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Pers Soc Psychol Bull 2001; 27; 1144
DOI: 10.1177/0146167201279007

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Mindset and Relationship Illusions: The Moderating Effects of Domain Specificity and Relationship Commitment

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Two studies integrated and advanced mindset and relationship illusions research. In Study 1, mindset influenced perceived partner superiority and goal domain moderated this effect. When focusing on a nonrelationship goal, an implemental mindset increased idealistic partner perceptions. When focusing on a relationship goal, a deliberative mindset increased idealistic partner perceptions. In Study 2, effects for mindset about relationship goals were moderated by relationship commitment. High-commitment participants defended against the threat of a deliberative mindset by increasing their positive views of their partner. Low-commitment participants did not defend against deliberation about a relationship goal. No such differences were found for relationship implementals; both high- and low-commitment individuals increased their glowing partner views when in an implemental mindset.

We generally are successful in sustaining our convictions that our partner and our relationship are better than others' partners and relationships. Moreover, such positive idealizations are a cornerstone to the satisfaction and survival of close relationships (e.g., Murray & Holmes, 1997). However, the failure to ever realistically consider one's relationship and one's partner might set one on a course for catastrophe. Fortunately, correlational evidence suggests that this peril does not loom too large. Despite relationship illusions, individuals are moderately adept at monitoring their concurrent relationship realities (Murray, Holmes, & Griffin, 1996). Nevertheless, an important two-sided question remains: Under what conditions do people marshal relationship illusions, in service of sustaining satisfied relationships, and under what conditions might relationship illusions be minimized?

A critical factor may be mindset. According to Gollwitzer's (1990; Gollwitzer & Bayer, 1999) mindset theory, different cognitive processes are associated with decision making and goal implementation. When someone is in the process of making an important decision, that person is said to be in a deliberative mindset. At this stage, one's task is to make the best possible decision by becoming increasingly open to information about different competing goals and to impartially evaluate this information. Once the decision is made, the person is then said to be in an implemental mindset. At this point, one's task is to think about how, where, and when to achieve one's chosen goal by narrowly focusing his or her attention on information promoting goal achievement. Research on the self has revealed that this particular set of circumstances influences perceptions that people have about themselves. When people are thinking about implementing an important goal, their self-perceptions strongly reflect positive illusions, whereas deliberating about whether to choose a given goal brings

Authors' Note: This research was supported by a McGill Major fellowship and by a doctoral fellowship from the Social Sciences and Humanities Research Council of Canada to the first author and by grants from the Social Sciences and Humanities Research Council of Canada and by Fonds pour la Formation de Chercheurs et l'Aide à la Recherche to the second author. We gratefully thank Mark Baldwin, Richard Koestner, and Tara MacDonald for comments on an earlier version of this article. We also thank Jennifer Bartz, Teresa Grosko, Mande Labelle, and Karyn Levy for their invaluable assistance in recruiting and running participants. Correspondence concerning this article should be addressed to Faby Gagné, who is at the Department of Psychology, McGill University, 1205 Dr. Penfield Avenue, Montreal, Quebec, Canada H3A 1B1; e-mail: faby@ego.psych.mcgill.ca.

PSPB, Vol. 27 No. 9, September 2001 1144-1155
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about more even-handed and accurate self-perceptions—a dampening of positive illusions (Gollwitzer & Kinney, 1989; Taylor & Gollwitzer, 1995). These cognitive processes also are likely to influence relationship illusions.

A minimization of positive illusions when in a deliberative mindset about an important decision prevents people from making regretful snap judgments by allowing for an impartial and thorough analysis of competing decision alternatives. In contrast, increased positive illusions when in an implemental mindset enable people to strive more persistently at their goals by protecting them from distracting thoughts about the expected desirability and feasibility of the goal. Extending this to relationship illusions, one would hypothesize that an implemental mindset would bolster relationship illusions, whereas a deliberative mindset would minimize relationship illusions.

However, theory and research in close relationships suggest that the doubt and uncertainty of a deliberative mindset might evoke a completely opposite response. People invested in an exclusive relationship have passed the deliberative and implemental mindsets: They have decided to be, and they currently are, in a romantic relationship. As a result, they are in the action phase, in which they engage in daily activities to make their relationship work. In Gollwitzer's (1990) terms, individuals at this phase are already committed to their relationship. Thus, deliberating about one's relationship could be perceived as a regressive step backward for the relationship, inducing doubt and uncertainty. Marshaling relationship illusions may be a way of defending against such threat.

Indeed, doubt and uncertainty in the relationship can be reduced by the use of several cognitive tools. When individuals feel threatened by an attractive available alternative to their partner, they tend to reject and devalue the alternative (Johnson & Rusbult, 1989; Lydon, Meana, Sepinwall, Richards, & Mayman, 1999). In addition, when confronted with a loved one's imperfections, individuals are motivated to minimize their partner's faults and to embellish their virtues or to turn their partner's faults into virtues (Murray & Holmes, 1993, 1996). In this light, the uncertainty associated with deliberation about an important relationship goal might bring on a compensatory boost of relationship illusions.

One purpose of the present research was to investigate how mindset influences the way individuals see their romantic partner. The second purpose of the present study was to resolve the competing predictions about mindset that are derived from theory and research on positive illusions and close relationships, respectively. We theorized that the goal domain of one's mindset would moderate the effects of mindset on relationship

illusions. Deliberating or thinking about implementing a relationship goal (e.g., getting married) would influence relationship perceptions in a different way than deliberating or thinking about implementing a nonrelationship goal (e.g., accepting a job offer).

