
Effects of Mindset on the Predictive Validity of Relationship Constructs

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Abstract

The authors investigated the effects of deliberative versus implemental mindsets on the predictive validity of relationship constructs. Dating students anticipating the transition from university to work deliberated about increasing their commitment or thought about how to maintain their relationships after graduation. As hypothesized, this mindset manipulation interacted with subsequent ratings of relationship closeness and perceived partner commitment to predict relationship status six months later. Ratings made by those in a deliberative mindset were more strongly associated with relationship survival than were similar ratings made by those in an implemental mindset. Deliberatives' relationship appraisals were only positive if their relationships were on a successful trajectory whereas implementals' relationship appraisals were positive whether their relationships were on course for success or dissolution.

Résumé

Les auteurs se sont penchés sur les effets des attitudes ancrées délibératives par opposition à la mise en pratique sur la validité de prédiction des construits d'une relation. Des étudiants qui sortaient ensemble et qui anticipaient la transition de l'université au milieu de travail ont abordé la question d'accroître leur engagement ou ont pensé à des façons de maintenir leurs relations après l'obtention de leur diplôme. Supportant l'hypothèse, cette manipulation de l'attitude ancrée a interagi avec les évaluations subséquentes de la proximité de la relation et l'engagement perçu du partenaire pour prédire l'état de la relation six mois plus tard. Les évaluations posées par les personnes dans un état d'attitude délibérative étaient plus fermement associées à la survie de la relation que les évaluations semblables faites par les personnes dont l'attitude était celle de mise en pratique. Les évaluations des relations délibératives n'étaient positives que si leur relation suivait une trajectoire heureuse, tandis que les évaluations des personnes dont l'attitude ancrée était celle de mise en pratique, étaient positives peu importe si leurs relations suivaient une trajectoire vouée au succès ou à l'échec.

One way intimates can know if their romantic relationships will last is to ask themselves about the current state of their romantic relationships: How committed am I to my relationship? How committed is my partner? How close are we? Such relationship evaluations have been found to be reliably associated with the future success of a relationship. The more individuals report being committed, (Bui, Peplau, & Hill, 1996; Lydon, Pierce, & O'Regan, 1997; Rusbult, 1983), close (Aron, Aron, & Smollan, 1992; Berscheid, Snyder, & Omoto, 1989), in love (Hill, Rubin, & Peplau, 1976; Lund, 1985), and satisfied with their relationships (Karney & Bradbury, 1995; Simpson, 1987), the more likely their relationships will last.

However, a recent study by Agnew and his colleagues (Agnew, Loving, & Drigotas, 2001) suggests that the predictive validity of relationship constructs is somewhat limited by the need to feel good about one's relationship. Ratings made by dating partners were found to be more positive and consequently less associated with the future survival of the relationship than were similar ratings made by friends possessing inside information about the relationship. Such findings are consistent with another study showing that dating students were more optimistic, and less accurate, in predicting how long their relationships would last than were outside observers (MacDonald & Ross, 1997).

The validity of relationship evaluations in predicting the future success of a relationship will likely depend on whether people are guided by motives to accurately understand the relationship or by motives to enhance the relationship (Fletcher & Simpson, 2000; Fletcher & Thomas, 1996). To date, research suggests that people are typically motivated by both epistemic and esteem needs when evaluating their relationships (e.g., Kenny & Acitelli, 2001). That is, they are motivated to know their relationship and to feel good about it. However, as Fletcher and Thomas (1996) theorized, there may be times when people become increasingly guided by epistemic concerns and this should result in an increase in the predictive

validity of relationship evaluations. There also may be other times when people are exclusively guided by esteem concerns when evaluating their relationships and this should result in a decrease in the predictive validity of relationship evaluations. The purpose of the present paper is to investigate a particular set of circumstances that might influence the validity of relationship constructs in predicting the future survival of a relationship.

What Influences the Predictive Validity of Relationship Constructs?

We believe that the processes of decision-making and of goal pursuit are important in determining the predictive validity of relationship appraisals. When people are deliberating about conflicting goals, they are more likely to be guided by the need to accurately understand the relationship. For example, a person who is offered a unique career opportunity many kilometres away from his or her loved one will most likely need to ponder the advantages and disadvantages of accepting the job offer and moving away or of declining the job offer and staying closer to the partner. Such important decisions require an impartial consideration of all factors related to the decision, including relationship factors. Otherwise, one runs the risk of making a decision that might lead to regret and disappointment in the long run. Imagine abandoning career opportunities to be with Mr. Right only to discover years later that Mr. Right is really Mr. Wrong while no more career opportunities are knocking on your door.

In contrast, intimates may be more motivated to enhance the relationship than to know the relationship once they have committed themselves to the pursuit of an important goal in the relationship. After all, positive beliefs about the relationship will likely fuel one's motivation to implement the steps needed to achieve the chosen relationship goal. For example, partners who have decided to get married are likely to feel very optimistic about the future of their own relationship. Despite knowing that over half of marriages end up in divorce, engaged couples believe that their own probability of divorcing is closer to zero percent (Baker & Emery, 1993). This optimism is likely to further boost their enthusiasm and motivation to make plans for the start of their marriage.

