Motivation and Emotion (2019) 43:313–324
https://doi.org/10.1007/s11031-018-9731-1

ORIGINAL PAPER

Goals, emotions, and the effort to be responsive during couple interactions

Wei-Fang Lin[1] · **Courtney L. Gosnell**[2] · **Shelly L. Gable**[3]

Published online: 17 October 2018

Abstract
Previous research has shown that perceived responsiveness benefits psychological and relationship well-being. Perceived responsiveness is, at least partly, a function of how responsiveness the partner intended to be during the interaction. Relatively little is known about what factors make people intend to be more or less responsive to their partners. In two studies, we examined whether individuals' experienced emotion and underlying relationship goals were linked to their intended responsiveness. Across two studies, both experienced positive emotion and approach goals predicted higher intended responsiveness, whereas experienced negative emotions predicted lower intended responsiveness. In addition, Study 2 also showed that people with strong approach goals intended to provide more responsiveness when they experienced more positive emotions. In contrast, the negative association between experienced negative emotions and intended responsiveness was stronger for low avoidance individuals than for high avoidance individuals. Our findings highlight that experienced positive and negative emotions may provide different information relavant to an individuals' intended responsiveness depending on their relationship goals.

Keywords Approach and avoidance motivation · Close relationship · Emotions · Responsiveness

An essential component of maintaining a high quality relationship is perceived responsiveness to the self, which is the degree to which individuals feel understood, validated, and cared for by their partners during interactions (Reis et al. 2004). A robust body of research has focused on the benefits of perceived responsiveness, such as increases in intimacy and relationship satisfaction, building interpersonal resources, and decreased defensive reactions after failure (Caprariello and Reis 2010; Gable et al. 2006; Maisel and Gable 2009). Although perceptions of responsiveness in a partner are partly a function of factors residing within a perceiver (e.g., attachment style, relationship satisfaction; Reis and Gable 2015), perceptions are also clearly influenced by the actual behavior of the responder, which is closely tied to how responsive he or she intended to be (e.g., Gable et al. 2012; Maisel et al. 2008). However, we know little about the contextual or individual factors that might influence responders' intended level of responsiveness. In the current study, we examine emotion and motivation as potential moderators of level of intended responsiveness.

Responsiveness in relationships

Self-disclosure, the sharing of self-relevant information, is an important feature of close relationships. When individuals disclose personal information it provides an opportunity to increase intimacy. However, the consequences of self-disclosure depend on the listeners' reactions. Reis and Shaver (1988) suggested that perceived responsiveness, feeling the listener understands, validates, and cares for the self, plays a key role in the development of intimacy. Perceived responsiveness is a perception of the listener's behavioral response, which is the degree that the listener gets the facts right about the discloser, conveys that the he/she views the discloser's point of views as valid, and shows warmth and compassion to the discloser.

✉ Shelly L. Gable
shelly.gable@psych.ucsb.edu

[1] Department of Psychology, Chung Yuan Christian University, Taoyuan, Taiwan

[2] Department of Psychology, Pace University, New York, USA

[3] Department of Psychology, University of California, Santa Barbara, USA

Previous research has indicated that perceived responsiveness contributes to several personal and relationship outcomes. Gable et al. found that perceived responsiveness following the disclosure of personal events was associated with more positive affect, less negative affect, better relationship satisfaction and stability (Gable et al. 2004, 2006). Caprariello and Reis (2010) found that perceived responsiveness lead individual to become less defensive to failure. Perceived responsiveness also plays a key role in shaping intimacy in interpersonal processes (Laurenceau et al. 1998), and predicts more satisfaction, trust, relationship duration, and prosocial orientation (Gable et al. 2006, 2012; Maisel et al. 2008).

Because of the benefits of perceived responsiveness, previous research has also focused on what factors predict the perception of responsiveness. Even though perceived responsiveness is a constructive perception (Burgoon et al. 1995; Courtright 2013; Jones and Wirtz 2006) which may be affected by many factors, it is at least partly a function of how responsiveness the partner intended to be during interaction. Reis and Gable (2015) review of the literature found evidence that responder's actions influence on partner's perceived responsiveness. For example, the responder's responsive behaviors observed and rated by judges are linked to one partner's perceived responsiveness (Gable et al. 2006) and moreover, the more participants reported trying to be responsive in daily life, the higher their partners rated them on responsiveness. Canevello and Crocker (2010) also found the more individuals intended to provide responsiveness, the more their partners perceived responsiveness.

Although the literature on responsiveness continues to grow, most studies have focused on the discloser's perspective and have not considered factors that might predict who, or when one is likely to respond in a way that is perceived as understanding, validating, and caring. Since perceived responsiveness is crucial in close relationship and tied directly to the intentions of the responder, more attention should be paid to the factors contributing to individuals' intentions to be more or less responsiveness during specific interactions. In the current study, we predicted that individuals' experienced emotion and their underlying motives would predict their intention to be more or less responsive to their partner.