Because the person is already committed to the relationship, deliberation about an important relationship goal may elicit threatening feelings of insecurity in the relationship. As a result, individuals should bolster their relationship illusions to defend against the threat associated with a deliberative mindset. Thus, those in a relationship deliberative mindset would be expected to exaggerate relationship illusions compared to those in a control condition (Hypothesis 1).

We also expected those in an implemental mindset about an important relationship goal to increase their relationship illusions compared to those in a control condition (Hypothesis 2). Our reasoning about an implemental mindset in the relationship domain follows mindset theory: By increasing their beliefs that their partner is better than others' partners in response to an implemental mindset, one puts aside insecurities about a partner's attributes that could create doubt about the decision made, which, in turn, would hinder goal implementation. Therefore, both a deliberative mindset and an implemental mindset about a relationship goal were expected to elicit more relationship illusions than a control condition.

Deliberation about a nonrelationship goal should not present a direct threat to the relationship; therefore, it was not expected to elicit a defense. Instead, we expected an extension of Taylor and Gollwitzer's (1995) findings for self-appraisals and self-illusions to relationship appraisals and relationship illusions. Previous work on mindset has found that its effects generalized across situations related to the self (Gollwitzer & Kinney, 1989; Taylor & Gollwitzer, 1995). For example, deliberating about whether to apply to medical school should elicit thoughts about the expected feasibility and desirability of the goal (Am I intelligent enough for medical school?), which, in turn, should prime generally less positive beliefs, thus attenuating illusions including relationship illusions. Therefore, we expected those in a nonrelationship deliberative mindset to minimize their relationship illusions compared to those in a control condition (Hypothesis 3). However, as Taylor and Gollwitzer (1995) found for illusions about the self, we expected goal deliberation to perhaps dampen but not completely eliminate relationship illusions.

In contrast, we expected participants in an implemental mindset about a nonrelationship goal to bolster their relationship illusions compared to those in a control or deliberative mindset condition (Hypothesis 4).

An implemental mindset invoked by focusing on accomplishing set goals (e.g., My good grades will get me into medical school) should elicit generally more positive beliefs and thus activate relationship illusions.

STUDY 1

In Study 1, we investigated whether goal domain would moderate how mindset influences dating people's perceptions of their partner by randomly assigning people to relationship or nonrelationship mindset conditions or to a control condition. As described in the Method section, participants in the experimental conditions participated in a mindset manipulation task similar to Gollwitzer and Kinney's (1989). Subsequently, all participants completed a measure designed to assess their perceptions of their romantic partner.

Method

PARTICIPANTS

The sample comprised 168 women and 38 men (M age = 20.1 years). Of these, 90% were not living with their dating partner, whereas 10% reported cohabiting with their current dating partner at the time of assessment. Of the respondents, 24 reported being involved in a casual dating relationship, whereas the remaining participants reported being involved in an exclusive dating relationship. At the time of assessment, respondents indicated dating their current partner for a mean length of 82.2 weeks (range = 4 to 377 weeks). Respondents either received CAN\$10 or course credit and CAN\$5 for their participation.

PROCEDURE

Whether a given testing session would be an experimental session (i.e., a session with mindset manipulation) or a control session (i.e., a session with no mindset manipulation) was randomly determined before participants' arrival. Participants attended the 1-hour experimental session individually or in small groups of two to five. After arriving at the laboratory, participants were greeted by one of the three female experimenters who explained that the study investigated different life aspects of dating students. They were seated at separate tables with partitions so that participants could not see others working but all could see the experimenter.

Then, participants in the experimental session were randomly assigned to a mindset (deliberative vs. implemental) and goal domain (nonrelationship vs. relationship) condition. They were given verbal instructions orienting them to the task to follow and then given written instructions following the procedures of Gollwitzer and Kinney (1989). They also were provided with a written example ostensibly completed by a previous participant. For example, the written example for

the nonrelationship deliberative mindset condition was, "Should I go on a vacation or not?" Then, participants were asked to close their eyes for a minute and to focus on the task at hand. Finally, participants were given their own exercise booklet to complete.

Deliberative mindset conditions. Deliberative participants in the nonrelationship goal domain were asked to name and describe an undecided project that was not related to their relationship, whereas those in the relationship goal domain were asked to name and to describe an undecided project that was related to their relationship. They were further told that the undecided project should be important and take the form of "Should I do X or not?" In their exercise booklet, respondents first were to write down the immediate and long-term positive and negative consequences of making the decision to pursue the goal and of making the decision to not pursue the goal. For each positive and negative consequence, participants were asked to rate the probability of occurrence in percentage. Then, participants were instructed to list the expected difficulties that might arise if they decided to pursue the personal goal.

Implemental mindset conditions. Implemental participants in the nonrelationship domain condition were asked to name and describe an intended project that was not related to their relationship, whereas those in the relationship domain condition were asked to name and describe an intended project related to their relationship. The intended goal had to be important and one that could be accomplished within the near future. They were asked not to invent a project for this exercise. In their exercise booklet, participants were instructed to first list the five most important steps involved in accomplishing their goal and to then list when, where, and how each step was to be performed.

Mindset consolidation. To strengthen their induced mindset, participants were asked to rank-order four items according to how much they described their own thoughts and feelings (see Salancik, 1982). Unbeknownst to the participants, in the deliberative mindset condition, all the items described thoughts that people have when in a deliberative mindset (e.g., I think that I need more information before making a decision to pursue my potential project), whereas in the implemental mindset condition, all the items described thoughts that people have when in an implemental mindset (e.g., My thoughts are focused on what I need to do to achieve my chosen project.)

Manipulation check. At the end of their mindset exercise booklet, participants were asked to complete a manipulation check questionnaire. Following exactly from Gollwitzer and Kinney (1989), participants in a deliberative mindset condition were asked how im-

portant was their undecided project (1 = *not at all important*, 9 = *extremely important*), whereas those in an implemental mindset were asked how much they would mind if their decided goal, for one reason or another, could not be implemented (1 = *not at all*, 9 = *very much*). In addition, all participants were asked how related to their dating relationship was their decided or undecided project (1 = *not at all related*, 9 = *extremely related*).

