. In addition, the tendency of individuals in relationships to avoid intimacy plays an integral role in determining which friends increase (and which may decrease) self-liking. Thus, as long as one is careful in utilizing the appropriate friends when needed, it appears that Robert Louis Stevenson was right when he wrote: "A friend is a present that you give yourself".

References

- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Sage: Newbury Park, CA.
- Anderson, N. H. (1965). Averaging versus adding as a stimulus-combination rule in impression formation. *Journal of Experimental Psychology*, 70, 394–400.
- Argyle, M. (1987). The psychology of happiness. London: Methuen.
- Aron, A., Aron, E. N., & Smollan, D. (1992). The inclusion of others in the self (IOS) scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 596–612.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 60, 241–253.
- Baldwin, M. W. (1994). Primed relational schemas as a source of selfevaluative reactions. *Journal of Social and Clinical Psychology*, 13, 380–403.
- Baldwin, M. W., & Fehr, B. (1997). On the instability of avoidance of intimacy ratings. *Personal Relationships*, 2, 247–261.
- Baldwin, M. W., Keelan, J. P. R., Fehr, B., Enns, V., & Koh-Rangarajoo, E. (1996). Social-cognitive conceptualization of attachment working models: Availability and accessibility effects. *Journal of Personality and Social Psychology*, 71, 94–109.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7, 147–178.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment Styles among young adults: A test of a four-category model. *Journal of Personality* and Social Psychology, 61, 226–244.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.
- Blanton, H., Jaccard, J., Gonzeles, P. M., & Christie, C. (2006). Decoding the implicit association test: Perspectives on criterion prediction. *Journal of Experimental Social Psychology*, 42(2), 192–212.
- Bodenhausen, G. V., Kramer, G. P., & Süsser, K. (1994). Happiness and stereotypic thinking in social judgment. *Journal of Personality and Social Psychology*, 66, 621–632.
- Bowlby, J. (1973). Attachment and loss. Separation: Anxiety and anger (Vol. 2). New York: Basic Books.
- Bukowski, W. M., Newcomb, A. F., & Hoza, B. (1994). The association between rating scale and nomination-based popularity measures and an index of friendship mutuality. *Journal of Social and Personal Relationships*, 11, 485–488.
- Carver, C. S. (1989). How should multifaceted personality constructs be tested. Issues illustrated by self-monitoring, attributional style, and hardiness. *Journal of Personality and Social Psychology*, 56, 577–585.
- Cavallo, M., & Gabriel, S. (2006). No man is an island: Dismissive avoidant avoidance of intimacy and the need to belong. *Personality* and Social Psychology Bulletin, 32, 697–709.
- Chung, T., & Mallery, P. (1999). Social comparison, individualism-collectivism, and self-esteem in China and the United States. Current Psychology: Developmental, Learning, Personality, Social, 18, 340–352.
- Cohen, L. H., Towbes, L. C., & Flocco, R. (1988). Effects of induced mood on self-reported life events and perceived and received social support. *Journal of Personality and Social Psychology*, 55, 669–674.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644–663.

