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# "I'm so excited for you!" How an enthusiastic responding intervention enhances close relationships

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**Abstract**

The positive impact of active–constructive responding (i.e., showing enthusiasm) to the sharing of good news (i.e., capitalization attempts) on relationship well-being is well documented. The objective of this research was to determine whether individuals in a close relationship benefit from training to increase active–constructive responding to partner capitalization attempts and to document its impact on relationship well-being. Compared with a joint activity control group, individuals who received training in providing active–constructive responses perceived a greater amount of gratitude from their study partner and perceived their study partner as having greater relationship satisfaction; however, there were no significant differences in reported relationship satisfaction or gratitude expression. Gratitude receipt from a study partner mediated the relationship between experimental condition and perceived study partner relationship satisfaction. These results are discussed in terms of their potential impact on interventions and future research.

**Keywords**

Active–constructive responding, capitalization, gratitude, relationship satisfaction

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Capitalization has been defined as the process of seeking out others when good things happen in order to share the positive news with another (Gable, Reis, Impett, & Asher, 2004; Langston, 1994). Sharing positive experiences is common: People disclose their most positive daily experience 60–80% of the time (Gable et al., 2004). However, prior research has demonstrated that others' responses to the person who is sharing are crucial to the outcomes of the capitalization process (e.g., Reis et al., 2010). In fact, responses to positive events tend to be better predictors of relationship well-being than responses to negative events (Gable, Gonzaga, & Strachman, 2006), and enthusiastic, supportive responses have been positively correlated with commitment, satisfaction, intimacy, and trust (Gable et al., 2004). The primary objective of the current study was to examine whether individuals in a close relationship benefit from training on providing enthusiastic, supportive responses (or, active–constructive responses) to capitalization attempts and whether doing so has a positive impact on dimensions of relationship well-being, such as relationship satisfaction and gratitude as well as perception of one's study partner as satisfied in their relationship and receipt of gratitude from one's study partner (i.e., a perceived increase in one's study partner expressing more gratitude in the relationship).

Prior research examining the process of active–constructive responding has been somewhat limited to correlational methods. The primary exception (Reis et al., 2010) focused on how sharing positive experiences may build trust and prosocial orientation toward the listener with whom one shares. However, Reis et al. acknowledge that a limitation of their experiments was that they were conducted entirely with "stranger-dyads" (2010, p. 326) and not with real-life relationship partners. The authors recommend that future research investigates how sharing positive experiences in a close relationship can be enhanced.

As examining active–constructive responding is a newer area of research (Gable & Reis, 2010), there are no studies we are aware of in which the researcher employed an experimental design and directly intervened over a period of time to teach participants how to better respond to capitalization attempts, while testing the relational benefits. In addition, only a portion of experimental research on active–constructive responding uses samples of real-life relationship partners (Gable & Reis, 2010). Thus, a primary objective of the current study is to demonstrate a causal relationship between response to capitalization attempts and relationship processes, including gratitude and perceived relationship satisfaction. A secondary objective is to understand this causal relationship using close relationship dyads, especially given recommendations that responsiveness to capitalization attempts are more "evident and influential in close relationships" (Gable & Reis, 2010, p. 210).

One alternative explanation for the present study is that it may be that simply having a pleasant interaction with a relationship partner (as may occur during the sharing of a positive event) is responsible for an increase in positive mood. Prior research (e.g., Vittengl & Holt, 1998) suggests that positive forms of social interaction, specifically fun/active and necessary/informational forms of interaction, are related to elevated positive affect. This may, in turn, be related to positive relationship outcomes. Thus, another objective of the present investigation is to rule out the possibility that simply having a pleasant interaction with a close relationship partner provides more of a boost in relationship processes than active–constructive responding, including gratitude and perceived relationship satisfaction.

### *Relationship satisfaction, gratitude receipt, and active–constructive responding*

Although capitalization attempts in and of themselves have resulted in positive relationship outcomes (e.g., Reis et al., 2010), partner responses to capitalization attempts are critical. A partner's response to an individual's sharing of a positive event determines whether the capitalization process is successful or unsuccessful (Gable & Reis, 2010). More important is how the capitalizing partner sharing their positive experience *perceives* their partner's responsiveness (Reis, 2007). This perceived partner responsiveness has been defined as a "process by which individuals come to believe that relationship partners both attend to and react supportively to central, core defining features of the self" (Reis, Clark, & Holmes, 2004, p. 203). It may also include a sense that one is cared for by a partner and that one's partner will be helpful in addressing any needs (Reis, 2007). Perceiving a partner's responsiveness as enthusiastic is likely to further the sharing partner's initial positive emotions and create an upward spiral of positive interpersonal interactions (Gable & Reis, 2010; Reis & Gable, 2003). Adding to this upward, spiral effect may be the perception the responder has of an increase in relationship satisfaction occurring in the individual capitalizing. In addition, the responder may receive gratitude from the sharing partner, in response to the responder's enthusiasm. Thus, the present study seeks to identify whether these two distinct interpersonal relationship outcomes (enhanced relationship satisfaction and gratitude receipt for both—the one capitalizing and the responder—as seen in perceived partner outcomes) occur as a result of capitalization attempts and partner responsiveness.