Moreover, participants were asked to complete two critical items designed to determine whether implemental participants had written about a goal for which they were decided and whether deliberative participants had described a goal for which they were still undecided.

The first critical item determined how close participants were to making a decision on a scale of 13 points ranging from *far from making a decision* to *past having made a decision*, with the midpoint labeled *in the act of making a decision*. The second critical item determined how close participants were in achieving their project by choosing one of five options: (a) I am not yet in the act of making a decision to pursue my potential personal project, (b) I am currently in the act of making a decision to pursue my potential personal project, (c) I have made a decision and I am now thinking of ways to implement my chosen personal project, (d) I have made a decision and I am currently doing the things necessary to achieve my chosen personal project, and (e) I have achieved my chosen personal project. Implemental participants who circled nine or greater for the first critical item, or three or greater for the second one, were retained as implemental participants who had described a decided goal. Deliberative individuals who circled five or less for the first critical item, or two or less for the second one, were retained as deliberative participants who had described an undecided goal.

Control condition. Participants assigned to the no-mindset control condition did not participate in the mindset manipulation task. Instead, they only completed a questionnaire booklet containing the dependent variable and demographic questions. The experimental and control groups were run in different sessions because the manipulation of mindset took approximately 35 minutes longer than the dependent variable booklet.

Perceptions of partner superiority. Following the completion of the mindset task, all respondents completed a questionnaire booklet containing the dependent variable and some background questions. Based on previous research, four items were developed to measure whether participants saw their partner more positively than how they perceived the average peer of the same sex and age as the partner. Participants were asked to compare, in percentages, the physical attractiveness, the intelligence

(Swann, Hixon, & De La Ronde, 1992), the warmth (Murray et al., 1996), and the sense of humor (Swann & Gill, 1997) of their dating partner relative to the partner's same-sex peers (e.g., "My partner is more physically attractive than ___% of men [or women] of the same age"). Ratings for each item were aggregated to form a global perception of partner superiority measure. Interitem correlations ranged from .14 to .38, with an alpha equal to .59, somewhat lower than in a previous field study ($\alpha = .72$) (Gagné & Lydon, 1998).

Results

MANIPULATION CHECK

Of 92 participants in the implemental mindset conditions, 16 had written about a goal for which they were still undecided, whereas 9 of 80 participants in the deliberative mindset conditions had described a goal for which they had come to a decision. Furthermore, 1 participant described a goal that was unimportant, and 3 participants in the nonrelationship mindset conditions described a goal that was extremely related to their romantic relationship. Preliminary analyses confirmed that these participants responded in a significantly different way to the dependent measure. Consequently, they were excluded from the subsequent analyses. The final sample thus consisted of 177 participants: 143 in the four experimental conditions and 34 in the no-mindset control condition.

The importance of the goals did not vary by mindset or by goal domain, $p > .1$. Moreover, goals described in the relationship mindset conditions were more related to the romantic relationship than those described in the nonrelationship mindset conditions, $p < .001$. Deliberatives' goals were significantly more related to their relationship than that of implementals', $p = .05$. This was due to nonrelationship deliberatives ($M = 5.18$) describing their goal as more related to the relationship than nonrelationship implementals ($M = 3.94$) but still significantly less related to the relationship than those described by relationship deliberatives ($M = 7.71$) and relationship implementals ($M = 7.53$), who did not differ. Because deliberation is a time when people are more open to incoming information than goal implementation (Heckhausen & Gollwitzer, 1987), it would be natural for people who are deliberating about a personal goal to think of other life domains such as their relationship, especially if the decision has practical implications for the relationship.

EVIDENCE OF RELATIONSHIP ILLUSIONS

Our measure of relationship illusions derived from theoretical (Taylor & Brown, 1988) and empirical (e.g., Murray & Holmes, 1997) work on logical impossibilities:

Most people believe that their partner is better than average, but it is statistically impossible for the vast majority of dating partners to be better than the average. To ascertain whether respondents' perceptions of the partner were indeed illusory, ratings of partner were compared to the theoretical scale midpoint of 50. When collapsing across experimental conditions, a one-sample *t* test revealed that participants saw their partner ($M = 77.68$) more positively than the typical peer, $t(176) = 31.47$, $p < .001$. Moreover, analyses individually comparing all five experimental conditions to the scale's midpoint revealed that participants rated their partner more positively than the average, irrespective of their assigned experimental condition, all p s $< .001$.

EFFECTS OF MINDSET

A 2 (mindset: deliberative vs. implemental) by 2 (domain: nonrelationship specific vs. relationship specific) ANOVA yielded a significant interaction between mindset and domain, $F(1, 139) = 8.84$, $p < .01$. When thinking of nonrelationship goals, participants exaggerated their partner's superiority more in an implemental mindset ($M = 81.85$) than in a deliberative mindset ($M = 76.90$), $t(139) = 1.93$, $p < .06$, (two-tailed). In contrast, when thinking about relationship goals, participants exaggerated their partner's superiority more in a deliberative mindset ($M = 80.58$) than in an implemental mindset ($M = 74.59$), $t(139) = 2.33$, $p < .05$, (two-tailed). The main effects of mindset and domain did not approach significance, both F s < 1 .

To examine these four experimental conditions in relation to the control group, a five-groups one-way ANOVA was performed supplemented by comparisons to the control group ($M = 74.99$). As predicted and illustrated in Figure 1, both nonrelationship implemental and relationship deliberative groups reported greater partner superiority than the control group, $t(172) = 2.49$ and 2.01 , respectively, p s $< .05$. However, neither nonrelationship deliberative nor relationship implemental groups differed from the control group in their perceptions of partner superiority, both t s < 1 .