Our reasoning is consistent with theory and research in the goals literature. According to mindset theory (Gollwitzer, 1990; Gollwitzer & Bayer, 1999), the task of making important decisions elicits a deliberative mindset conducive to the careful consideration of the desirability (i.e., pros and cons) and the feasibility (i.e., probability that the goal will be

achieved if chosen) associated with competing goals. For example, Jack may deliberate about whether to move in with his girlfriend Jill by weighing the pros (Jill is a good cook) and cons (But she is also a neat freak) and considering the likelihood that this new living situation would work out (If we moved in together, chances are good that our relationship would grow.)

Once the decision is made, the task of planning the execution of the chosen goal elicits an implemental mindset facilitating goal-directed actions such as how, when, and where to achieve the goal. For example, after having decided to move in with Jill, Jack (and Jill) will need to plan where they should live, when they should move in together, and who could help them move.

Compared to people who are in an implemental mindset, those who are in a deliberative mindset are more receptive to incoming information (e.g., Heckhausen & Gollwitzer, 1987) and more impartial when processing this information (e.g., Gollwitzer & Hammelbeck, 1998, as cited in Gollwitzer & Bayer, 1999). Moreover, people in a deliberative mindset show less positive illusions than do those in an implemental mindset. An initial study found that individuals who were assigned to a deliberative mindset condition were more realistic in their judgments of control than were those assigned to an implemental mindset condition (Gollwitzer & Kinney, 1989). Compared to implementals, deliberatives also were less likely to self-enhance and to report invulnerability to a host of future risks (Taylor & Gollwitzer, 1995).

In addition, we previously showed that people deliberating about important goals directly or indirectly related to their romantic relationships were more accurate in their explicit predictions of relationship survival than were those thinking about how to implement similar goals (Gagné & Lydon, 2001a, Studies 2 & 3). In one study, we tested this by randomly assigning university students to a deliberative mindset condition, an implemental mindset condition, or a control condition. Using a standard mindset manipulation (Gollwitzer & Kinney, 1989, Study 2), participants in a deliberative mindset condition were asked to name an undecided goal and to list the positive and negative consequences of pursuing or not pursuing the goal. Participants in an implemental mindset condition were asked to name an intended goal and to list the steps involved in the implementation of how, when, and where to achieve the goal. In another study, we tested this by using a self-report measure of students' mindset about their academic goals. In both studies, ratings of how long partici-

pants expected their relationships to last interacted with mindset in predicting whether the relationship was still intact six to nine months later. Overall, the correspondence between relationship predictions and the actual survival of the relationship was significantly greater when predictions were made in a deliberative mindset than when predictions were made in an implemental mindset.

The reason for this was not that deliberatives were generally more pessimistic than were implementals in their relationship forecasts. Instead, it was because they were more realistic. Among those whose relationships remained intact throughout the study, deliberatives were just as optimistic as were implementals. However, among those whose relationships later dissolved, deliberatives' forecasts were significantly less optimistic, and more realistic, than were implementals' forecasts. This suggests that deliberatives, compared to implementals, were attending to information signaling the later dissolution of the relationship.

The Present Study

Given that mindset influenced the accuracy of relationship predictions, we reasoned that mindset would also influence the predictive validity of relationship constructs associated with relationship survival. In a pilot study, open-ended thoughts and feelings of students about to leave home and their dating partners were coded for mindset and found to interact with relationship commitment in predicting the survival of the relationship three months later (Gagné & Lydon, 2001a, Study 1). That is, relationship commitment reported in a deliberative mindset was significantly better at predicting the future status of the relationship than was relationship commitment reported in an implemental mindset.

Nonetheless, several problems limit the interpretation and generalizability of the results found in that preliminary study. First, there was no control group to compare the relative effects of deliberation versus implementation. Second, the design was correlational. Third the operationalization of mindset was not standard. Fourth, the sample was small ($N = 36$) and participants were young. Given these limitations, the question of whether mindset can reliably influence the predictive validity of relationship constructs remains open to debate. In the present study, we used the same experimental-longitudinal design that we had previously used to test the accuracy of explicit relationship predictions. The experimental design enabled us to include a control group thereby providing a fuller test as to whether mindset influences the predictive validity of relationship constructs.

We selected relationship closeness as one of the relationship constructs because it has been linked to relationship survival (Aron et al., 1992). At the same time, its predictive validity seems to be limited because of a positive bias (Agnew et al., 2001). Consequently, we expected the predictive validity of relationship closeness to be increased or decreased depending on deliberative versus implemental mindsets.

We also selected perceptions of partner commitment as a relationship construct. To date, perceptions of partner commitment have not been examined in relation to relationship survival. But we theorized that perceptions of partner commitment would predict relationship survival for two reasons. First, there is good evidence that one's own commitment is associated with relationship survival (Lydon et al., 1997; Rusbult, 1983). Given the link between own commitment and perceptions of partner commitment (Adams & Jones, 1997), we assumed that perceived partner commitment would also be associated with the future survival of a relationship. Second, perceptions that a partner is committed through his or her willingness to act in the best interest of the relationship leads to feelings of trust, commitment, and own willingness to engage in pro-relationship behaviours (Wieselquist, Rusbult, Foster, & Agnew, 1999). Hence, if partner commitment matters in relationship functioning, then it should also matter in terms of the long-term survival of the relationship. We thus examined for the first time the predictive validity of perceived partner commitment and whether it is moderated by mindset.