- Dijksterhuis, A., Spears, R., Postmes, T., Stapel, D., Koomen, W., Knippenberg, A. V., et al. (1998). Seeing one thing and doing another: Contrast effects in automatic behavior. *Journal of Personality and Social Psychology*, 75, 862–871.
- Ditto, P. H., & Lopez, D. F. (1992). Motivated skepticism: Use of differential decision criteria for preferred and nonpreferred conclusions. *Journal of Personality and Social Psychology*, 63, 568–584.
- Edelstein, R. S., & Shaver, P. R. (2004). Avoidant attachment: Exploration of an oxymoron. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 397–412). Mahwah, NJ: Lawrence Erlbaum Associates.
- Fehr, B. (2004). Intimacy expectations in same-sex friendships: A prototype interaction-pattern model. *Journal of Personality and Social Psychology*, 86, 265–284.
- Fisher, C. S. (1982). What do we mean by "friend"? An inductive study. *Social Network*, 3, 287–306.
- Fiske, S. T. (1980). Attention and weight in person perception: The impact of negative and extreme behavior. *Journal of Personality and Social Psychology*, 38, 889–906.
- Gabriel, S., Carvallo, M., Bartak, C., & Shafir, M. (2007). Social comparison and romantic partners: The moderating role of attachment style. Under Review.
- Gabriel, S., Carvallo, M., Dean, K., Tippin, B. D., & Renaud, J. (2005).
 How I see "Me" depends on how I see "We": The role of avoidance of intimacy in social comparison. *Personality and Social Psychology Bulletin*, 31, 1561–1572.
- Gardner, W. L., Gabriel, S., & Hochschild, L. (2002). When you and I are "we," you are not threatening: The role of self-expansion in social comparison. *Journal of Personality and Social Psychology*, 82, 239–251.
- Gillath, O., Shaver, P. R., Mikulincer, M., Nitzberg, R. E., Erez, A., & Van Ijzendoorn, M. H. (2005). Attachment, caregiving, and volunteering: Placing volunteerism in an attachment-theoretical framework. *Personal Relationships*, 12(4), 425–446.
- Griffin, D., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology*, 67, 430–445.
- Heppen, J. B., & Ogilvie, D. M. (2003). Predicting affect from global selfdiscrepancies: The dual role of the undesired self. *Journal of Social and Clinical Psychology*, 22, 347–368.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. Psychological Review, 94, 319–340.
- Higgins, E. (1989). Continuities and discontinuities in self-regulatory and self-evaluative processes: A developmental theory relating self and affect. *Journal of Personality*, 57, 407–444.
- Holt-Lunstad, J., Uchino, B. N., Smith, T. W., Olson-Cerny, C., & Nealey-Moore, J. B. (2003). Social relationships and ambulatory blood pressure: Structural and qualitative predictors of cardiovascular function during everyday social interactions. *Health Psychology*, 22, 388–397.
- Kestenbaum, R., Farber, E. A., & Sroufe, L. (1989). Individual differences in empathy among preschoolers: Relation to attachment history. In Empathy and related emotional competence. In N. Eisenberg (Ed.). New directions for child development (Vol. 44, pp. 51–64). San Francisco: Jossey-Bass.
- Klinger, E. (1977). *Meaning and void: Inner experience and the incentives in people's lives*. Minneapolis: University of Minnesota Press.
- Kumashiro, M., & Sedikides, C. (2005). Taking on board liability-focused feedback: Close positive relationships as a self-bolstering resource. *Psychological Science*, 16, 732–739.
- Kunda, Z. (1990). The case for motivated reasoning. Psychological Bulletin, 108, 480–498.
- Larson, R. W., & Bradney, N. (1988). Precious moments with family members and friends. In R. M. Milardo (Ed.), *Families and social* networks (pp. 107–126). Newbury Park, CA: Sage.
- Levy, M. B., & Davis, K. E. (1988). Lovestyles and attachment styles compared: Their relations to each other and to various relationship characteristics. *Journal of Social and Personal Relationships*, 5, 439–471.