INTERNAL ANALYSIS OF DELIBERATIVE MINDSET

Perhaps participants in the relationship deliberative mindset condition boosted their relationship illusions because of simple priming: Relationship deliberatives may have listed more positive consequences in the mindset task than nonrelationship deliberatives. To address this possibility, comparisons were made between relationship and nonrelationship deliberatives on the average number of immediate and long-term positive and negative consequences listed. However, we found that relationship deliberatives reported, on average, fewer—not more—positive long-term consequences

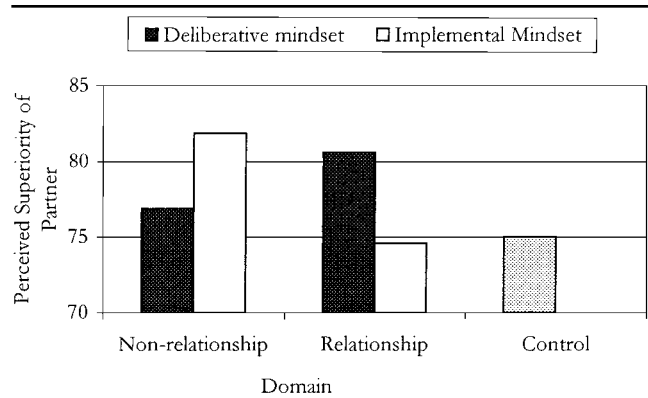


Figure 1 Effects of nonrelationship mindset and relationship mindset on perception of partner superiority (Study 1).

($M = 2.68$) than did nonrelationship deliberatives ($M = 3.64$), $t(65) = 3.52$, $p < .001$. No differences were found for listed negative consequences.

Discussion

Consistent with our hypotheses, mindset's influence on ratings of partner superiority varied as a function of the domain in which mindset was manipulated. In the nonrelationship domain, thinking about implementing a personal goal increased positive perceptions of the romantic partner. However, in the relationship domain, deliberating about an undecided relationship goal increased positive perceptions of the partner.

These results do not indicate that deliberation is a time when people are relatively less idealistic about their partner's virtues and shortcomings. Whereas thinking of implementing a goal outside the relationship led to an exaggeration of relationship illusions, the deliberate and careful appraisal of an undecided goal outside the relationship did not lead to the hypothesized minimization of those illusions compared to controls. Instead, the present results corroborate the assertion that relationship illusions are a robust phenomenon.

There were two major limitations to Study 1. First, contrary to our predictions, individuals who were focused on how to implement a decided relationship goal did not report more relationship illusions than did control participants. One likely explanation is that young dating individuals may not be implementing many long-term relationship goals. For example, although their data were not included in the analyses reported, 16% of those assigned to the relationship implemental mindset condition described relationship goals for which they were still undecided. Indeed, at the end of the experimental session, some participants explained to the experimenter how difficult it was for them to think of a decided relationship goal. Such difficulty in describing a decided relationship goal or the

realization that one has few decided-on relationship goals may have prevented these individuals from adopting a strong implemental mindset.

Relatedly, a second limitation to Study 1 was the loss of participants due to difficulty in following their respective mindset task instructions. Previous mindset studies have used less stringent instructions for manipulating mindset. Moreover, previous mindset studies have oversampled participants from populations likely to be involved in on-going decision making and goal pursuits. For example, Taylor and Gollwitzer (1995) mainly recruited college seniors because previous pilot testing revealed weaker effects with freshman and sophomore students. On the brink of graduating from college, seniors are more likely to be faced with important conflicting goals, whereas their junior counterparts are more likely to be focusing on enacting daily tasks related to their studies. Our sample was recruited mainly in introductory-level university classes, and this may be another reason why some participants were unable to generate goals satisfying the requirements of their assigned mindset condition.

A second study was conducted to address these limitations and to replicate relationship mindset's effects on perceived superiority of the partner. First, to address the lack of effects with relationship implementals and the loss of participants due to difficulty in generating task-congruent goals, we recruited students anticipating a university graduation. Students undergoing such a life transition are likely to be faced with many important decisions and new goals. Also, in dealing with the possibility that students may have difficulty generating specific relationship goals (e.g., going on a vacation with my partner), all students were assigned a goal pertinent to their real-life transition.

STUDY 2

Study 1 addressed the question, "When do people increase or minimize their idealized partner-perceptions?" In Study 2, we addressed the question, "Why do intimates increase their idealized partner-perceptions when deliberating about an important relationship goal?"

The rationale for why people defend against relationship threats is that they are committed to the relationship (Johnson & Rusbult, 1989; Lydon, 1999). Commitment represents the motivation to maintain and to defend one's relationship in the face of adversity. If people defend against deliberation about the relationship because of commitment, then individual differences in commitment should moderate such defending. In three studies, Johnson and Rusbult (1989) found that the devaluation of relationship alternatives was associated with greater commitment when the alternative posed a

threat to the relationship due to his or her physical attractiveness or availability. More recently, Lydon and colleagues (1999) have expanded this work by calibrating level of commitment with level of adversity. They found that people will only be motivated to defend their relationship when the level of commitment matches the level of adversity. Only those moderately committed defended against a moderate level of threat, whereas only those highly committed defended against a high level of threat.