Several studies document a positive, interpersonal process related to enthusiastic responding to capitalization attempts. Gable et al. (2004) found that not only does sharing positive events increase positive affect over and above the initial positivity experienced but perceived partner responsiveness further enhances the benefits of sharing. More specifically, these authors differentiated partner responses on dimensions of active versus passive and constructive versus destructive. Active–constructive responses (i.e., enthusiastic listening and support) were found to be positively correlated with commitment, satisfaction, intimacy, and trust, while the other three types of responses (passive–constructive, active–destructive, and passive–destructive) were negatively associated with these relationship measures. Overall, perceiving a partner as responding actively and constructively was associated with higher relationship quality, including measures of intimacy. It is important to note, however, that these responses were *perceived* and reported by individuals who only *imagined* themselves sharing positive events with their close relationship partners rather than actually doing so. Reis et al. (2010) further demonstrated in several experiments that enthusiastic responding to shared positive events results in the growth of trust and a prosocial orientation toward the responder. Therefore, we predicted that active–constructive responding, enhanced through specific training to encourage and increase these types of responses, will relate to positive interpersonal relationship outcomes including improved perceived relationship satisfaction and gratitude receipt.

*Perceived relationship satisfaction.* Prior research has demonstrated that sharing positive events with another person and perceiving this partner to be enthusiastically responsive

is positively related to several constructs similar to perceived relationship satisfaction, including trust, willingness to self-disclose, closeness (Reis et al., 2010), commitment, intimacy, and relationship satisfaction (Gable et al., 2004). We therefore predict that, as individuals respond to their partners' capitalization attempts in an active–constructive way, they will become more satisfied and perceive their partner as being more satisfied with their relationship.

*Gratitude.* Sharing positive events improves an individual's feelings about these events, including positive affect, meaningfulness (Reis et al., 2010), and life satisfaction (Gable et al., 2004). Furthermore, in a series of studies, Lambert, Gwinn, Fincham, and Stillman (2013) found that sharing positive or grateful experiences with a close partner enhanced happiness, positive affect in the relationship, and life satisfaction. This being the case, we contend that providing active–constructive responses to a study partner's capitalization attempts enables them to reach higher levels of positive affect and life satisfaction. Providing an enthusiastic response also allows the person sharing to relive the experience and enhance its reality and salience. Thus, the listener is a conduit to concrete benefits for the person sharing and thus we would expect that the person sharing would express more gratitude and that the listener would receive a greater amount of gratitude from the person who shared the good news.

*Gratitude as a mechanism for the relationship between active–constructive responding and perceived relationship satisfaction.* Prior research suggests that feeling the gratitude or appreciation of a partner contributes to relationship satisfaction and perceived partner relationship satisfaction. For example, appreciation was listed as one of the most important factors contributing to a satisfying marriage according to long-term married (25–40 years) couples (Sharlin, 1996). In addition, among newlyweds, expressing gratitude for one's relationship as well as gratitude for one's partner was related to higher marital satisfaction and better marital adjustment (Schramm, Marshall, Harris, & Lee, 2005). Interpersonal gratitude has also been related to relationship satisfaction (Algoe, Haidt, & Gable, 2008). Therefore, the present study additionally investigates whether gratitude receipt mediates the relationship between active–constructive responding and relationship satisfaction and perceived study partner relationship satisfaction.

## Study overview

This study tested an intervention to improve regularly sharing positive experiences and responding in an active–constructive manner (i.e., showing enthusiastic, joyful excitement for another's success). We examined whether being trained to increase amounts of active–constructive responding would lead to increases in relationship satisfaction and perceived partner relationship satisfaction as well as gratitude expression and received gratitude from the study partner over the course of 4 weeks. Participants were randomly assigned with their study partner to an experimental or control condition. In the experimental condition, participants learned how to respond in an active–constructive manner when their study partner shared good news with them and were instructed to practice doing so every day. Study partners in the control condition participated in a joint

activity encouraging them to engage in discussions of television programs with one another. We hypothesized that study partners who were trained in the practice of active–constructive responding would report higher levels of satisfaction and perceived study partner relationship satisfaction and gratitude expression and receipt at the conclusion of 4 weeks relative to those who engaged in a joint activity (the control condition). In addition, we predicted that gratitude would not only be affected by the intervention but also mediate the relationship between experimental condition and relationship satisfaction/perceived study partner relationship satisfaction.