In the present study, all participants were undergoing the major life transition from university to work. We theorized that life transitions might be a time when epistemic and esteem relationship motives might both be activated. At the time our study was conducted, some participants were carefully deliberating about decisions associated with their life transition. Such deliberation should heighten their need to accurately understand the relationship (cf. Fletcher & Fincham, 1991; Lydon et al., 1997). Yet, at the same time, participants may have felt motivated to enhance their relationships as a way to cope with the uncertainty associated with their life transition (Gagné & Lydon, 2001b). In theory, priming deliberative versus implemental mindsets should make these motives more or less dominant.

We experimentally manipulated mindset using a standard procedure adapted from Gollwitzer and Kinney (1989, Study 2) to see whether it would interact with relationship constructs in predicting the survival of the relationship six months later. Hence, stu-

dents who were involved in a dating relationship and about to experience the transition from university to work were invited to deliberate about their commitment (deliberative mindset) or to think about implementing their goal of maintaining their relationships (implemental mindset) after graduation. We reasoned that a contextual factor such as an experimental manipulation of mindset would bring about an increased need to understand the relationship for those in the deliberative mindset condition and an increased need to feel good about the relationship for those in the implemental mindset condition.

Hypothesis 1. Our first hypothesis predicted a significant interaction between Time 1 mindset and Time 1 ratings of relationship constructs, with the Time 2 survival of the relationship as the dependent variable. Specifically, we hypothesized that ratings of relationship closeness and of the partner's commitment made in a deliberative mindset would be more highly associated with the future survival of the relationship than would similar ratings made in an implemental mindset. The association between relationship ratings and the future status of the relationship in the control condition was expected to be lower than that in the deliberative mindset condition but higher than that in the implemental mindset condition.

Previous research has shown that assessments of the relationship are more positive when made by intimates themselves than when made by informed outside observers (Agnew et al., 2001). This suggests that intimates' appraisals of the relationship may be biased. In the present research, one might expect an implemental mindset to increase positive bias and a deliberative mindset to decrease positive bias so that, overall, assessments would be more positive when made in an implemental mindset than when made in a deliberative mindset. However, we believe that a deliberative mindset triggers realism and not necessarily negativity. We expected that deliberatives would only attenuate the positivity of their relationship views if the relationship was on a trajectory for dissolution. If the relationship was on course for success, than deliberatives' evaluations should be just as positive as implementals' evaluations.

Hypothesis 2. Our second hypothesis predicted an interaction between Time 1 mindset and Time 2 relationship survival, with Time 1 relationship constructs as the dependent variables. For participants whose relationships will remain intact throughout the study, ratings of relationship closeness and partner commit-

ment were not expected to differ between those in the deliberative mindset, implemental mindset or control conditions. However, for participants whose relationships will terminate by the end of the study, ratings of relationship closeness and partner commitment were expected to be lower for those in the deliberative mindset condition than for those in the implemental mindset or control conditions. Finally, controls' ratings were expected to be lower than ratings made by implementals.

Method

Time 1

*Participants*¹

The Time 1 sample comprised 100 McGill University students (69 women and 31 men with a mean age of 21.8 years) who had been dating their current partner for a mean length of 88 weeks (range = 4 to 305 weeks). Three participants did not indicate how long they had been dating their romantic partners. However, when booked for the study, they did specify that they had been with their partners for at least four weeks. Three respondents reported being involved in a casual relationship. Participants either received CDN \$5.00 or a movie pass for their participation.

Procedure and Materials

Participants were first recruited by advertising the study in upper-level classes or through letters electronically mailed to all senior students in the Faculties of Arts and Science at McGill University. Students were told that the study was on different life aspects of dating students graduating from university. Interested students were then telephoned by a female research assistant to assess their eligibility to participate in the study. Participants were deemed

1 This study also examined the effects of mindset on relationship illusions as reported in Study 2 of Gagné and Lydon (2001b). However, it is important to note that the hypotheses investigated in the present paper addressed a different theoretical issue than the ones investigated in Gagné and Lydon (2001b). The hypotheses in Gagné and Lydon (2001b) addressed the interactive effects of mindset and relationship commitment on perceived superiority of the partner. The current article addressed the interactive effects of mindset and relationship constructs (relationship closeness and perceptions of partner commitment) in predicting the survival of the relationship as assessed six months later. And so, whereas both articles used the mindset manipulation, the Gagné and Lydon (2001b) article used relationship commitment as the moderating variable and perceptions of partner superiority as the outcome variable and the present article used relationship closeness and perceptions of partner commitment as the moderating variables and the Time 2 survival of the relationship as the outcome variable.

eligible if (a) they had been in a dating relationship for at least four weeks, (b) they and/or their partners were graduating from university that spring, (c) they were unsure of whether they would be living in the same city as their partners after graduation, and (d) they were not currently thinking of ending their relationships. Baseline relationship commitment was then assessed before scheduling the lab session.

Participants came to their lab session approximately one week later when they were randomly assigned to one of three conditions: an implemental mindset condition, a deliberative mindset condition or a control condition. Participants in the *mindset conditions* were then asked to complete, in the following order, a mindset manipulation task, a mindset consolidation task, and a manipulation check question. Finally, they were asked to complete the relationship construct measures.