Given this evidence, Study 2 sought to investigate whether relationship mindset's influence on relationship illusions would be moderated by commitment level. We theorized that dating individuals would only be motivated to defend against the threat of a deliberative mindset about a relationship goal if their commitment to their relationship was high. Consequently, we hypothesized that dating intimates who were highly committed to their relationship would respond to intense deliberation about an important relationship goal by increasing their idealized perceptions of their romantic partner (Hypothesis 5). Dating individuals who were low in attitudinal commitment would not be motivated to defend against deliberation of a relationship goal because the associated threat exceeds their commitment level. Instead, we expected these individuals to fully engage in deliberation and to minimize—or at least not increase—their positive perceptions of their partner (Hypothesis 6).

An implemental mindset about a relationship goal should be associated with general positive affect and not be threatening to young dating intimates. We expected that the decision to implement an important relationship goal would elicit positive beliefs about the relationship, independent of how committed one is to the relationship. Therefore, for both high- and low-commitment individuals, thinking about implementing an important relationship goal was expected to increase one's positive perceptions of their partner (Hypothesis 7).

Method

PARTICIPANTS

To be eligible for Study 2, participants had to be involved in a heterosexual dating relationship for at least 4 weeks and not currently contemplating ending their relationship. Also, they or their partner had to be graduating from university that spring and unsure of whether they would be living in the same city as their partner after graduation.

The sample comprised 69 women and 31 men ($M_{age} = 21.8$ years). Respondents had been dating their current partner for a mean length of 88 weeks (range = 4 to 305 weeks). Only 3 of the respondents reported being involved in a casual dating relationship and 2 reported

living with their partner. Eighty-two reported intentions to graduate in the spring and 45 had partners who were graduating that spring.

Postgraduation plans. Of the 82 graduating participants, 18 reported not knowing what they would be doing next year after graduation, whereas 33 were planning to pursue another university degree, 5 were planning to travel, 25 were planning to work, and 1 had other plans.

PROCEDURE

Baseline commitment measure. During a preliminary 5-minute telephone interview, participants were asked, using a 9-point scale (1 = *not at all*, 9 = *completely*): “To what extent do you feel committed to your relationship right now?” “How invested are you in this relationship?” “To what extent do you feel dedicated to your relationship?” Items were aggregated to create a baseline composite measure of relationship commitment ($\alpha = .93$). A median split was then performed to create two commitment groups: high ($n = 50$) versus low ($n = 50$).

Manipulation of mindset. Participants came to the laboratory individually or in groups of up to five and were greeted by one of the three female experimenters. As in Study 1, participants were seated at separate tables with partitions so that participants could not see others working but so that all could see the experimenter. The experiment took on average 1 hour to complete and participants either received CAN\$5 or a movie ticket for their participation.

Participants were randomly assigned to one of three experimental conditions, given written instructions orienting them to their respective condition task, and then asked to close their eyes for a minute and to focus on the task at hand. Those assigned to the no-mindset control condition did not participate in the mindset manipulation task. Instead, they first completed a questionnaire booklet containing the dependent variable and the manipulation check question and then a filler task.

In contrast to our previous experimental study of mindset and relationship goals, in this study, we wanted to focus all participants on a higher order relationship goal of particular relevance as graduation approached—committing to their relationship. Because the sample had indicated their intentions, at least in the short run, to maintain their relationship, all who were randomly assigned to the implemental mindset condition could be induced to think about when, where, and how to implement this goal after graduation. However, a deliberative mindset requires consideration of a not-yet-resolved goal. Therefore, those randomly assigned to the deliberative mindset condition were asked to deliberate about increasing their commitment to the relationship after graduation.

Participants assigned to the relationship deliberative mindset condition were given the following written instructions:

Past research has shown that people who are going through major life transitions (e.g., graduating from university) are likely to feel very uncertain about many things in their lives, including their romantic relationship. These individuals are not yet sure whether to take action in order to change things in their relationship or not. They ask themselves whether it might not be better to leave things as they are. This means that they haven't decided to take action, but they haven't decided against it either.

Subsequently, they were instructed to carefully deliberate about increasing their own commitment to their relationship after graduation. Specifically, they were asked to list the positive and negative consequences of increasing and of not increasing their commitment to their relationship after graduation, to rate the probability of occurrence in percentage for each consequence, and to list the expected difficulties that might arise if they decided to increase their commitment. To consolidate their mindset, deliberative participants completed a task similar to Study 1; however, this time, they rank-ordered items describing a deliberative mindset about increasing their commitment to their relationship after graduation (e.g., I think that I need more information before making a decision to increase my commitment to my relationship after graduation).

Participants assigned to the relationship implemental mindset condition read the following instructions:

Past research has shown that people who are going through major life transitions (e.g., graduating from university) are more likely to feel determined about many things in their lives, including their romantic relationship. These individuals know what they want in their relationship. They are focusing on how to maintain their relationship by carefully making plans.

They were further instructed to list the five most important steps in bringing about their own goal of maintaining their relationship after graduation. They were then asked to list when, where, and how they would implement these steps. Participants in the implemental mindset condition also were asked to complete a mindset consolidation task similar to Study 1. However, this time, they rank-ordered items describing an implemental mindset about maintaining their commitment to their relationship after graduation (e.g., My thoughts are focused on what I need to do to maintain my relationship after graduation).

Manipulation check. At the end of the mindset task, individuals assigned to the deliberative mindset condition were asked to rate, in percentages, how certain they were about increasing their relationship commitment after they or their partner graduated from university. Those assigned to the implemental mindset condition were asked to rate, in percentages, how certain they were about maintaining their relationship commitment after they or their partner graduated from university. Participants assigned to the control condition were asked to respond to both questions at the end of the administration of the dependent variables. Our rationale was that a deliberative mindset should decrease certainty, whereas an implemental mindset should increase certainty compared to a control group.