## Method

### Participants

Participants were recruited from several undergraduate courses in a family and child sciences department of a large southeastern university. Student participants were provided extra credit for participation and required to bring a close relationship partner (not from their class) for the present study. Nonstudent study partners were given $20 for participating in the study. There were a total of 130 participants, 78% female who were between the ages of 18 and 31 (median age = 20). Of these participants, 23 pairs reported a heterosexual romantic dating relationship (89% exclusive and 11% nonexclusive) and 42 pairs reported their relationship as close friends. Relationship type was included in the analyses described below. In addition, of the sample, 78.5% reported their race as White, 17.7% African American, 6.9% as other. The effects were not moderated by relationship status ($F = .69$, $p = .41$), so friend and romantic partner dyads were combined for all analyses.

### Measures

*Gratitude expression and receipt.* The Expression of Gratitude in Relationships (Lambert, Clark, Durtschi, Fincham, & Graham, 2010) is a 3-item measure. A sample item includes "I express appreciation for the things that my partner does for me," participants rated their perception of how they received gratitude from their partner using an adapted partner version of the measure ("My partner expresses appreciation for the things that I do for him/her"). Responses were rated on a 7-point scale (1 = *never*, 7 = *very frequently*). Scores were coded such that higher scores indicated a greater perception of partners' gratitude or "gratitude receipt," then averaged as one composite score. Coefficient $\alpha$ for gratitude expression in the current sample was .77 at Time 1 and .84 at Time 2 and for gratitude receipt was .95 at Time 1 and .95 at Time 2.

*Relationship satisfaction and perceived study partner relationship satisfaction.* Relationship satisfaction and perception of study partners' relationship satisfaction were assessed at Time 1 and Time 2 with an adapted version of the 4-item Couple Satisfaction Index (Funk & Rogge, 2007). Sample items included, "How rewarding do you think your relationship is?" (1 = *not at all*, 6 = *completely*) and "I think that we have a warm and comfortable relationship" (1 = *not at all true*, 6 = *completely true*). We adapted the measure

to assess individuals' perception of how satisfied their study partner is in the relationship ("My partner thinks that we have a warm and comfortable relationship"). Coefficient $\alpha$ for the current sample for relationship satisfaction was .76 at Time 1 and .91 at Time 2 and for perceived relationship satisfaction was .86 at Time 1 and .89 at Time 2.

*Gender.* Previous research suggests that there are gender differences in the perception of gratitude (Schwartz & Rubel, 2005) and the expression of gratitude (Kashdan, Mishra, Breen, & Froh, 2009) with women rating higher on both dimensions. Additionally, research supports gender differences in relationship satisfaction (e.g., Sacher & Fine, 1996; Smith et al., 2011) (men rate higher) and active–constructive responding (Gable et al., 2006) (women rate higher). We, therefore, included gender as a control variable in our analyses. For our sample, males were coded as 0 and females were coded as 1.

## Procedure

Participants attended an initial laboratory session during which they completed a battery of baseline measures. Together with their study partner they were randomly assigned to a lab computer, from which they received either the experimental or control condition. The partners were assisted in setup by research assistants who were then available during the training and practice time to answer questions, if needed. The actual practice was mediated by an audio-guided computer slide show. The research assistants were provided information on each of the condition, and trained on how to answer questions if asked and how to provide the specific handouts for each. The pairs then received training in their assigned task, based on their assigned condition. Over the course of the following 4 weeks, each person reported their progress in complying with their assigned task in an online journal a total of 7 times (approximately twice a week). Study partners then attended a second lab visit at the conclusion of 4 weeks to complete a posttest survey in order to assess their progress. More specifically, to avoid recognition of the participant dyads that there were two conditions, each room's computers were setup to provide similar training. The number of computers in each room was uneven and therefore a higher proportion of the sample was randomly assigned to the experimental condition. The two conditions were as follows.

*Active–constructive responding intervention.* The experimental condition ($n = 38$ pairs) included video and written training in active–constructive responding to capitalization attempts. Participant dyads received a 20-min training through an audio-guided PowerPoint presentation that described the importance of sharing positive events with a study partner, the benefits of doing so, as well as several examples of positive experiences they could share with their study partner (e.g., good grades, recent vacation, new friend, compliments received, etc.). The presentation also explained the importance of positive, enthusiastic responding to a study partner's sharing, including verbal (e.g., energetic voice, positive feedback, and ask specific questions) and nonverbal (e.g., smile, raise eyebrows, nod, and face body toward partner) examples of active–constructive responding similar to prior research (e.g., Gable et al., 2004).