Approach–avoidance goals and intended responsiveness

Goals shape people's behavior and direct their efforts toward different outcomes. Previous research has found that individual's goals affect feelings, communication styles, and interpretation of other's behavior (Caughlin 2010; Keck and Samp 2007). Gable (2006) distinguished between approach and avoidance goals in the close relationship domain. Individuals with approach-oriented goals tend to pursue rewards, such as closeness and intimacy in the relationship; and individuals with avoidance-oriented goals are focused on eluding potential threats, such as rejection and conflicts in the relationship. Previous research has found that approach and avoidance goals are associated with both individual and relationship-specific outcomes. Specifically, having strong approach goals has been associated with higher relationship satisfaction, more positive affect, and less loneliness; having strong avoidance goals is linked to more anxiety, lowered relationship satisfaction, and higher loneness. Because people with strong approach goals seek opportunities to increase relationship incentives (e.g., intimacy, satisfaction), they could be more sensitive to opportunities to be responsive and increase intimacy and relationship quality. In contrast, individuals with stronger avoidance goals are focused on preventing negative outcomes, and to the extent that the interaction does not present a threat (e.g., conflict, rejection), avoidance goals should not predict intended responsiveness. However, prior work has shown that avoidance goals were negatively associated with responsiveness; Impett et al. (2010) found that when couples discussed the experience of feeling love for the partner, individuals high in approach goals were rated as more responsive toward partner's needs by outside observers whereas individuals high in avoidance goals were rated as less responsive. It could be that being vigilant for threat leads to missed opportunities for advancing rewards in the moment. Nevertheless, we tentatively hypothesized that intended responsiveness would be positively associated with approach goals but unrelated to avoidance goals.

Experienced emotion and intended responsiveness

Functional accounts of emotions offer a framework for understanding how both positive and negative emotions may have an impact on intended responsiveness (Keltner and Gross 1999). Positive emotions serve as incentives which encourage people to engage in social interactions while negative emotions serve as deterrents which decrease individual's involvement in social interactions (Keltner and Kring 1998). Findings from studies on helping behavior also support the incentive functions of emotions and suggest that positive moods lead to individuals becoming more prosocial (Carlson et al. 1988).

On the other hand, to provide responsiveness, individuals have to pay attention to partners' needs and the current situation. Experienced emotions also change attention, which in turn, may also affect peoples' capacity and willingness to provide responsiveness to their partner. Positive

emotions are thought to widen attention which may increase responders' awareness of their partners' needs (Fredrickson 1998, 2001; Fredrickson and Branigan 2005). In contrast, even though some negative emotions are associated with approach behavioral tendencies (i.e. anger), experiences of most negative emotions narrow people's attention (Gable et al. 2015); they become more self-focused which may limit one's capacity to notice a partner's needs. Taken together, we hypothesized that experienced positive emotion would be positively associated with intended responsiveness, whereas experienced negative emotion negatively associated with intended responsiveness.

The interaction of emotion and motivation

We also explored the how individual differences in approach and avoidance goals might moderate the effects of in-the-moment emotional experiences. We reasoned that individuals' goal orientations would also direct their attention to different emotions and weight that information according to the strength of their goals. For example, Updegraff et al. (2004) found that when evaluating their own personal well-being or their overall satisfaction with a laboratory session, individuals with strong approach motivations based their judgments more on positive emotional experiences than those with weak approach goals. Similarly, Gable and Poore (2008) also found that people with strong approach goals weighted their moment-to-moment positive emotions (i.e., love) toward their romantic partner more heavily when evaluating their overall relationship satisfaction than those with weaker approach goals. On the other hand, they found that those with strong avoidance goals tended to weigh their moment-to-moment negative emotions (i.e., feelings of insecurity) more heavily in their overall relationship satisfaction judgments than those with weaker avoidance goals.

In the current study, we examined how relationship goals moderated the effect of emotion experienced in the moment on individuals' intended responsiveness. We expected that experienced positive emotion (own as well as perceptions of the partner's emotion) during the interaction would serve as a reward and positive signals of promoting the relationship, which are salient cues to individuals with strong approach goals. Specifically, we expected that the more individuals high in approach goals experienced positive emotions during the interaction (their own or their partners'), the more they would try to provide responsiveness to their partner to build relationship resources. In contrast, even though experienced negative emotions per se may interfere with effective responding, individuals with strong avoidance goals may see negative emotions as a potential loss and threat signal, which in turn may motivate them to increase their efforts to be responsive in order to avert a negative outcome. Specifically, we predicted that strong avoidance goals would mitigate the otherwise detrimental effect that experiencing negative emotions would have on intended responsiveness.

The current study

We conducted two studies to examine our hypotheses regarding goals, emotions and intended responsiveness. Dating couples were invited to the laboratory to discuss either their important personal goals (Study 1) or a personal strength and weakness (Study 2). After each discussion, responders reported their experienced emotions and their intended responsiveness and disclosers reported how responsiveness they perceived the responders to be during the discussion. We predicted that experienced positive emotions and individual's approach goals would be associated with greater intended responsiveness, whereas experienced negative emotions would be associated with lower intend responsiveness. In addition, the positive correlation between experienced positive emotion and intended responsiveness would be stronger for individuals with strong approach goals than those with weaker approach goals. In contrast, the negative correlation between experienced negative emotions and intended responsiveness would become weaker for individuals with strong avoidance goals, compared to those with weaker avoidance goals.

Study 1

Method

Participants

Forty-nine (48 heterosexual, 1 lesbian) couples were recruited via advertisements in two local community information websites (one aimed at parents and one aimed at the general population). We recruited couples who were currently involved in a dating relationship of at least 3 months. The average age was 28.19 ($SD = 13.62$) years.[1] The majority of participants were white (62%), Latino/a (14%), or Asian (13%), and the remaining participants (11%) were Black, Native American, or Other/More than one race. Couples were paid US $50 for their participation.

Procedure

When couples arrived in the laboratory they were given an overview of the procedures and provided informed consent.

[1] One participant didn't report his/her age.

Each person was led into a separate room to complete questionnaires on computers using the MediaLab software. After completing questionnaires on the computer, participants were given a paper form that asked them to list five personal goals that they would be pursuing in the next few years (e.g. "maintaining a high GPA"). After listing their goals, participants were informed that they would be discussing their two most important personal goals with their partners in the next phase of the study. They were asked to select the 'top two' from their goals sheet and write them on blank note cards to keep with them for the next phase. Participants were told that if they were uncomfortable discussing their top two goals, they could substitute others from their list.