Perceptions of partner superiority. Subsequent to the manipulation check question, participants completed a booklet comprising demographic questions and the dependent measure. To assess positive perceptions of the romantic partner, participants completed the same four-trait measure as in Study 1. However, in Study 1, participants were asked to compare their partner to peers of the same sex and age as the partner. In Study 2, participants were instead asked to compare their partner to the typical dating partner of the same sex and age as their partner because the typical partner constitutes a better reality benchmark than the typical peer for determining whether perceptions of the partner are indeed illusory.

Results

MANIPULATION CHECK

All participants completed their tasks according to instructions. A 2 (condition: deliberative vs. control) \times 2 (commitment: high vs. low) ANOVA was performed to compare controls' certainty ratings of increasing their commitment to their relationship to those in the deliberative mindset condition and to address the possibility that relationship commitment interacted with mindset in creating certainty about commitment increase. Contrary to what we expected, controls' certainty ratings of increasing their relationship commitment after graduation ($M = 59.8\%$) did not differ from those made by participants in the deliberative mindset condition ($M = 60.5\%$), $F < 1$. Although controls were similar to deliberatives in uncertainty, they did not specify and deliberate about the bases of their uncertainty as did those in the deliberative mindset condition. The lack of difference between deliberative and control participants can be explained by the generalized state of uncertainty experienced by students experiencing a major life transition such as graduating from university (Lydon, Pierce, & O'Regan, 1997). A second reason may be that individual differences in relationship commitment overrode the

effect of deliberation on certainty. As one would expect, individuals high in relationship commitment were more certain about increasing their commitment to their relationship ($M = 71.4$) than were those low in relationship commitment ($M = 46.2$), $F(1, 61) = 10.43$, $p < .01$. Of importance, the interaction between the experimental conditions and relationship commitment was not significant, $F < 1$, eliminating the possibility that deliberation induced more uncertainty among low-commitment individuals than among high-commitment individuals.

To compare controls' certainty ratings of maintaining their commitment to their relationship to those in the implemental mindset condition and to address the possibility that relationship commitment interacted with mindset in creating certainty about commitment maintenance, a 2 (condition: implemental vs. control) \times 2 (commitment: high vs. low) ANOVA was performed. Controls' certainty ratings of maintaining their commitment to their relationship after graduation were significantly lower than those made by participants in the implemental mindset condition, $F(1, 63) = 11.00$, $p < .01$. This suggests that the implemental mindset task boosted students' certainty about their future. A main effect of relationship commitment also revealed that individuals high in relationship commitment were more certain about maintaining their relationship ($M = 85.0$) than were those low in relationship commitment ($M = 66.4$), $F(1, 63) = 11.42$, $p < .01$. Again, the interaction between the experimental conditions and relationship commitment was not significant, $F(1, 63) = 1.21$, *ns*.

Finally, controls' certainty ratings of increasing their commitment to their relationship ($M = 59.8$) did not differ from their certainty ratings of maintaining their commitment to their relationship ($M = 65.1$), $t(31) = 1.47$, *ns*.

EVIDENCE OF RELATIONSHIP ILLUSIONS

As in Study 1, respondents' positive perceptions of their partner were compared to the scale midpoint of 50 to determine whether participants' perceptions were illusory. When collapsing across experimental conditions, a one-sample *t* test revealed that participants saw their partner ($M = 79.69$) more positively than the typical partner, $t(99) = 32.51$, $p < .001$. Analyses comparing each of the three experimental conditions to the scale's midpoint again revealed that participants rated their partner more positively than the average partner, all *ps* $< .001$. In fact, all 100 participants indicated that their partner was better than the average partner.

EFFECTS OF MINDSET AND COMMITMENT

Preliminary analyses. In this study, relationship mindset about future commitment to the relationship was manipulated using students who were undergoing a major life

transition: graduation from university. We examined various potential factors being associated with positive perceptions of the partner such as age, gender, who is graduating (the participant or their partner), postgraduation plans, and so forth. Indeed, an analysis of covariance (ANCOVA) indicated that participants' postgraduation plans were confounded with positive perceptions of the partner such that those continuing in school had especially positive perceptions of the partner compared to those entering the workforce and those planning to travel, $F(1, 92) = 7.51, p < .01$. Thus, participants' postgraduation plans were retained as a covariate in the following analyses.

Perceived superiority of the partner. First, a 3 (mindset: deliberative, implemental vs. control) \times 2 (commitment: high vs. low) ANCOVA was conducted. This omnibus F test was followed by planned comparisons (one-tailed t tests) to offer a more focused test of our hypotheses. All means presented in this section were adjusted for the covariates. One participant could not be included in the analyses because she did not complete the question on her postgraduation plans.

The analysis yielded the predicted main effect of mindset, $F(2, 92) = 5.13, p < .01$. Both those in an implemental mindset ($M = 82.38$) and in a deliberative mindset ($M = 80.47$) had significantly more positive perceptions of the romantic partner than did controls ($M = 75.83$), $t_s(92) = 3.18$ and $2.20, p_s < .01$ and $.05$, respectively. However, planned comparisons revealed that this pattern was present for high-commitment individuals only. As illustrated in Figure 2, for those high in commitment, both implemental ($M = 84.10$) and deliberative ($M = 84.64$) mindsets significantly increased positive perceptions of their romantic partner compared to high-commitment controls ($M = 76.95$), $t_s(92) = 2.35$ and $2.70, p_s < .01$. For those low in commitment, an implemental mindset ($M = 80.66$) increased positive perceptions of the partner compared to low-commitment controls ($M = 74.71$), $t(92) = 2.09, p < .05$. However, a deliberative mindset did not minimize low-commitment participants' perceptions ($M = 76.30$) compared to controls, $t < 1$.