Participants in the *control condition* did not participate in the mindset manipulation and consolidation task. Instead, they first completed the relationship construct measures followed by the two manipulation check questions, and then a filler task. This filler task included a decision task in which participants were asked to list and to rate the importance of all the decisions they needed to make in the next three months, a measure of affect, and a measure of somatic symptoms.

Baseline relationship commitment. Participants were asked three questions to determine their relationship commitment. On a 9-point scale ranging from *not at all* to *completely*, they rated (a) To what extent do you feel committed to your relationship right now?; (b) How invested are you in this relationship?; and (c) To what extent do you feel dedicated to your relationship? The internal consistency of this relationship commitment measure was equal to .93.

Mindset manipulation. To manipulate mindset, participants were given written instructions orienting them to their respective task (adapted from Gollwitzer and Kinney, 1989) and asked to close their eyes for a minute in order to focus on the task at hand (mindset conditions) or to clear their minds (control condition).

Participants in the *implemental mindset condition* were induced to think about the goal of maintaining their commitment to their relationships after graduation. Specifically, they were asked to list the five most important steps in bringing about their goal of maintaining their relationships after graduation and to list how, when, and where they would implement each step.

Because a deliberative mindset requires deliberation about an undecided goal and all participants previously had indicated their intentions of maintaining their relationships, participants assigned to the *deliberative mindset condition* were asked to deliberate about the undecided goal of increasing their commitment to the relationship after graduation (e.g., deciding to live with partner, deciding to marry). Specifically, they were asked to first list the positive and negative consequences of increasing and of not increasing their commitment to the relationship after graduation. For each consequence listed, deliberative participants were also asked to rate the probability of occurrence in percentage. Finally, they were asked to list the expected difficulties they might encounter if they decided to increase their commitment.

Consolidation of induced mindset. To consolidate their induced mindset, participants were asked to rank order the personal relevance of four items. Unbeknownst to them, all items represented thoughts congruent with their respective mindset condition (Salancik, 1982). For example, participants in the implemental mindset condition were presented with, "My thoughts are focused on what I need to do to maintain my relationship after graduation." Those in the deliberative mindset condition were presented with statements such as, "I think that I need more time before making a decision to increase my commitment to my relationship after graduation."

Manipulation check. As a manipulation check, participants in the deliberative mindset condition also were asked to rate in percentages their certainty of increasing their relationship commitment after graduation. Participants in the implemental mindset condition were asked to rate in percentages their certainty of maintaining their relationship commitment after graduation. Controls responded to both questions after having completed the relationship construct measures.

Relationship closeness. Relationship closeness was assessed using Aron et al.'s (1992) Inclusion of Other in Self Scale (IOS). Participants were asked to choose among seven pairs of increasingly overlapping circles, marked self and partner, the one that best represented their perceptions of closeness in their relationships. Our operationalization of relationship closeness was consistent with that of Agnew et al. (2001).

Perception of partner's commitment. Participants also were asked, "How committed do you think your

partner is to your relationship?" on a 9-point scale ranging from not at all to completely.

Time 2

Participants

Approximately six months later, 81 participants (59 women and 22 men) were recontacted by mail or by telephone to assess their Time 2 relationship status. Of the 100 Time 1 participants, 29 completed the Time 2 five-minute telephone interview and 52 completed the Time 2 mail questionnaire. The 19 participants who did not complete the Time 2 material did not differ from the 81 who did complete the Time 2 material on any of the variables assessed at Time 1, $t_s < 1$.

Materials

Relationship status. Embedded in the Time 2 material was a question assessing whether participants were still dating the same partner. Fifty-nine participants were still dating the same partner (implementals = 22, deliberatives = 21, controls = 16), whereas 22 were no longer dating the same partner (implementals = 8, deliberatives = 5, controls = 9).

Results

Manipulation Check

We performed t -tests to compare controls' certainty ratings of maintaining or increasing their relationship commitment after graduation with ratings respectively made by participants in the implemental and deliberative mindset conditions. As predicted, controls were significantly less certain ($M = 65.1%$) than were implementals ($M = 84.1%$) about maintaining their commitment to their relationships after graduation, $t(65) = 2.77, p < .01$. However, contrary to what we expected, controls ($M = 59.8%$) did not differ from deliberatives ($M = 60.5%$) in their certainty ratings of increasing their relationship commitment after graduation, $t < 1$. A possible explanation for this lack of difference between participants in the deliberative mindset and control conditions may be that controls were recruited at a time in their lives when they may have been naturally deliberative. Life transitions, like the one being experienced by our sample at the time of the study, are times when people are typically faced with many decisions. Ongoing deliberation about what to do or where to live after graduation may have influenced controls' feelings of uncertainty with respect to their relationships after graduation. Finally, a paired t -test showed that controls did not differ in their certainty ratings of increasing their commitment and their certainty ratings of maintaining their commitment, $t(31) = 1.47, ns$.