Participants were reunited with their partners in a small room equipped with unobtrusive yet visible video cameras. Couples then took part in a total of six discussions. For the first discussion, one (randomly selected) participant was asked to talk about his or her favorite characteristic of the partner. The discussion served as a light-hearted "warm-up" discussion to help participants become acclimated to talking to each other in the lab setting. For the next four discussions, participants took turns talking about their personal goals from their notecards (most important goal was discussed first); the participant who did not share the favorite characteristic of the partner in the first discussion went first in this sequence.[2] After each goal discussion participants completed post-discussion measures, the participant who did not share his or her favorite characteristic of the partner in the warm-up discussion, did so for the final (6th) discussion. This interaction served as a positive ending note to the study. After couples completed all discussions, they were debriefed and thanked for participating the study.[3] For the current study we focus only on the four goal-sharing discussions.

Measures

Relationship goals

As part of the initial set of questionnaires, participants completed a relationship goals measures which is an adaption of Elliot et al. (2006) social goals measures.[4] Specifically the social goals measure was adapted to focus on the dating relationship and has been used in previous studies (e.g., Impett et al. 2008). The measure consists of 4-items assessing approach relationship goals (e.g., "I will be trying to enhance the bonding and intimacy in my romantic relationship", $\alpha = .88$) and four items assessing avoidance relationship goals (e.g., "I will be trying to avoid disagreements and conflicts with my romantic partner", $\alpha = .70$). Participants were asked to consider their goals for their relationship over the next few months and indicate the extent they endorsed each goal on 7-point scales (1 = 'not at all true of me' to 7 = 'very true of me'). The approach and avoidance goal scales were calculated by averaging the responses across the four items for each scale. The correlation between approach relationship goals and avoidance relationship goals was .37 ($p < .001$).

Post-goal discussion measures

Following each goal discussion, participants completed a brief questionnaire about the interaction. Following discussions in which their partner was sharing a personal goal and they were responding to that goal,[5] participants completed measures of how responsive (understanding, validating, and caring) they tried to be during the discussion. Specifically, participants responded to 12 items assessing intended responsiveness to the partner, a modified version of the perceived responsiveness scale used in prior research (e.g., Maisel et al. 2008). Participants responded using a seven-point scale (1 = not at all to 7 = very much). Sample items included were "I tried to understand my partner", "I tried to really listen to my partner", "I tried to respect my partner", "I tried to express liking and encouragement for my partner" ($\alpha = .89$). The correlation between intended responsiveness ratings in the two separate partner goal discussions (most important and second most important) was .53 ($p < .001$) and so the two were combined into one aggregate intended responsiveness score.

Emotion was also measured after each interaction in which the partner shared a goal. There were seven positive emotions (happiness, love, pride, joy, hope, desire, relief) items and five negative emotions (anxiety, frustration, embarrassment, disappointment, nervousness). Participants were asked to indicate their personal feelings and their perception of partner's feelings on a 5-point scale (1 = not at all, 5 = very much) according to the extent they felt each emotion (or perceived their partner was experiencing that emotion) during the discussion. Ratings of emotions in the two goal interaction discussions were highly correlated ($r = .44$ to .61, $p < .001$) and so emotion scales were aggregated across

[2] Due to timing issues, three couples only discussed one goal each.

[3] Participants were contacted for four brief follow-up surveys (online) over the next 2 years (every 6 months). Data from the follow-up surveys are not the focus of the current manuscript. The rate of participation in the follow-up surveys varied and information on follow-up participation rates and the measures collected are available from the last author (Gable).

[4] The complete list of measures is available from the last author (Gable).

[5] The partner who shared his/her goals in the preceding discussion also completed measures during this time, however these measures are not the focus of the current study.

Table 1 Experienced emotion and relationship goals predicting intended responsiveness

	Intended responsiveness ($N=98$)		
	Model 1	Model 2	Model 3
Predictors			
Intercept	4.38 (.06)	4.38 (.05)	4.39 (.06)
Approach goals	.18** (.06)		.05 (.06)
Avoidance goals	− .03 (.05)		− .02 (.04)
Experienced positive emotion		.27*** (.06)	.27*** (.06)
Experienced negative emotion		− .40*** (.09)	− .36** (.09)
Experienced positive emotion × approach goal			− .07 (.07)
Experienced negative emotion × avoidance goal			.01 (.08)

Numbers outside parentheses are unstandardized HLM coefficients; numbers inside parentheses are standard errors

***$p<.001$; **$p<.01$; *$p<.05$

the two goal interaction. In addition, felt positive emotion ($\alpha=.89$) and perceived positive emotion ($\alpha=.89$) were correlated at .86, $p<.001$. Therefore, a composite positive emotion measure was created by combing the two felt and two perceived positive emotion measures into one aggregated measure of *experienced* positive emotion. Similarly, felt negative emotion ($\alpha=.83$) and perceived negative emotion ($\alpha=.84$) were correlated at .48, $p<.001$ and a composite negative emotion measure was created by combing experienced and perceived negative emotion into one aggregated measure of *experienced* negative emotion.[6] Thus the experienced emotion measures captured both experience and perceived emotions across the two separate interactions. Finally, the correlation between the positive and negative emotion measures was moderate ($r=-.28$, $p<.01$), and so we examined each emotion measure separately.

Results

Data analytic strategy

The main focus of the current study is to examine what factors are associated with individuals' intended responsiveness to their partner. Couple's responses were interdependent and therefore hierarchical linear modeling techniques were used to analyze the data with HLMwin program (Raudenbush et al. 2004). Data from the interaction were nested within couples. Grand-mean centered predictors were used to test between-person level interaction terms where appropriate.