- Liberman, A., & Chaiken, S. (1992). Defensive processing of personally relevant health messages. *Personality and Social Psychology Bulletin*, 18, 669–679.
- Lockwood, P., Dolderman, D., Sadler, P., & Gerchak, E. (2004). Feeling better about doing worse: Social comparisons within romantic relationships. *Journal of Personality and Social Psychology*, 87, 80–95.
- Lockwood, P., Marshall, T. C., & Sadler, P. (2005). Promoting success or preventing failure: Cultural differences in motivation by positive and negative role models. *Personality and Social Psychology Bulletin*, 31, 379–392.
- Markus, H., & Nurius, P. (1986). Possible selves. American Psychologist, 41, 954–996.
- Mikulincer, M., Gillath, O., & Shaver, P. R. (2002). Activation of the attachment system in adulthood: Threat-related primes increase the accessibility of mental representations of attachment figures. *Journal of Personality and Social Psychology*, 83, 881–895.
- Mikulincer, M., Hirschberger, G., Nachmias, O., & Gillath, O. (2001).
 The affective component of the secure base schema: Affective priming with representations of attachment security. *Journal of Personality and Social Psychology*, 81, 305–321.
- Mikulincer, M., & Horesh, N. (1999). Adult attachment style and the perception of others: The role of projective mechanisms. *Journal of Personality and Social Psychology*, 76, 1022–1034.
- Mikulincer, M., Orbach, I., & Iavnieli, D. (1998). Adult attachment style and affect regulation: Strategic variations in subjective self-other similarity. *Journal of Personality and Social Psychology*, 75, 436–448.
- Mikulincer, M., & Shaver, P. R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality* and Social Psychology, 81, 97–115.
- Murray, S. L., Griffin, D. W., Rose, P., & Bellavia, G. (2003). Calibrating the sociometer: The relational contingencies of self-esteem. *Journal of Personality and Social Psychology*, 85, 63–84.
- Mussweiler, T., & Ruter, K. (2003). What friends are for! The use of routine standards in social comparison. *Journal of Personality and Social Psychology*, 85, 467–481.
- Newcomb, A. F., & Bagwell, C. (1995). Children's friendship relations: A meta-analytic review. *Psychological Bulletin*, 117, 306–347.
- Pelham, B. W., & Wachsmuth, J. O. (1995). The waxing and waning of the social self: Assimilation and contrast in social comparison. *Journal of Personality and Social Psychology*, 69, 825–838.

- Pratto, F., & John, O. P. (1991). Automatic vigilance: The attentiongrabbing power of negative social information. *Journal of Personality* and Social Psychology, 61, 380–391.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Sedikides, C. (1993). Assessment, enhancement, and verification determinants of the self-evaluation process. *Journal of Personality and Social Psychology*, 65, 317–338.
- Simpson, J. A. (1990). Influence of attachment style on romantic relationships. *Journal of Personality and Social Psychology*, 59, 971–980.
- Skowronski, J. J., & Carlston, D. E. (1987). Social judgment and social memory: The role of cue diagnosticity in negativity, positivity, and extremity biases. *Journal of Personality and Social Psychology*, 52, 689–699.
- Stapel, D. A., & Koomen, W. (2001). I, we, and the effects of others on me: How self-construal level moderates social comparison effects. *Journal of Personality and Social Psychology*, 82, 766–781.
- Swann, W. B. Jr., (1990). To be adored or to be known? The interplay of self-enhancement and self-verification. In R. M. Sorrentino & E. T. Higgins (Eds.), *Motivation and cognition* (pp. 404–448). New York: Guilford Press.
- Tesser, A. (1988). Toward a self-evaluation maintenance model of social behavior. In L. Berkowitz (Ed.). Advances in experimental social psychology: Social psychological studies of the self: Perspectives and programs (Vol. 21, pp. 181–227). Academic Press: San Diego, CA.
- Uchino, B. N., Holt-Lunstad, J., Uno, D., & Flinders, J. B. (2001). Heterogeneity in the social networks of young and older adults: Prediction of mental health and cardiovascular reactivity during acute stress. *Journal of Behavioral Medicine*, 24, 361–382.
- Vohs, K. D., & Heatherton, T. F. (2001). Self-esteem and threats to self: Implications for self-construals and interpersonal perceptions. *Journal of Personality and Social Psychology*, 81, 1103–1118.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070
- White, K., & Lehman, D. R. (2005). Culture and social comparison seeking: The role of self-motives. *Personality and Social Psychology Bulletin*, 31, 232–242.