Hypothesis 1

We hypothesized that T1 mindset would interact with Time 1 ratings of relationship closeness and perceptions of the partner's commitment in forecasting Time 2 relationship status. We investigated this hypothesis by first using sequential logistic regressions. Because mindset was a three-level categorical variable, we created two deviation contrast variables. In one, participants in the implemental mindset condition were compared to those in the control condition. In the other, participants in the deliberative mindset condition were compared to those in the control condition. The main effect of relationship closeness (or partner commitment) was entered on the first step, the two contrast coded mindset variables were entered on the second step, and their interaction terms were entered on the third step. The Time 2 status of the relationship was entered as the criterion variable.² In addition, tests of simple effects within implemental mindset, deliberative mindset, and control conditions were conducted using point-biserial correlations between relationship closeness (or relationship commitment) and Time 2 relationship status. By contrasting these point-biserial correlations, we were able to individually test whether relationship ratings would be (a) more valid in predicting the future survival of the relationship when made by deliberatives than by implementals, (b) more valid when made by controls than by implementals, and (c) more valid when made by deliberatives than by controls.

Relationship closeness. When entered alone, relationship closeness, $\chi^2(1, N = 81) = 1.92, ns$, and mindset, $\chi^2(2, N = 81) = 1.66, ns$, did not reliably predict Time 2 relationship status. The overall interaction between relationship closeness and mindset was significant, $\chi^2(2, N = 81) = 6.06, p < .05$. Ratings of relationship closeness made within an implemental mindset condition were not reliably associated with Time 2 relationship status, $r(28) = -.22, ns$. In contrast, ratings of relationship closeness made within a deliberative mindset were associated with Time 2 relationship status, $r(24) = .38, p = .055$. Finally, controls' ratings of their relationship closeness were not associated with their Time 2 relationship status, $r(23) = .33, p > .1$. However, this lack of significance may be due to low statistical power.

Comparisons of the point-biserial correlations between experimental conditions revealed that delib-

2 Gender was not found to interact with relationship appraisals (relationship closeness and partner commitment) nor mindset in predicting relationship survival.

eratives' ratings of relationship closeness were a better predictor of the future survival of the relationship than were implementals' ratings, $Z = 2.20$, $p < .05$. Controls' ratings of relationship closeness also were better at predicting the future survival of the relationship than were implementals' ratings, $Z = 1.97$, $p < .05$. However, deliberatives and controls did not differ in the predictive validity of their relationship closeness, $Z = .19$, *ns*.

Partner commitment. We decided to control for relationship length and own commitment in our analyses with partner commitment. In the present study, both relationship length and own commitment were correlated more with partner commitment ($r_{\text{length}} = .33$; $r_{\text{commitment}} = .67$) than with IOS ($r_{\text{length}} = .09$; $r_{\text{commitment}} = .48$) for controls. Correlations between own commitment and perceptions of a partner's commitment are usually very high (Adams & Jones, 1997), indicating that people typically project their own commitment onto their partners' commitment. Moreover, because relationship length is usually positively related to own commitment (Lydon & Gagné, 2001), it makes sense that it should also be related to perceptions of a partner's commitment.

Controlling for both length and own commitment,³ perceptions of the partner's commitment was a significant predictor of Time 2 relationship status, $\chi^2(1, N = 78) = 6.54$, $p = .01$. However, mindset was not a significant predictor of Time 2 relationship status, $\chi^2(2, N = 78) = 2.49$, *ns*. As expected, mindset interacted with perceptions of partner commitment in predicting Time 2 relationship status, $\chi^2(2, N = 78) = 5.80$, $p = .055$. Ratings of partner commitment made by participants in an implemental mindset were not associated with their Time 2 relationship status, $r(25) = -.02$, *ns*. Ratings of partner commitment made by those in a deliberative mindset were significantly associated with their Time 2 relationship status, $r(21) = .60$, $p < .01$. Finally, controls' ratings of partner commitment were not significantly associated with their Time 2 relationship status, $r(20) = .13$, *ns*.

When comparing the point-biserial correlations between experimental conditions, ratings of partner commitment were a better predictor of the future survival of the relationship when made in a deliberative mindset than when made in an implemental mindset, $Z = 2.46$, $p = .01$. Unexpectedly, controls' ratings of partner commitment were not better in predicting the

3 The correlation between own commitment and Time 2 relationship status was equal to .42 and the one between relationship length and Time 2 relationship status was equal to .23.

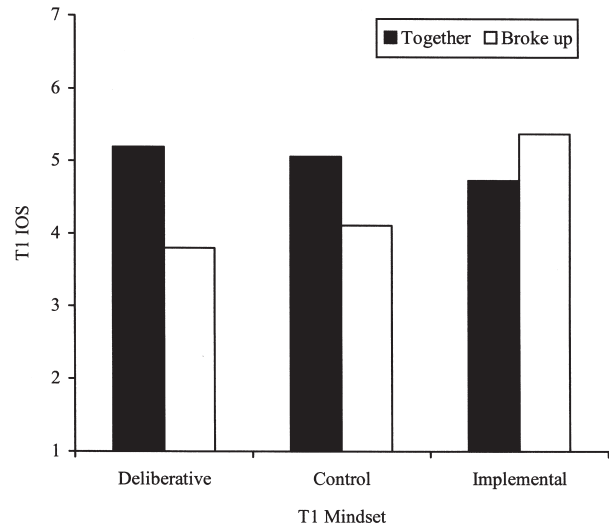


Figure 1. Mean ratings of Time 1 relationship closeness as a function of Time 1 mindset and Time 2 relationship status.

future survival of the relationship than were implementals' ratings, $Z = .51$, *ns*. However, consistent with our hypothesis, ratings of partner commitment made by controls were significantly less valid in predicting the future survival of the relationship than were ratings made by deliberatives, $Z = 1.84$, $p < .05$.⁴