Goals and responsiveness

To test our hypothesis that an individual's approach goals would predict intended responsiveness and explore the possibility that avoidance goals were associated with responsiveness, we constructed a model in which approach and avoidance goals were entered simultaneously as predictors of intended responsiveness.[7] As expected, approach goals were positively associated with intended responsiveness ($b=.18$, $SE=.06$, $p<.01$). Also as we hypothesized, avoidance goals were not significantly associated with intended responsiveness ($b=-.03$, $SE=.05$, $p=.52$).

Experienced emotions and responsiveness

To examine whether individual's positive and negative experienced emotions about the discussion was associated with intended responsiveness, we constructed a model in which positive and negative experienced emotions about the discussion predicted responsiveness. Consistent with our predictions, we found that the more individuals experienced positive feelings during the discussion, the more they reported they intended to provide responsiveness to their partners ($b=.27$, $SE=.06$, $p<.001$). In contrast, the more individuals experienced negative feelings during the discussion, the less they reported they intended to provide responsiveness to their partners ($b=-.40$, $SE=.09$, $p<.001$) (Table 1).

[6] We have also run all analysis with personal emotion and perceived partner's emotion separately which produced the same pattern of results.

[7] Five participants didn't complete the goal orientation questionnaire. We used the grand-mean score of approach and avoidance goals to replace the missing values. We also analyzed our data without these five participants (only included participants who completed all measures), the results are similar.

Goals as moderators of the links between emotions and responsiveness

To examine our hypotheses that the association between experienced emotions and intended responsiveness would be moderated by individual differences in goal strength we constructed models that tested two interaction terms (positive emotions × approach goal; negative emotion × avoidance goals) and entered them in the model simultaneously. Contrary to our hypotheses, goal strength did not moderate the associations between emotions and intended responsiveness, neither the interaction between approach goal and positive feelings ($b = -.10$, $SE = .07$, $p = .20$), nor the interaction between avoidance goal and negative feelings ($b = -.00$, $SE = .09$, $p = .97$).[8]

Study 1 discussion

Consistent with our hypothesis, we found that both goals and experienced emotions had main effects on intended responsiveness. Specifically, the more positive emotions individual experienced during the discussion, the more they tried to provide responsiveness, whereas the more negative emotions they experienced, the less they tried to provided responsiveness. In addition, individuals with stronger approach goals tried to provide more responsiveness to their partners. There was also no significant association between avoidance goals and intended responsiveness; nor did goals moderate the associations between experienced emotions and intended responsiveness. We further discuss these unexpected results in "General discussion". In Study 2, we tested our hypotheses in a similar study however the topics of the discussions were centered on the partner's greatest strength and weakness that had an impact on their relationship.

Study 2

Method

Participants

Sixty-two (59 heterosexual, 3 same-gender) couples were recruited via the University of California at Santa Barbara (UCSB) paid participant pool. We recruited couples who were currently involved in a dating relationship of at least 3 months. On average, participants were 21.44 ($SD = 1.37$) years[9] of age and were involved in their current relationship for 16.89 months ($SD = 14.68$). Couples were paid US $50 for their participation.

Procedure

Participants were e-mailed the link to an online pre-survey which assessed their relationship goal orientations one week before visiting the lab for the discussion session. When couples arrived in the lab, each member of the dyad was seated alone in a small room. They were asked to nominate three personal strengths and three personal weakness. They then subsequently rated each of these six attributes for the impact they perceived it had on their relationship with their partner.

Couples were then brought back together and told the computer would randomly assign one personal strength and one personal weakness from attributes they had nominated. In truth participants were assigned to discuss their personal strength and weakness with the greatest impact on their relationship.[10] Couples were led into a room with unobtrusive yet visible video cameras.

Couples randomly assigned to one of eight discussion topic orders (counter balancing both gender and valence) and took part in a total five discussions. They were informed they could discuss any aspect they wished and talk for as long or as short a period of time as they would like in each discussion. However, all couples, regardless of their discussion topic order, began the warm-up session with a discussion of their first date experience. For the remaining four discussions, they discussed either one member's strength or weakness. After each strength or weakness discussion, participants were asked to rate their own emotions, their perception of partner's emotions, and intended responsiveness toward the partner (if the partner was sharing his/her strength or weakness) or perceived responsiveness from the partner (if he/she was sharing a strength or weakness). After they completed all discussions, couples were debriefed and thanked for participation.

[8] Although in the current study we focus on the intended responsiveness, we noted that intended responsiveness significantly predicted the partner's perception of responsiveness ($r = .30$, $p < .01$).

[9] The average length of relationship is based on 113 individuals that reported their relationship length.

[10] However, in nine instances the strength (two instances)/weakness (seven instances) with the greatest impact was not chosen. For two participants the strengths rated as having the highest impact on the relationship were "[I'm] hot" for one individual and "[I'm] good at taking surveys"/"[I'm] damn sexy" for the other. For these two participants the next highest rated strength was chosen. For the weaknesses, one participant rated "[I'm] colorblind" as most negative and therefore the next most negative rated trait was chosen. In the remaining six instances the experimenter was responsible for assigning the wrong discussion topic.

Table 2 Result of experienced emotions and relationship goals in predicting intended responsiveness

	Strength			Weakness		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Predictors						
Intercept	4.22 (.06)	4.22 (.05)	4.21 (.05)	4.08 (.06)	4.08 (.06)	4.06 (.05)
Approach goal	.17** (.06)		.15** (.05)	.12† (.06)		.09 (.06)
Avoidance goal	.01 (.05)		.00 (.04)	.06 (.05)		.07 (.05)
Experienced pos. emotion		.29*** (.06)	.26*** (.06)		.29*** (.06)	.27*** (.06)
Experienced neg. emotion		− .22* (.09)	− .22** (.08)		− .05 (.08)	− .07 (.08)
Experienced pos. emotion × approach goal			.11* (.06)			.16* (.06)
Experienced neg. emotion × avoidance goal			.15* (.06)			.08 (.06)

Numbers outside parentheses are unstandardized HLM coefficients; numbers inside parentheses are standard errors

***$p < .001$; **$p < .01$; *$p < .05$. $^{\dagger}p < .1$

Measures

Relationship goals

Relationship goals were assessed with the same adapted social goal measures used in Study 1 (Elliot et al. 2006). Reliability of approach and avoidance goals in Study 2 was .89 and .72, respectively.