Participants viewed two video examples of a dyad capitalizing and active–constructive responding. In addition, participant pairs were provided with two handouts: one included verbal and nonverbal examples of enthusiastic responses and the second included a list of different examples of positive events they could share and follow-up questions that could be asked, given certain situations (e.g., celebrating a birthday, ''Who did you celebrate with? What did you do? and Where did you go?''). Before leaving the laboratory, participants practiced this process to ensure any questions they had were answered by research assistants. The training then concluded by encouraging participants to share the most positive thing that happened during their day, each day. They were also instructed to respond enthusiastically to their study partners' sharing.

*Joint activity control condition.* Participant dyads randomized to the control condition ($n = 27$ pairs) received a training that emphasized the importance of common interests and trained participants to discuss a common interest many people share: television. The difference in the number of pairs between the two conditions is due to the setup of the lab in which the trainings took place. The purpose of the control condition was to rule out the possibility that simply working together on communication skills and having an enjoyable shared goal would confound the effects that active–constructive responding uniquely had on relationship satisfaction and perceived gratitude receipt. Similar to the treatment condition, participant dyads received an 18-min training through an audio-guided PowerPoint presentation that described how television can be discussed (e.g., television that was watched recently, television shows one plans to watch, and television shows that have been recorded) and how communication about television can occur (e.g., describe the plot, describe specifics about the episode, and offer information about when the show airs so your study partner can also watch). Participants viewed one video example of a dyad discussing a recent television special and received two handouts: one provided examples of what to share, the second explained what sharing should look like (e.g., ''speak clearly,'' ''describe the plot of the show,'' and ''use your partner's name''). Before leaving the laboratory, participants practiced this process and training concluded by requesting that study partners share daily with one another about television.

## Data analysis

*Multilevel modeling.* We utilized the analytic approach of multilevel modeling through random effects models (also referred to as hierarchal linear modeling) to account for the interdependent nature of the data obtained from dyad members (Kenny, Kashy, & Cook, 2006; Raudenbush & Bryk, 2002). Due to the correlated, or nonindependence, dyadic responses, multilevel modeling through random effects models is suggested as an appropriate analysis of dyads (Kenny et al., 2006). This nonindependence is due to the circumstance that two members of one dyadic are intrinsically more similar (or different) to one another than are two members from a different dyad. Traditional fixed effects analysis of variance (ANOVA) and analysis of covariance (ANCOVA) models are inappropriate as these methods of analysis include the underlying assumption of independent data. Separate multilevel models, each consisting of two levels, were used to

examine effects on each of the main dependent variables: perceived relationship satisfaction and gratitude receipt. Level 1 of the models included the control variables: gender (males = 0, females = 1), Time 1 reports of relationship satisfaction, perceived relationship satisfaction, or gratitude receipt (depending on the model; grand mean centered), and relationship type (romantic partner = 0, friend = 1). Level 2 of the model included the control versus experiment dummy variable, coded as 0 = control and 1 = experimental condition. This allows us to analyze the effect that the condition has on the mean value of relationship satisfaction and perceived relationship satisfaction while taking into account the nonindependent (nested) nature of the dyadic data. In running the models, full maximum likelihood estimation was implemented and all the standard errors reported are robust.

*Bootstrapping mediation tests.* To test whether participants' perceptions of their study partners' gratitude, or gratitude receipt, functioned as a mediator between the experimental condition and relationship satisfaction and perceived study partner relationship satisfaction, we conducted a bootstrapping analysis as recommended by Preacher and Hayes (2008). As demonstrated in previous research (e.g., MacDonnell, Naar-King, Murphy, Parsons, & Harper, 2010), bootstrapping is appropriate for use with smaller sample sizes because it maximizes statistical power (Shrout & Bolger, 2002). Bootstrapping involves the repeated extraction of samples from the data set (in this case, 5,000 samples were taken), and the estimation of the indirect effect in each resampled data set. This permits the construction of a 95% confidence interval (CI) for the effect size of each indirect effect. If the values of the estimated effect sizes within the CI do not include zero, a statistically significant mediation effect is indicated. We examined the bias-corrected and accelerated intervals as a recommended improvement of traditional CI and bootstrapping methods (Efron, 1987).

For the present bootstrapping analysis, the experimental condition was dummy coded such that the active–constructive responding condition was coded as 1 and the positive interaction control condition was coded as 0. This was then entered as the independent variable with T2 relationship satisfaction or perceived relationship satisfaction as the dependent variable and T2 gratitude receipt as the mediator.