Furthermore, among individuals assigned to the deliberative mindset condition, high-commitment individuals rated their partner more positively than did low-commitment individuals, $t(92) = 2.78, p < .01$. However, high- and low-commitment individuals did not differ in their positive perceptions of their partner when assigned to an implemental mindset condition or to a control condition, $t_s(92) = 1.18$ and $.75$, respectively, ns .

A contrast examining all six groups simultaneously also was performed. The three conditions expected to exaggerate relationship illusions (i.e., high- and low-commitment implementals and high-commitment

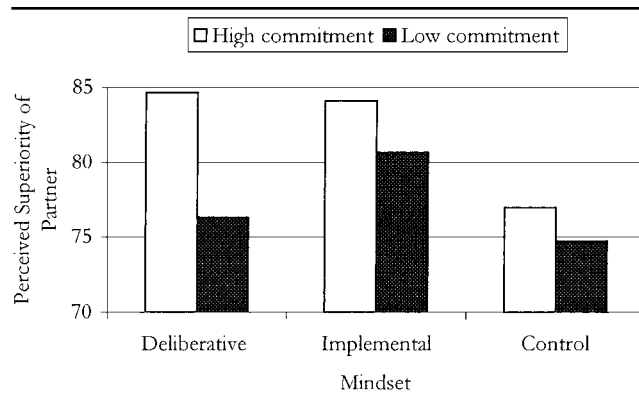


Figure 2 Effects of relationship mindset on perception of partner superiority for high- versus low-commitment individuals (Study 2).

deliberatives) were contrasted with the three other experimental conditions. As predicted, high- and low-commitment participants in an implemental mindset as well as high-commitment participants in a deliberative mindset reported significantly more positive perceptions of their partner than did participants in the other three experimental conditions, $F(1, 92) = 17.50, p < .001$.

A main effect of commitment also was found with high-commitment individuals ($M = 81.89$) perceiving their partner more positively than did low-commitment individuals ($M = 77.23$), $F(1, 92) = 7.42, p < .01$. The overall omnibus interaction between mindset and commitment was not significant, $F(2, 92) = 1.11, ns$.

Internal analysis of deliberative mindset. Perhaps when responding to the deliberative mindset task, highly committed individuals increased their positive perceptions of their partner because they listed more pros and fewer cons than less committed individuals. To address this possibility, comparisons of the average number of positive and negative consequences for both increasing and not increasing their commitment were made between high- and low-commitment participants in the relationship deliberative mindset condition. When listing the number of positive and negative consequences of making the decision to increase their commitment to the relationship, high-commitment deliberatives did not differ from low-commitment deliberatives, $t_s < 1.25, ns$. When listing the number of positive consequences of making a decision to not increase their commitment, no differences were found between high- and low-commitment participants, $t < 1$. However, highly committed participants ($M = 2.68$) did list more negative consequences associated with the decision of not increasing relationship commitment than did less committed individuals ($M = 1.79$), $t(31) = 2.18, p = .04$. Of importance, the number of negative consequences of not increasing commitment was not related to perceptions of superiority of the partner, $r(31) = .11, ns$. Moreover, differences in per-

ceived superiority ratings between high- ($M = 85.04$) and low- ($M = 75.29$) commitment individuals in the deliberative mindset condition remained significant when controlling for the number of negative consequences listed for not increasing one's commitment in the deliberative mindset task, $t(92) = 3.25, p < .01$. Finally, the probability of these positive and negative consequences of increasing or not increasing their commitment did not differ between commitment groups, all t s < 1.57 .

Discussion

Study 2 provides strong evidence that mindset about a relationship goal does influence idealized romantic perceptions. Participants in a deliberative and in an implemental mindset about their future relationship commitment boosted their relationship illusions. Furthermore, Study 2 went beyond the effects of Study 1 by demonstrating the moderating role of commitment in how deliberation about a relationship goal influences perceived partner superiority. Specifically, when put in a deliberative mindset, those high in commitment boosted their relationship illusions, whereas those low in commitment did not. In contrast, when put in an implemental mindset, those high and low in commitment increased their embellished views of their partner.

In line with previous work (Gollwitzer & Kinney, 1989), the determination to implement a relationship goal is likely to bring on increased positive views of the partner. One can no longer spend time ruminating about a partner's vices if one is seriously considering how to achieve an important relationship goal. Attention spent on a partner's imperfections could risk undermining the goal at hand. In contrast, uncertainty in deliberating about important relationship outcomes is likely to be perceived as a relationship threat. Highly committed deliberatives are motivated to defend against this threat and to protect their commitment to the relationship by embellishing their partner. Those low in commitment are not sufficiently motivated to defend against this same level of threat. In calibration terms, the level of threat exceeds their level of commitment (Lydon et al., 1999).

One alternative explanation could be that the manipulation for the deliberative mindset condition may have created a social comparison/contrast effect; that is, highly committed individuals may have realized that they have few doubts about their relationship and believed that their partner is superior. However, this explanation is unlikely because low- and high-commitment individuals did not differ in their overall listing of positive and negative consequences or in the probability of these consequences occurring. Nevertheless, positive consequences may be more accessible, more emotionally salient, or more likely to have been previously experi-

enced by participants high in commitment than by those low in commitment.

GENERAL DISCUSSION

Across two studies, dating people asked to deliberate about an important relationship goal boosted their relationship illusions. Dating people asked to think about implementing important goals also increased their relationship illusions. Moreover, underlying mechanisms for deliberative versus implemental mindset effects on relationship illusions can be explained in light of goal domain and relationship commitment.