Post-discussion measures

Following discussion in which partners were sharing their personal strength (or weakness) and participants were responding to partners' disclosure, participants reported how responsive they tried to be during the discussion. The intended responsiveness to the partner was assessed by a modified version of the 10-item perceived responsiveness scale used in Maisel et al. (2008). Reliability of the intended responsiveness was .90 in the discussion of partner's strength and .87 in the discussion of partner's weakness.[11]

After discussing partner's strength/weakness, emotions were assessed by 11 items, including the 7 positive items from Study 1 and 4 of the negative items from Study 1 (nervousness was omitted). For each emotion item, participants indicated to what extent they felt and perceived their partner was experiencing it during the discussion on 5-point scale (1 = *not at all* to 5 = *very much*). Because the felt positive emotion (α = .91) and perceived partner's positive emotion (α = .92) were also highly correlated ($r = .93$, $p < .001$), we then created a composite positive emotion index by combining the two felt and two perceived positive emotion measures into one aggregated measure of *experienced* positive emotion. Similarly, felt negative emotion (α = .76) and perceived negative emotion (α = .83) were correlated ($r = .71$, $p < .001$) and we created a composite negative emotion index by combing the two felt and two perceived negative emotion measures into one aggregated measure of *experienced* negative emotion.

[11] One participant didn't report intended responsiveness while discussing partner's strength, we used the grand-mean score to replace the missing value. We also analyzed our data without this participant (only included participants who completed all measures), the results are similar.

Results

Data analytic strategy

The data structure of Study 2 was very similar to Study 1. We use hierarchical linear modeling techniques our hypotheses with HLMwin program (Raudenbush et al. 2004). Data from the interactions were nested within couples. Grand-mean centered predictors were used to test between-person level interaction terms where appropriate.

Goal orientation and experienced emotions during the discussion

The main effect results (see Table 2) of goal orientation and experienced emotions during the discussion replicated our findings in Study 1. We found that in both strength and weakness discussions, those who had strong approach goals reported that they intended to provide more responsiveness to their partner ($b = .17$, $SE = .06$, $p < .01$; $b = .12$, $SE = .06$, $p = .05$, respectively), but avoidance goals were not correlated with intended responsiveness ($b = .01$, $SE = .05$, $p = .82$; $b = .06$, $SE = .05$, $p = .21$, respectively). In addition, higher experienced positive emotions were associated with higher intended responsiveness in both strength and weakness discussions ($b = .29$, $SE = .06$, $p < .001$; $b = .29$, $SE = .06$, $p < .001$, respectively), whereas higher experienced negative emotions were associated with lower intended

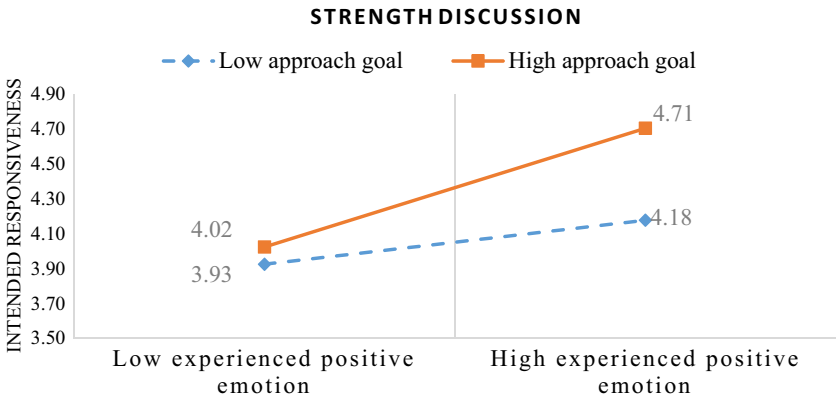

Fig. 1 The interaction between experienced positive emotion and approach goals in predicting intended responsiveness while discussing strength

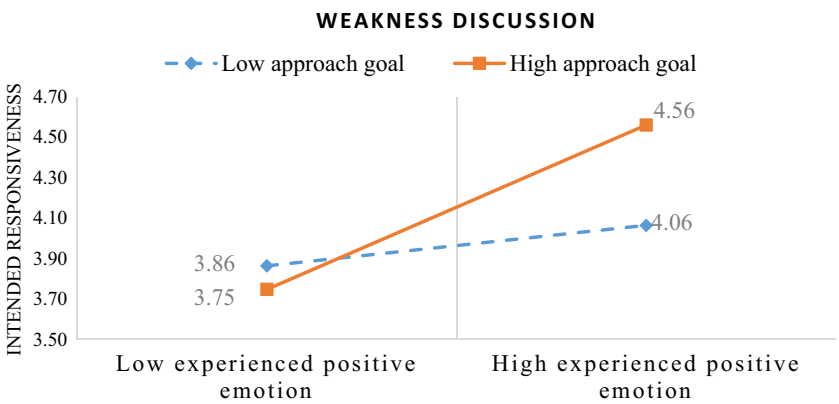

Fig. 2 The interaction between experienced positive emotion and approach goals in predicting intended responsiveness while discussing weakness