## Results

We first investigated for any initial group differences in our main dependent variables and key demographic variables. $\chi^2$ tests revealed no significant differences between condition groups in gender, race, or relationship type (all $p$s > .05). Similarly, ANOVA tests indicated that there were no significant differences between groups for age, initial gratitude receipt scores (experimental group, $M = 5.82$, $SD = 1.14$; control group, $M = 5.57$, $SD = 1.29$; $F(128) = 1.34$, $p > .05$), initial relationship satisfaction (experimental group, $M = 1.32$, $SD = .51$; control group, $M = 1.44$, $SD = .70$; $F(128) = 1.86$, $p > .05$), and initial perceived study partner relationship satisfaction scores (experimental group, $M = 4.11$, $SD = .92$; control group, $M = 3.90$, $SD = .85$; $F(128) = 1.72$, $p > .05$).

## Effects of active–constructive responding intervention

### Gratitude receipt

*Random effects ANOVA.* In order to evaluate the variability of gratitude receipt scores between the different dyads, an unconditional random effects ANOVA was run. The equations for this model are Level 1, $Y_{ij} = \beta_{0j} + r_{ij}$ and Level 2, $\beta_{0j} = \gamma_{00} + \mu_{0j}$, resulting in the combined formula, $Y_{ij} = \gamma_{00} + \mu_{0j} + r_{ij}$. The intercept estimated by this model ($\gamma_{00}$) represents a population average based on the data from all the dyads. The variance terms for the residual parameters ($\mu_{0j}$ and $r_{ij}$) allow us to calculate the intraclass correlation coefficient (ICC), which indicates the amount of variance in the outcome variable that is attributed to differences between dyads—which in this case would indicate different dyads undertaking different training conditions. The intercept in this case was significantly different from zero ($\gamma_{00} = 5.78$, $SE = .10$, $t(80) = 55.64$, $p < .05$) and represents the grand mean or average gratitude receipt score across all dyads.

The residual term in this equation, $\mu_{0j}$, represents each dyad's deviation of gratitude receipt from that of the grand mean and, as expected, indicates there is significant variability in gratitude receipt between dyads ($\tau_{00} = .28, \chi^2(80) = 120.01, p < .05$). The Level 1 residual in this model, $r_{ij}$, represents each individual's deviation from the predicted gratitude receipt score. Its variance term ($\sigma^2 = 1.17$) is used to calculate the ICC, indicating the proportion of total variance in gratitude receipt that can be attributed to differences (variability) between dyads. The ICC $= (\tau_{00'}/(\tau_{00'} + \sigma^2)) = (.28)/(.28 + 1.17) = .193$. Therefore, 19.3% of the variability in gratitude receipt scores are due to the differences between dyads. This makes sense, given that dyads were assigned to different conditions that were expected to impact the gratitude receipt scores. Reliability of $\beta_{0j}$ was $\lambda = .32$ and the deviance for this model is 510.17, $df = 3$.

*Random effects ANCOVA.* To examine the effect of the dyad's condition (intervention or control) on their gratitude receipt scores, a random effects ANCOVA was conducted. This included the Level 2 predictor of dyad condition. Additionally, control variables of gratitude receipt scores from Time 1 (grand mean centered), gender (male = 0), and relationship type (romantic partner = 0) were included as Level 1 predictors. This model examines whether there is significant variability in gratitude receipt scores across dyads, and whether these means are different across the experimental condition of the dyad, after controlling for Time 1 gratitude receipt, gender, and relationship type. The equation (combining Level 1 and Level 2) for this model is $Y_{ij} = \gamma_{00} + \gamma_{01}(\text{Condition})_j + \gamma_{10}(\text{T1GratReceipt})_{ij} + \gamma_{20}(\text{Gender})_{ij} + \gamma_{30}(\text{RelType})_{ij} + \mu_{0j} + r_{ij}$. For this model, $\gamma_{10}$, $\gamma_{20}$, and $\gamma_{30}$ are treated as fixed effects across dyads.

The intercept for this equation ($\gamma_{00}$) indicates the expected mean gratitude receipt score for males (gender = 0) in the control condition (condition = 0) and in a romantic relationship (relationship type = 0), whose Time 1 gratitude receipt score is at the grand mean and was significantly different from zero ($\gamma_{00} = 5.60$, $SE = .30$, $t(79) = 18.65$, $p < .05$). Time 1 gratitude receipt significantly predicted Time 2 gratitude receipt, $\gamma_{10} = .59$, $SE = .09$, $t(76) = 6.67$, $p < .05$; gender did not significantly predict Time 2 gratitude receipt, $\gamma_{20} = .02$, $SE = .18$, $t(76) = .12$, $p = .91$; and relationship type did not significantly predict Time 2 gratitude receipt, $\gamma_{30} = -.17$, $SE = .20$, $t(76) = -.85$, $p = .40$. At Level 2, the

experimental condition of the dyad significantly influenced the expected mean gratitude receipt scores, $\gamma_{01} = .43$, $SE = .18$, $t(79) = 2.41$, $p < .05$. This parameter estimates the mean difference between conditions when controlling for gender, relationship type, and Time 1 gratitude receipt. This indicates that individuals within dyads assigned to the active–constructive responding intervention condition reported significantly higher gratitude receipt from their study partners than those in the control condition (unadjusted means: intervention $M = 6.17$, $SD = 1.12$; control $M = 5.38$, $SD = 1.31$).