Hypothesis 2

Were individuals in a deliberative mindset generally more conservative in their relationship ratings than were those in an implemental mindset, or did they only report lower ratings than did implementals if their own relationship was on course for subse-

4 Deliberatives' variance for perceptions of partner commitment did not significantly differ from that of implementals and controls, both $F_s < 2.00$, *ns*. However, the variance for perceptions of partner commitment was significantly greater for controls than for implementals, $F(34, 31) = 3.22$, $p < .05$. By performing a log linear transformation of the partner commitment ratings, this difference was no longer significant, $F(34, 31) = 1.69$, *ns*. The point-biserial correlations between Time 1 partner commitment and Time 2 relationship status, controlling for both relationship length and baseline relationship commitment, were performed using the transformed ratings of partner commitment. This correlation remained nonsignificant for implementals and controls, $r_s = .01$ and $.11$, respectively, *ns*, whereas it remained significant for deliberatives, $r = .48$, $p < .05$.

Again, the transformed ratings of partner commitment controlling for relationship length and baseline relationship commitment were more valid in predicting the future survival of the relationship when made in a deliberative mindset than when made in an implemental mindset, $Z = 2.02$, $p < .05$. The predictive validity of ratings made by controls did not differ from that of implementals, $Z = .57$, but it was less significant than that of deliberatives, $Z = 1.56$, $p < .05$.

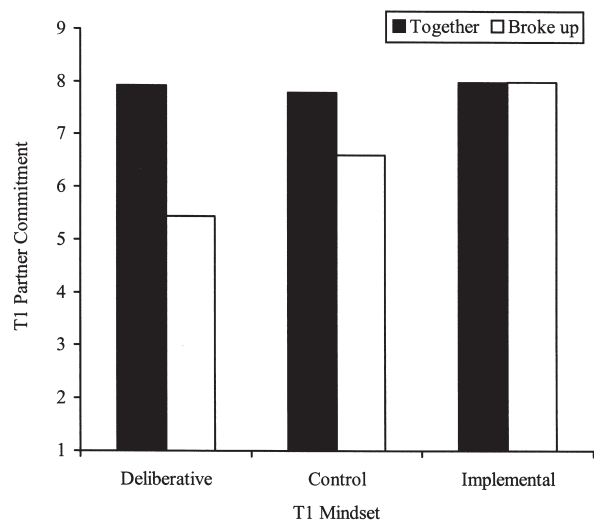


Figure 2. Mean ratings of Time 1 partner commitment as a function of Time 1 mindset and Time 2 relationship status.

quent dissolution? To address this question, we conducted 3 (Time 1 Mindset: deliberative vs. implemental vs. control) \times 2 (Time 2 relationship status: together vs. broke up) Analyses of Variances (ANOVAs) first with Time 1 relationship closeness and then with Time 1 partner commitment as the dependent variables.

Relationship closeness. When relationship closeness was entered as the dependent variable, the main effects for Time 2 relationship status and mindset were not significant, $F_s < 2.60$, *ns*. However, there was a significant interaction between mindset and Time 2 relationship status, $F(2, 75) = 3.24$, $p < .05$. As illustrated in Figure 1, planned comparisons revealed that among those whose relationships later dissolved, implementals reported more relationship closeness ($M = 5.38$) than did deliberatives ($M = 3.80$) and controls ($M = 4.11$), $t_s(75) = 2.02$ and 1.92 , $r_s = .23$ and $.22$, $p_s < .05$. Controls did not differ from deliberatives in their ratings of relationship closeness, $t < 1$. However, among those whose relationships remained intact throughout the study, ratings of relationship closeness did not differ between implementals ($M = 4.73$), deliberatives ($M = 5.19$), and controls ($M = 5.06$), $t_s < 1.11$.

Partner commitment. We again controlled for relationship length and relationship commitment when partner commitment was entered as the dependent variable. The main effect of Time 2 relationship status was significant, $F(1, 70) = 11.18$, $p = .001$. Those who

subsequently broke up ($M = 6.68$) perceived lower levels of partner commitment than did those whose relationships remained intact throughout the study ($M = 7.90$). The main effect of mindset also was significant, $F(2, 70) = 4.43$, $p < .05$. As a group, implementals ($M = 8.00$) reported higher perceptions of partner commitment than did deliberatives ($M = 6.68$) and controls ($M = 7.19$), $t_s(70) = 3.67$ and 2.19 , $r_s = .40$ and $.25$, $p_s < .01$ and $.05$, respectively. Controls did not differ from deliberatives in their ratings of partner commitment, $t(70) = 1.34$, $r = .16$, *ns*. Finally, there was a significant interaction between mindset and Time 2 relationship status, $F(2, 70) = 3.48$, $p < .05$.

Figure 2 illustrates that among those whose relationships later dissolved, implementals reported more partner commitment ($M = 8.00$) than did deliberatives ($M = 5.44$) and controls ($M = 6.60$), $t_s(70) = 3.12$ and 2.15 , $r_s = .35$ and $.25$, $p_s < .01$ and $.05$, respectively. Deliberatives tended to differ from controls; however, this trend was not significant, $t(70) = 1.45$, $r = .17$, *ns*. Among those whose relationships remained intact throughout the study, perceptions of partner commitment did not differ between implementals ($M = 7.99$), deliberatives ($M = 7.92$), and controls ($M = 7.79$), $t_s < 1$.