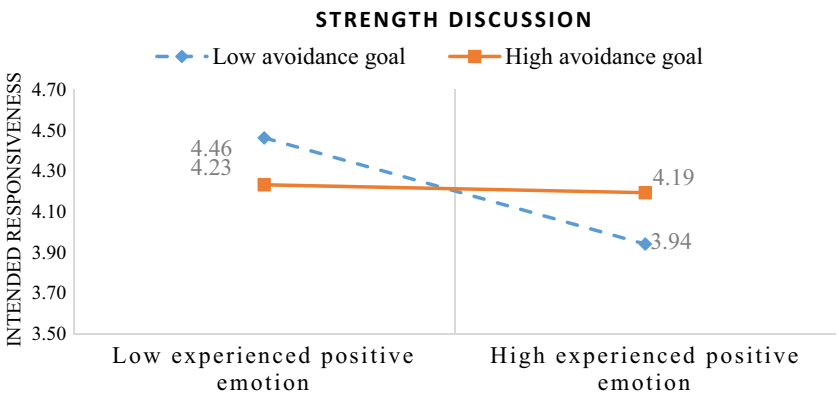

Fig. 3 The interaction between experienced negative emotion and avoidance goals in predicting intended responsiveness while discussing strength

responsiveness ($b = -.22$, $SE = .09$, $p = .01$) in the strength discussion but not in the weakness discussion ($b = -.05$, $SE = .08$, $p = .55$).

The interaction between experienced emotions and relationship goals

To examine whether the associations between experienced emotions and intended responsiveness would be moderated by individual's relationship goals, we created two interaction terms (positive emotions × approach goal; negative emotion × avoidance goals) and entered them into the model simultaneously. The results are shown in Table 2. We found that the interactions between experienced positive emotions and approach goals were significant in predicting intended responsiveness in both strength and weakness discussions ($b = 11$, $SE = .06$, $p = .04$; $b = 16$, $SE = .06$, $p = .01$, respectively). In addition, the interactions between experienced negative emotions and avoidance goals was significant in predicting intended responsiveness in strength discussion ($b = .15$, $SE = .06$, $p = .02$) but not in weakness discussion ($b = .08$, $SE = .06$, $p = .18$).

Simple slope analysis (Preacher et al. 2006) revealed that in both strength and weakness discussions (see Figs. 1, 2), for those who have strong approach goal, the more experienced positive emotions they had, the more they were trying to be responsive to their partner ($b = .37$, $SE = .08$, $p < .001$; $b = .44$, $SE = .09$, $p < .001$, respectively), but a similar association was not found on those who have lower approach goal ($b = .14$, $SE = .08$, $p = .09$; $b = .11$, $SE = .09$, $p = .23$, respectively). In addition, we found that in the strength discussion, those who had weaker avoidance goals, when they reported more experienced negative emotions, intended to be less responsive toward their partners ($b = -.41$, $SE = .11$, $p < .001$); for those with strong avoidance goals, their experienced negative emotions were not significantly associated with their intended responsiveness ($b = -.03$, $SE = .12$, $p = .80$; see Fig. 3).[12]

Study 2 discussion

Study 2 replicated the findings of Study 1 regarding the associations between experienced positive emotions and intended responsiveness. Specifically, as in Study 1, the results showed that when the interaction goes smoothly (i.e., experienced positive emotions), people reported trying harder to be a responsive partner. However, when the interaction is characterized by experienced negative emotions people reported not trying as hard to be responsive. In addition, Study 2 supported our hypotheses regarding how approach and avoidance goals would moderate the associations between experienced emotions and intended responsiveness. Individuals with strong approach goals for their relationship exhibited a strong positive association between positive emotions and intended responsiveness. Those with weak approach goals showed a much weaker (and nonsignificant) association between their experienced positive emotions and responsiveness.

In addition, people with weak avoidance goals had a negative association between their experienced negative emotion and intended responsiveness, and this association was not seen in those with strong avoidance goals. It is also worthwhile to mention that the main effect of experienced negative emotions and the interaction effect between experienced negative emotion and avoidance goal in predicting intended responsiveness were more salient in the positive interaction (i.e. discussing strength) than in negative interaction (i.e. discussing weakness).

[12] Study 2 replicated the positive associations between intended responsiveness and partner's perception of responsiveness ($r = .50$, $p < .001$).

General discussion

Although perceived responsiveness—feeing understood, validated, and cared for—is central to close relationship quality, researchers have not focused on factors associated with the willingness to provide responsiveness. We conducted two studies to answer this question from the provider's standpoint. In what follows, we further discuss our findings and how these findings extend the previous research on responsiveness provision in close relationships.

Relationship goals and intended responsiveness

Our first goal was to examine the relationship between approach–avoidance goals and intend responsiveness. As we predicted, across two studies, individual with strong approach goals intended to provide more responsiveness. Because those with strong approach are more focused on the rewards and benefits of their close relationship than weak approach individuals, they may be more sensitive to opportunities to provide responsiveness. However, avoidance goals were not associated with intended responsiveness, as we tentatively predicted. Our reasoning was that in contexts that are not particularly threatening to the self or the relationship, avoidance goals, per se would not be particularly salient. In the current studies, disclosers either discussed their own goals (Study 1) or their own strength/weakness (Study2). Therefore, the nature of the discussions was not particularly high on signals of threat (e.g., conflict, rejection) to which avoidance relationship goals are sensitive. However, Impett et al. (2010) did find an association between responsive behavior and avoidance goals in what on the surface should have been a relatively threat-low interaction. In their study, responsiveness was coded by judges and in our studies we examined intended responsiveness. It is possible that there is a disconnect between intentions and behavior.