### *Relationship satisfaction*

*Random effects ANOVA.* As with gratitude receipt and perceived study partner relationship satisfaction, we ran an unconditional model that examines variability in relationship satisfaction scores between the different dyads. The equations for this model are Level 1, $Y_{ij} = \beta_{0j} + r_{ij} = +$ and Level 2, $\beta_{0j} = \gamma_{00} + \mu_{0j} = +$, resulting in the combined formula, $Y_{ij} = \gamma_{00} + \mu_{0j} + r_{ij} = +$. The intercept of this equation ($\gamma_{00}$)) is the grand mean and represents the average relationship satisfaction score across all dyads; for this equation, the intercept was significantly different from zero, $\gamma_{00} = 1.44$, $SE = .07$, $t(80) = 20.97$, $p < .05$. However, the residual term in this equation, $\mu_{0j}$, representing each dyad's deviation of relationship satisfaction from that of the grand mean indicated that there was no significant variability in relationship satisfaction among dyads ($\tau_{00} = .02$, $\chi^2(80) = 1.21$, $p = .23$). The residual term for Level 1, $r_{ij}$, indicates an individual's deviation from the relationship satisfaction score; its variance ($\sigma^2 = .56$) is used to calculate the ICC. The ICC $= (\tau_{00'}/(\tau_{00'} + \sigma^2)) = (.02)/(.02 + .56) = .03$. This explains that 3% of the variability in relationship satisfaction scores is due to differences between dyads. The reliability of $\beta_{0j}$ was $\lambda = .68$, and the deviance for this model is 355.03, $df = 2$.

*Random effects ANCOVA.* To examine the effects the condition of the dyad had on their relationship satisfaction scores, a random effects ANCOVA was conducted. This included the Level 2 predictor of dyad condition. Additionally, control variables of relationship satisfaction scores from Time 1 (grand mean centered), gender (male = 0), and relationship type (romantic partner = 0) were included as Level 1 predictors. This model examines whether there is significant variability in relationship satisfaction scores across dyads, and whether these means are different across the experimental condition of the dyad, after controlling for Time 1 relationship satisfaction, gender, and relationship type. The equation (combining Level 1 and Level 2) for this model is $Y_{ij} = \gamma_{00} + \gamma_{01}(\text{Condition})_j + \gamma_{10}(\text{T1RelSat})_{ij} + \gamma_{20}(\text{Gender})_{ij} + \gamma_{30}(\text{RelType})_{ij} + \mu_{0j} + r_{ij}$. For this model, $\gamma_{10}$, $\gamma_{20}$, and $\gamma_{30}$ are treated as fixed effects across dyads.

The intercept for this equation ($\gamma_{00}$) indicates the expected mean relationship satisfaction score for males (gender = 0) in the control condition (condition = 0) in a romantic relationship (relationship type = 0), whose Time 1 relationship satisfaction score is at the grand mean, and was significantly different from zero, $\gamma_{00} = 1.47$, $SE = .27$, $t(79) = 5.44$, $p < .05$. Time 1 relationship satisfaction significantly predicted Time 2 relationship satisfaction, $\gamma_{10} = .41$, $SE = .07$, $t(76) = 6.71$, $p < .05$. However, gender did not significantly predict relationship satisfaction, $\gamma_{20} = .12$, $SE = .09$, $t(76) = 1.33$, $p = .19$. Relationship type also did not significantly differ for relationship satisfaction,

$\gamma_{30} = -.22$, $SE = .13$, $t(76) = -1.66$, $p = .10$. Finally, the Level 2 experimental condition of the dyad did not significantly influence the expected mean relationship satisfaction scores, $\gamma_{01} = .09$, $SE = .07$, $t(79) = 1.29$, $p = .20$. This parameter estimates the mean difference between conditions when controlling for gender, relationship type, and Time 1 relationship satisfaction. This indicates that individuals within dyads assigned to the active–constructive responding intervention condition did not report significantly higher relationship satisfaction than those in the control condition (unadjusted means: intervention $M = 1.54$, $SD = .79$; control $M = 1.45$, $SD = .76$).