Discussion

Since the 1970s, researchers in the close relationship literature have investigated what makes a relationship last. Relationship constructs such as commitment (e.g., Rusbult, 1983) and closeness (Aron et al., 1992) were identified as good prognosticators of the future survival of a relationship. Nonetheless, such constructs are limited in their predictive validity, most likely because of people's desire to feel good about their relationships (Agnew et al., 2001). In the present study, we showed that the predictive validity of relationship constructs can shift depending on one's motivated mindset about the relationship.

Ratings of relationship closeness made by participants in an implemental mindset were significantly less valid in predicting the future survival of the relationship than were similar ratings made by those in a deliberative mindset and in a control condition. Ratings of a partner's commitment to the relationship were a better predictor of the future survival of the relationship when they were made by participants in a deliberative mindset than when they were made by participants in an implemental mindset or control condition.

Additional results suggest that the reason why relationship appraisals are less associated with the future survival of the relationship when made by individuals in an implemental mindset might be

because these appraisals are highly positive, even when more conservative appraisals are warranted. Participants thinking about how to implement their goal of maintaining their relationship commitment reported high levels of relationship closeness and partner commitment, irrespective of whether their relationships were on course for dissolution. It is important to point out, however, that deliberatives were not generally more conservative in their relationship views than were implementals. Participants deliberating about whether to increase their relationship commitment only reported lower relationship closeness and lower perceived partner commitment if their relationships were to later dissolve. When their relationships were on a successful trajectory, deliberatives' relationship ratings were just as positive as were those of implementals.

Overall, our results are consistent with the notion that people may at times be motivated by epistemic goals and at other times be motivated by esteem-regulatory goals (cf. Fletcher & Thomas, 1996). Circumstances in which people are motivated to understand the relationship lead to more valid appraisals of the relationship than do circumstances in which people are motivated to feel good about the relationship.

Limitations

One limitation of the present study was our failure to show a consistent pattern for controls. We had predicted that relationship appraisals made in the control condition would be (a) more valid than appraisals made in the implemental mindset condition and (b) less valid than appraisals made in a deliberative mindset. For relationship closeness, we did find ratings made by controls to be better in predicting the future survival of their relationships than were ratings made by implementals. However, controls did not differ from deliberatives in the predictive validity of their ratings of relationship closeness. This could suggest that our manipulation was not successful in inducing a deliberative mindset. However, it is possible that our control group acted like deliberatives because they were recruited at a transition point in their lives, graduating from university, when they might have been naturally deliberative. When recruited, all participants indicated that they still did not know where they would be living after graduation. Ongoing deliberation about where to live and where to work probably had carry-over effects on how controls evaluated their relationship closeness in the lab. Nonetheless, it is important to point out that, unlike experimental deliberatives, controls were not explicitly asked to deliberate about

their commitment to their relationships. Hence, when looking at a relationship construct tied to commitment, controls did differ from experimental deliberatives. That is, perceptions of the partner's commitment were less strongly associated with the future survival of the relationship when they were made by those in the control condition than when they were made by those in the deliberative mindset condition.

It is clear that controls were projecting their own commitment onto their partners. The correlation between their commitment and their perceptions of their partner's commitment was equal to .67. Such projection is consistent with previous work that also shows strong associations (ranging between .81 and .91) between own commitment and perceived partner commitment (Adams & Jones, 1997). The same correlation was equal to .04 for deliberatives. However, without assessments of own commitment subsequent to the mindset manipulation, it is impossible to establish whether deliberatives' assessments of their partner's commitment were more predictive of relationship survival because these assessments (a) accurately reflected their partner's actual commitment to the relationship or (b) because they reflected more valid assessments of participants' own commitment.

In the present study, participants were assigned a goal that was pertinent to their real-life transition. However, these goals differed between mindset conditions. Upon recruitment, all participants had specified their intentions to maintain their relationships. Because an implemental mindset requires the planning of a decided goal, we assigned the goal of maintaining one's commitment to the implemental mindset condition. However, the same goal could not be assigned to the deliberative mindset condition because a deliberative mindset requires the deliberation of a goal that is undecided. We therefore assigned the goal of increasing one's commitment to the deliberative mindset condition.

Like in other mindset experiments (e.g., Taylor & Gollwitzer, 1995), it is possible that our manipulation of mindset was confounded by potential differences in type of goals between mindset conditions. For example, our effects may have been due to the possibility that the goal of increasing one's commitment may be less feasible than the goal of maintaining one's commitment. However, when asked, controls reported no differences between their certainty of maintaining their commitment and their certainty of increasing their commitment after graduation. Moreover, we realize that even if the goals of maintaining commitment and of increasing commitment do not differ on certainty, they might differ on other dimensions, such as desirability or complexity of

thought, that were not considered in our design.