Emotions and intended responsiveness

Our second research question was the association between emotion and intended responsiveness. The findings were consistent across two studies: the more positive emotions experienced, the higher intended responsiveness, whereas the more negative emotions experienced, the lower intended responsiveness. Our findings provide the empirical evidence supporting the incentive functions of emotion in social interaction. More precisely, experienced emotions are not only the outcomes of social interaction but also direct individuals' behavior. The results from the current study support the idea that individual's motivation for engagement in social interactions is at least partially influenced by their emotional experience. Experienced positive emotions are

associated with the willingness to engage in pro-relationship behaviors, such as trying to provide more responsiveness in the current study, which in turn, could evoke the other partner respond in a responsive way and create an the upward spiral of interactions. In contrast, experienced negative emotions may serve as a threat signal. Individuals tend to be more conservative to protect their personal resources and less willing to provide responsiveness.

Experienced emotion and approach and avoidance goals

We further consider the interactions between experienced emotions and approach–avoidance goals in predicting intended responsiveness. For those with strong approach goals, the more they experienced positive emotions during the discussion, the more they intended to provide responsiveness to their partner. In contrast, the association between experienced negative emotions during the discussion and a decline in intended responsiveness was mitigated for those high on avoidance goals. We found this pattern in Study 2, but not Study 1.

Although the evidence was mixed across our studies, these findings tentatively suggest that experienced positive and negative emotions may serve different function based on individuals' relationship goal. Approach goals direct individuals to be more sensitive to positive social information and outcomes (Elliot et al. 2006; Gable and Poore 2008; Gable et al. 2000). Thus, experienced positive emotion during the interaction may serve as signals of potential rewards to high approach goal individuals and motivate behavior toward those rewards. In contrast, avoidance goals direct individuals to stay away from threats and potential risks, which make them more focused on the negative social information and more reactive to negative events. Experienced negative emotions during the interaction may serve as a threat alarm to trigger their relationship protective behavior. Thus, individual with strong avoidance goals may be more motivated to be responsive when they experience negative feelings.

However as noted, we only found support for the goal and experienced emotions hypotheses in Study 2, not Study 1. One possible explanation as to why goals did not moderate the association between emotions and intended responsiveness in Study 1 was the relevance and emotional significance of the goals discussed by the partner to the responding participants likely varied a great deal. A partner discussion of goals such as "maintaining a high GPA" or "do an excellent job on whatever I am assigned at work" would be less relevant and emotionally involving than discussion of goals such as "Be more open with my feelings" or "Drink less". Thus, it may be that discussions that are more uniformly relevant to the ongoing relationship and more emotionally involving would be contexts in which goals might moderate the links between emotional experience and responsiveness. In Study 2, couples discussed their greatest strength and weakness that had an impact on their relationship and thus were more uniformly relevant to relationships goals.

Limitations and future direction

There are three caveats that should be noted with regard to our data. First, we focused on participants' intentions to be responsiveness rather than their actual responsive behavior. Although prior work has found that partners' intended responsiveness predicts receivers' perceptions of that responsiveness, there is still likely to be a gap between intentions and behavior. Future studies are needed to more fully explore the difference between intended and enacted responsiveness. Second, the design of the current studies addressed factors linked to one's intended responsiveness, we could not address the underlying mechanism between intended responsiveness and experienced emotions. More precisely, we are unable determine whether, for example, whether individuals with strong approach goals intended to provide more responsiveness because they experienced more positive emotions, or they reported feeling positive emotions (and seeing them in their partner) because they were trying be a responsive partner. Although the former explanation is more consistent with the theory than the latter, future studies should explore the causal relationship between experienced emotions and individuals' intended responsive using designs that can tease these pathways apart. Third, given the dyadic nature of couple interaction, it is also worthwhile to design studies that can more precisely test actor–partner effects to improve the understanding of responsiveness in couple dynamic interaction. Fourth, both Study 1 and Study 2 were laboratory studies in which couples discussed neutral to slightly positive topics. Future studies with different methods, such as longitudinal study or daily diary report, are needed to generalized our findings across different kinds of interpersonal situations and naturally occuring interactions.

Conclusion

Everyone wants a responsive partner who understands, values, and cares for our needs. But what about our own intentions to be responsive? The result of the current study indicated that both the emotions experienced during the interaction and individuals' approach–avoidance goals are associated with intended responsiveness. Moreover, experiencing positive and negative emotions may deliver different information to individuals with different relationship goals. Specifically, individuals with high approach motivation

intend to provide more responsiveness when they are experiencing more positive emotions. On the other hand, even though there is a general pattern that experiencing negative emotions is associated with decreased intended responsiveness, those who are high in avoidance goals do not pull back on their intended responsiveness but instead provide responsiveness in an effort to perhaps protect against negative outcomes. Thus, our finding suggested that both what we feel during the interaction and what relationship goals we hold influence how responsive we intend to be toward our partners.

Funding Funding was provided by Directorate for Social, Behavioral and Economic Sciences (Grant No. 0444129).

References

Burgoon, J. K., Dillman, L., & Stern, L. A. (1995). *Interpersonal adaptation: Dyadic interaction patterns*. Cambridge: Cambridge University Press.

Canevello, A., & Crocker, J. (2010). Creating good relationships: Responsiveness, relationship quality, and interpersonal goals. *Journal of Personality and Social Psychology, 99*, 78–106. https://doi.org/10.1037/a0018186.

Caprariello, P. A., & Reis, H. T. (2010). Perceived partner responsiveness minimizes defensive reactions to failure. *Social Psychological and Personality Science, 2*(4), 365–372. https://doi.org/10.1177/1948550610391914.

Carlson, M., Charlin, V., & Miller, N. (1988). Positive mood and helping behavior: A test of six hypotheses. *Journal of Personality and Social Psychology, 55*(2), 211–229. https://doi.org/10.1037/0022-3514.55.2.211.