*Perceived study partner relationship satisfaction*

*Random effects ANOVA.* Similar to our analysis with gratitude receipt, we first ran an unconditional model that examines variability in perceived relationship satisfaction scores between the different dyads. The equations for this model are Level 1, $Y_{ij} = \beta_{0j} + r_{ij}$ and Level 2, $\beta_{0j} = \gamma_{00} + \mu_{0j}$, resulting in the combined formula, $Y_{ij} = \gamma_{00} + \mu_{0j} + r_{ij}$. The intercept of this equation ($\gamma_{00}$) is the grand mean and represents the average perceived relationship satisfaction score across all dyads; for this equation, the intercept was significantly different from zero, $\gamma_{00} = 4.00$, $SE = .08$, $t(80) = 52.26$, $p < .05$.

Again, the residual term in this equation, $\mu_{0j}$, represents each dyad's deviation of perceived study partner relationship satisfaction from that of the grand mean and indicates that there is significant variability in perceived relationship satisfaction among dyads ($\tau_{00} = .30$, $\chi^2(80) = 217.53$, $p < .05$). The residual term for Level 1, $r_{ij}$, indicates an individual's deviation from the predicted perceived relationship satisfaction score; its variance ($\sigma^2 = .34$) is used to calculate the ICC. The ICC $= (\tau_{00'}/(\tau_{00'} + \sigma^2)) = (.30)/\ (.30 + .34) = .47$. This explains that 47% of the variability in perceived relationship satisfaction scores are due to differences between dyads. Again, this makes sense, given that dyads were assigned to different conditions that were expected to impact the gratitude receipt scores. The reliability of $\beta_{0j}$ was $\lambda = .63$, and the deviance for this model is 364.70, $df = 2$.

*Random effects ANCOVA.* Similar to our previous analysis, to examine the effects the condition of the dyad had on their perceived study partner relationship satisfaction scores, a random effects ANCOVA was conducted. This included the Level 2 predictor of dyad condition. Additionally, control variables of perceived relationship satisfaction scores from Time 1 (grand mean centered), gender (male = 0), and relationship type (romantic partner = 0) were included as Level 1 predictors. This model examines whether there is a significant variability in perceived relationship satisfaction scores across dyads, and whether these means are different across the experimental condition of the dyad, after controlling for Time 1 perceived relationship satisfaction, gender, and relationship type. The equation (combining Level 1 and Level 2) for this model is $Y_{ij} = \gamma_{00} + \gamma_{01}(\text{Condition})_j + \gamma_{10}(\text{T1PerRelSat})_{ij} + \gamma_{20}(\text{Gender})_{ij} + \gamma_{30}(\text{RelType})_{ij} + \mu_{0j} + r_{ij}$. For this model, $\gamma_{10}$, $\gamma_{20}$, and $\gamma_{30}$ are treated as fixed effects across dyads.

The intercept for this equation ($\gamma_{00}$) indicates the expected mean perceived relationship satisfaction score for males (gender = 0) in the control condition (condition = 0) in a romantic relationship (relationship type = 0) whose Time 1 perceived relationship satisfaction score is at the grand mean and was significantly different from zero, $\gamma_{00} = 3.92$, $SE = .18$, $t(79) = 21.91$, $p < .05$. Time 1 perceived relationship

satisfaction significantly predicted Time 2 perceived relationship satisfaction, $\gamma_{10} = .53$, $SE = .05$, $t(76) = 10.54$, $p < .05$. Gender did not significantly predict perceived relationship satisfaction, $\gamma_{20} = .13$, $SE = .10$, $t(76) = 1.30$, $p = .20$. However, relationship type did significantly differ for perceived relationship satisfaction, $\gamma_{30} = -.43$, $SE = .09$, $t(76) = -4.62$, $p < .01$. Although this indicates that friends reported significantly lower levels of perceived relationship satisfaction at Time 2 than romantic partners (and represents the mean difference), at Level 2 the experimental condition of the dyad still significantly influenced the expected mean perceived relationship satisfaction scores, $\gamma_{01} = .27$, $SE = .10$, $t(79) = 2.57$, $p = .01$. This parameter estimates the mean difference between conditions when controlling for gender, relationship type, and Time 1 perceived relationship satisfaction. This indicates that individuals within dyads assigned to the active–constructive responding intervention condition reported significantly higher perceived relationship satisfaction of their study partners than those in the control condition (unadjusted means: intervention $M = 4.18$, $SD = .83$; control $M = 3.72$, $SD = .75$).