Given the findings by Taylor and Gollwitzer (1995) showing that individuals in a deliberative mindset have lower self-esteem than do individuals in an implemental mindset, one may wonder whether the effects of mindset in the current study may have been mediated by self-esteem. Because self-esteem correlates with depression, one might imagine that a deliberative mindset lowered self-esteem and therefore made people sadder but wiser (Alloy & Abramson, 1979; Campbell & Fehr, 1990). However, follow-ups to the original sadder but wiser work have found that depressed individuals are not necessarily more realistic. In fact, when making predictions about things that have high success rates (like the survival rate in our study), mildly depressed individuals tend to be less accurate than are nondepressed individuals (Dunning & Story, 1991). Thus, if a deliberative mindset induced low self-esteem and increased depression then deliberatives should have been more pessimistic but not more realistic. But instead, we have found that a deliberative mindset induced greater realism and not more pessimism.

Future Directions

An important strength of the present work was to use a design that combined the positive features of an experimental study with the positive features of a longitudinal study. Nonetheless, our design cannot address whether people will naturally and spontaneously engage in deliberation when making decisions about important aspects of their relationships. It seems unlikely that everyone engages in thorough deliberation for every decision they make in their relationships. People do make bad relationship decisions. Overall, decisions about marriage or other aspects of the relationship are some of the most frequently reported lifetime regrets (Gilovich & Medvec, 1995). Accordingly, our findings for a deliberative mindset are likely limited to the extent that not all important decisions are made with due deliberation.

Perhaps then some people may be better equipped than others to engage in due deliberation when making important relationship decisions. According to Kruglanski and his colleagues (2000), some people may be more inclined to critically assess their circumstances (i.e., high assessment people) whereas others may feel a greater need to move forward in life, to pursue goals (i.e., high locomotion people). We speculate that people who are high in assessment might be more motivated to accurately understand their relationships whereas those high in locomotion might be more likely to exclusively focus on the posi-

tive aspects of their relationships. Individual differences in uncertainty orientation (Sorrentiono & Short, 1986), need for closure (Webster & Kruglanski, 1994), need for cognition (Cacioppo & Petty, 1982), or personal need for structure (Newberg & Newson, 1993), also could influence whether intimates are open-minded or biased when evaluating their relationships. Importantly, future work might reveal whether accuracy-driven dispositions can interact with contextual mindsets in influencing relationship constructs.

Future research might also reveal whether chronic needs to accurately assess the relationship are maladaptive, as they could undermine felt security in the relationship (see Murray, 1999). Instead, accuracy may best function in the contexts of temporary deliberation such as when making important decisions. Similarly, future research might also reveal whether chronic needs for closure and structure in the relationship may be maladaptive as these orientations might predispose intimates to prematurely commit to goals in the relationship without due deliberation.

One might also ask whether there are times when people run the risk of adopting untimely mindsets. For example, some factors might precipitate an implemental mindset without due deliberation. Time pressure might force people to prematurely commit to goals. This would be consistent with work showing that time pressure increases one's need for structure (Freund, Kruglanski, & Shpitajzen, 1985, Experiment 2) and cognitive closure (Heaton & Kruglanski, 1991). Snap decisions under time pressure could very well lead to later regret and disappointment if these decisions are made without an accurate view of the relationship. In contrast, other factors might delay an implemental mindset because of excessive deliberation. For example, a history of divorce in the family might increase one's fear of invalidity (cf. Freund et al., 1985; Kruglanski & Maysel, 1987) when faced with the decision to marry. Worried that history might repeat itself, a person might find him- or herself trapped in deliberation and unable to commit.

Implications of Mindset Effects in Close Relationships

The implications of our results are important for people involved in romantic relationships. Sooner or later, intimates will ask themselves about the viability of their relationships. The accuracy of their answers will depend on the effects of mindset both at a proximal level and at a more distal level. At the proximal level, our previous work has shown that explicit forecasts of relationship survival will be influenced by mindset (Gagné & Lydon, 2001a). However, these

explicit predictions will also depend on how people evaluate different aspects of their relationships, such as relationship closeness and commitment. We have found that mindset exerts an influence on the predictive validity of these distal-level variables.

We agree with Taylor and Gollwitzer (1995) that the role of mindset in regulating bias and accuracy is adaptive, particularly in the context of close relationships. The present study suggests that despite an overwhelming need to feel good about their relationships (Fletcher & Thomas, 1996), intimates have the ability to adopt a more realistic view of the relationship when making important decisions. Otherwise, the failure to take into consideration diagnostic information about the relationship when making important decisions could very well set people up for later disappointments and regrets.

Once important decisions have been made, an increased dose of positive bias in relationship perceptions is probably very adaptive. Overly positive views of the relationship help maintain the conviction that one's relationship is good and worth keeping (Murray, 1999). Without this sense of conviction, disquieting thoughts about the relationship could very well interfere with the pursuit of goals in the relationship. For example, one could find it difficult to think and behave in ways to build a successful marriage if plagued by nagging doubts about a partner's commitment level. In contrast, beliefs that a partner is highly committed will likely motivate one to engage in the pro-relationship behaviours necessary to achieve such goals (Wieselquist et al., 1999). Thus, increased positivity in relationship perceptions will likely fuel people's motivation to implement the steps necessary to achieve important goals (cf. Taylor & Gollwitzer, 1995).

In summary, a deliberative mindset regulates appraisals of relationship constructs according to whether individuals' relationships will likely survive. This relationship regulation occurs exactly when it matters most – when making key decisions. Similarly, an implemental mindset increases idealistic views of the relationship also when it matters most – when thinking about implementing important goals.

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