Caughlin, J. P. (2010). A multiple goals theory of personal relationships: Conceptual integration and program overview. *Journal of Social and Personal Relationships, 27*(6), 824–848. https://doi.org/10.1177/0265407510373262.

Courtright, J. (2013). *Observing and analyzing communication behavior*. New York: Peter Lang Publishing Inc.

Elliot, A. J., Gable, S. L., & Mapes, R. R. (2006). Approach and avoidance motivation in the social domain. *Personality and Social Psychology Bulletin, 32*, 378–391. https://doi.org/10.1177/0146167205282153.

Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology, 2*(3), 300–319. https://doi.org/10.1037/1089-2680.2.3.300.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*(3), 218–226. https://doi.org/10.1037/0003-066X.56.3.218.

Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion, 19*(3), 313–332. https://doi.org/10.1080/02699930441000238.

Gable, P. A., Poole, B. D., & Harmon-Jones, E. (2015). Anger perceptually and conceptually narrows cognitive scope. *Journal of Personality and Social Psychology, 109*(1), 163–174. https://doi.org/10.1037/a0039226.

Gable, S. L. (2006). Approach and avoidance social motives and goals. *Journal of Personality, 74*, 175–222. https://doi.org/10.1111/j.1467-6494.2005.00373.x.

Gable, S. L., Gonzaga, G. C., & Strachman, A. (2006). Will you be there for me when things go right? Supportive responses to positive event disclosures. *Journal of Personality and Social Psychology, 91*, 904–917. https://doi.org/10.1037/0022-3514.91.5.904.

Gable, S. L., Gosnell, C. L., Maisel, N. C., & Strachman, A. (2012). Safely testing the alarm: Close others' responses to personal positive events. *Journal of Personality and Social Psychology, 103*, 963–981. https://doi.org/10.1037/a0029488.

Gable, S. L., & Poore, J. (2008). Which thoughts count? Algorithms for evaluating satisfaction in relationships. *Psychological Science, 19*, 1030–1036. https://doi.org/10.1111/j.1467-9280.2008.02195.x.

Gable, S. L., Reis, H. T., & Elliot, A. J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology, 78*(6), 1135–1149. https://doi.org/10.1037/0022-3514.78.6.1135.

Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology, 87*, 228–245. https://doi.org/10.1037/0022-3514.87.2.228.

Impett, E. A., Gordon, A. M., Kogan, A., Oveis, C., Gable, S. L., & Keltner, D. (2010). Moving toward more perfect unions: Daily and long-term consequences of approach and avoidance goals in romantic relationships. *Journal of Personality and Social Psychology, 99*, 948–963. https://doi.org/10.1037/a0020271.

Impett, E. A., Strachman, A., Finkel, E. J., & Gable, S. L. (2008). Maintaining sexual desire in intimate relationships: The importance of approach goals. *Journal of Personality and Social Psychology, 94*, 808–823. https://doi.org/10.1037/0022-3514.94.5.808.

Jones, S. M., & Wirtz, J. G. (2006). How does the comforting process work? An empirical test of an appraisal-based model of comforting. *Human Communication Research, 32*(3), 217–243. https://doi.org/10.1111/j.1468-2958.2006.00274.x.

Keck, K. L., & Samp, J. A. (2007). The dynamic nature of goals and message production as revealed in a sequential analysis of conflict interactions. *Human Communication Research, 33*(1), 27–47. https://doi.org/10.1111/j.1468-2958.2007.00287.x.

Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition and Emotion, 13*(5), 467–480. https://doi.org/10.1080/026999399379140.

Keltner, D., & Kring, A. M. (1998). Emotion, social function, and psychopathology. *Review of General Psychology, 2*(3), 320–342. https://doi.org/10.1037/1089-2680.2.3.320.

Laurenceau, J.-P., Barrett, L. F., & Pietromonaco, P. R. (1998). Intimacy as an interpersonal process: The importance of self-disclosure, partner disclosure, and perceived partner responsiveness in interpersonal exchanges. *Journal of Personality and Social Psychology, 74*(5), 1238–1251. https://doi.org/10.1037//0022-3514.74.5.1238.

Maisel, N. C., & Gable, S. L. (2009). The paradox of received social support: The importance of responsiveness. *Psychological Science, 20*, 928–932. https://doi.org/10.1111/j.1467-9280.2009.02388.x.

Maisel, N. C., Gable, S. L., & Strachman, A. (2008). Responsive behaviors in good times and in bad. *Personal Relationships, 15*, 317–338. https://doi.org/10.1111/j.1475-6811.2008.00201.x.

Preacher, K. J., Curran, P. J., & Bauer, D. J. (2006). Computational tools for probing interactions in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics, 31*, 437–448. https://doi.org/10.3102/10769986031004437.

Raudenbush, S. W., Byrk, A. S., Chenong, Y. F., & Congdon, R. T. (2004). *HLM 6: Hierarchical linear and nonlinear modeling*. Chicago: Scientific Software International.

Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy

and closeness. In D. Mashek & A. Aron (Eds.), *The handbook of closeness and intimacy* (pp. 201–225). Mahwah: Lawrence Erlbaum Associates.

Reis, H. T., & Gable, S. L. (2015). Responsiveness. *Current Opinion in Psychology, 1*, 67–71. https://doi.org/10.1016/j.copsyc.2015.01.001.

Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck & D. F. Hay (Eds.), *Handbook of personal relationships: Theory, research, and interventions* (pp. 367–389). New York: Wiley.

Updegraff, J. A., Gable, S. L., & Taylor, S. E. (2004). What makes experiences satisfying? The interaction of approach-avoidance motivations and emotions in well-being. *Journal of Personality and Social Psychology, 86*(3), 496–504. https://doi.org/10.1037/0022-3514.86.3.496.