Theory and research on mindset and positive illusions suggested one possible effect of mindset on relationship illusions. Yet, theory and research on relationship threats suggested a contrary effect of mindset on relationship illusions. In Study 1, a new variable, goal domain, was identified, examined, and found to provide a resolution and integration. When asked to focus on a goal unrelated to the romantic relationship, we obtained a Taylor and Gollwitzer effect. As predicted, mindset's effects generalized from illusions about the self to illusions about one's romantic partner. Individuals who were asked to focus on how to implement an important goal outside the relationship domain (e.g., getting into law school) subsequently boosted their positive perceptions of their partner. From a functional perspective, the direct effects of nonrelationship goal implementation on a different life domain, such as the relationship domain, would seem to be highly adaptive. A boost in one's relationship illusions while actively planning the implementation of a personal goal would serve to strengthen one's general positive beliefs, fueling their confidence to achieve their goal. Any uncertainty about one's feelings for the partner would undermine goal-oriented focus and thus hinder successful goal achievement.

Whereas nonrelationship deliberatives did not dampen their relationship illusions as predicted, they did not increase them either. This is similar to the results found by Taylor and Gollwitzer (1995) for perceptions of invulnerability to risk; people in a deliberative mindset were no less optimistic than were controls about their future.

In contrast, when asked to focus on a goal directly related to the romantic relationship, deliberation produced more idealistic perceptions of the romantic partner compared to controls. In Study 1, the goal under deliberation was a lower order goal (see Austin & Vancouver, 1996). People prefer to give comprehensive meaning to their specific goals or actions and are thus motivated to tie their lower level goals to a higher level identification (see Vallacher, Nowak, Markus, & Strauss

[1998] for a review). As long as important lower order goals are being pursued (implemented) successfully, without obstacles, then the higher order goal is not brought into question. However, deliberation about the pros and cons of a lower order goal has the potential to raise questions and doubts about the committed higher order goal. The task then is to quell such doubts by increasing idealization of the partner. In Study 2, we went directly at a higher order relationship goal. Again, deliberation elicited increased idealization of the partner.

If relationship threat were the reason for increased idealizations in a relationship deliberative mindset, then relationship commitment should moderate such responses. Study 2 tested and found that relationship commitment influenced relationship illusions in response to deliberation about an important relationship goal. Dating individuals high in attitudinal commitment boosted relationship illusions in response to relationship threat. That is, those high in commitment reported more idealized perceptions of their partner in the deliberative mindset condition than in the control condition. Thus, the effect was not due to a generalized propensity for those high in commitment to idealize more. Rather, as theory on commitment would predict, the effect was specifically a response to a relationship threat—deliberation. In contrast, dating individuals low in relationship commitment were not motivated to defend against deliberation about a relationship goal because the associated threat exceeded their commitment level. Consequently, they did not boost their relationship illusions in response to relationship deliberation.

In addition, when in a deliberative mindset, those high in commitment rated their partners more positively than those low in commitment. However, this difference in perceived superiority of the partner between high- and low-commitment individuals was specific to the deliberative mindset. When in an implemental mindset or in a control condition, high-commitment participants did not rate their partner more positively than did low-commitment individuals. Thinking about the implementation of an important relationship goal should not present a threat to dating intimates' commitment and therefore should not warrant differential responses from those high versus low in commitment.

An important implication for mindset theory (Taylor & Gollwitzer, 1995) that merits further investigation is the possibility that commitment to a higher level identification plays an important role in determining whether one minimizes or defensively boosts positive illusions in response to a deliberative mindset about a lower level identification. Indeed, people acknowledge the possibility of a variety of superordinate types of commitment (e.g., commitment to one's children, to a romantic part-

ner, to one's occupation) (Fehr, 1999). Deliberation about an undecided goal that is not yet tied to a meaningful, valued, and committed higher level identification should be less threatening to the self and thus allow for a temporary reduction in one's positive illusions. However, we construed and have found that only when deliberation about an undecided goal is intricately tied to a meaningful, valued, and committed higher level identification will a compensatory boost of illusions in that domain occur. Whether such effects owe to the centrality and importance of close relationships or generalize to other life domains remains to be tested.

CONCLUSION

The present set of studies, together with others before ours (e.g., Brunstein, Dangelmayer, & Schultheiss, 1996), is a testimony that goals are an important reality in close relationships. "Many, perhaps most, of an individual's important and enduring goals are either deeply embedded in, or directly implicate, his or her close personal relationships" (Berscheid, 1994, p. 84). Presumably, people's decisions to pursue their daily strivings and lifetime aspirations are made in an impartial frame of mind, within which both positive and negative feedback are considered (Gollwitzer, 1990). However, both Study 1 and Study 2 strongly suggest that relationship illusions are persistent and robust in times of important decision making. First, irrespective of their mindset conditions, the vast majority of participants perceived their partner to be better than the partner's typical peer (98%) and the typical partner (100%)! Second, the two conditions predicted to dampen relationship illusions failed to do so. Whereas thinking of implementing a goal outside the relationship led to an exaggeration of relationship illusions, the deliberate and careful appraisal of an undecided goal outside the relationship did not lead to a minimization of those illusions. Moreover, whereas participants low in attitudinal commitment exaggerated their relationship illusions when thinking about implementing a relationship goal, they did not minimize their relationship illusions when deliberating about a relationship goal.

It is not clear yet what the long-term implications are of making personal and relationship decisions while wearing the rose-colored glasses of relationship illusions. However, it is clear that idealized perceptions of the partner appear unflinching, even in the eyes of those who wittingly ponder and deliberate about important personal goals or consequential relationship outcomes. Perhaps people's resilience in sustaining their convictions that their partner is better than everyone else's can be attributed to the possibility that disconfirmations of relationship illusions could seriously jeopardize felt security in the relationship (Murray & Holmes, 1996).

To the extent that felt security is a basic universal human need (Hazan & Shaver, 1994), relationship illusions may serve an essential human function.

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Received January 3, 2000

Revision accepted September 18, 2000