*Gratitude receipt as a mediator.* We implemented the bootstrapping technique (Preacher & Hayes, 2008) to test whether gratitude receipt functioned as a mediator between the experimental condition and perceived study partner relationship satisfaction. Results supported our hypothesis in that gratitude receipt mediated the effects of experimental condition on perceived study partner relationship satisfaction, with a 95% bias-corrected and accelerated CI [−.26, −.03]. While the intervention resulted in significantly higher scores of perceived relationship satisfaction, a significant mediation effect suggests that this relationship is partly explained through the receipt of gratitude from one's study partner. In other words, study partners engaging in more active–constructive responses to capitalization attempts may have incited a greater amount of gratitude expressed by their study partner. This, in turn, is associated with greater perceived relationship satisfaction.[1]

## Discussion

We wanted to test whether participants could learn how to be more active–constructive in their responses toward their study partners' capitalization attempts and whether this would create positive differences in their relationship. To ensure that any posttest differences were not due to sharing in general, we asked control participants to discuss television daily for 4 weeks with their close relationship partner. Consistent with study hypotheses, participants who engaged in the active–constructive responding intervention reported greater amounts of gratitude receipt and perceived relationship satisfaction of their study partners relative to participants in the joint activity control group. Also in accordance with our mediation hypothesis, gratitude receipt mediated the relationship between active constructive responding and perceived relationship satisfaction. In other words, the association between responding to capitalization attempts in an active–constructive manner and reported perceptions of one's study partner's relationship satisfaction operated through an individual's perception of the gratitude they received from their study partner. However, contrary to our hypothesis, the intervention did not significantly impact actual relationship satisfaction or expressed gratitude.

## Perceived versus actual changes

We expected that the intervention would have an effect on both the actual and perceived relationship satisfaction and gratitude; however, it only had a significant impact on perceived relationship satisfaction and gratitude receipt, not on actual relationship satisfaction. For example, we presume that as Partner B shared good news and Partner A responded enthusiastically, Partner A felt that doing this was making Partner B more satisfied and grateful, but Partner B was actually not more satisfied and did not express more gratitude by direct measurement. Thus, the primary change that occurred through this intervention was the personal belief within one person that doing something he/she was taught to be important was important and led to a perception of more satisfaction and gratitude. This has important implications for program evaluators to be aware of when measuring the impact of their intervention. Could perceiving that one's actions have a positive impact on one's partner be as valuable as the actions actually having the intended positive impact on the partner?

For instance, researchers examining positive illusions (Murray, Holmes, & Griffin, 1996) have found that their participants were happier in their relationships when they idealized their partners and their partners idealized them. Our intervention was limited to only 4 weeks and it seems plausible that having positive illusions of one's partner being more satisfied and more grateful could reap longer term benefits for one's relationship. This type of side benefit of intervention work should be examined more carefully by future research.

Conversely, positive illusions have drawbacks in this situation. For instance, in the current intervention it could be that many participants in this intervention perceived themselves as being effective at active constructive responding and thus perceived their partners as more satisfied and grateful when in actuality perhaps they were not effective in how they responded to their study partner's good news. Thus, these positive illusions of the effects of their behavior could give them an inflated sense of self that was not deserved, preventing them from learning to better implement skills that could make real differences in their relationship.

## Limitations and future directions

One limitation of the present study is our sample, which is not representative of more mature relationships or relationships in the general population. This is not unlike previous experiments testing the process of capitalization and responsiveness (e.g., Reis et al., 2010). Therefore, because much research on this close relationship phenomenon focuses on this specific age range, it is important to conduct replications of the present study with samples of different ages or cultures as well as more mature or long lasting relationships. However, an improvement over prior studies and a strength of the present study is that actual close relationship dyads were investigated. One of our main objectives was to understand the causal relationship between active–constructive responsiveness and improvements in relationship outcomes for actual partners. This was especially relevant because active–constructive responsiveness is assumed to be most salient in close relationships (Gable & Reis, 2010).

Regarding close relationships, our study did not have enough power to detect whether relationship status (romantic partner versus close friend) moderated the effects of our intervention. Future research should examine whether relationship type or status makes a difference for these types of interventions.

Our findings indicate that being taught about sharing and receiving an enthusiastic, supportive response enhances relationship outcomes. But what about those who refrain from sharing their positive experiences with relationship partners? One direction for future research is to more closely examine the personality characteristics or situational factors that may facilitate or impede the sharing of positive experiences. Similarly, additional research is needed to clarify what personal or relationship factors influence the response of the partner.

Furthermore, future research could test additional control conditions to rule out alternative explanations for our findings. For example, one alternative explanation could be that participants found the control activity to be tedious and thus other control conditions should be employed. Furthermore, one condition could require partners to share something they are excited or happy about without giving any instruction on enthusiastic responding to ensure that the active–constructive responding, rather than simply sharing positive events, is driving the observed effects on relationships. Also, it could be that the sharing of a personal versus nonpersonal event may be responsible for the effects of the study and this should be examined with alternative control conditions.

Another limitation of the current study is that we did not have a formalized way in which we assessed their compliance to the manipulation or control condition. Future research should more carefully assess compliance and may want to consider using the Perceived Responses to Capitalization Attempts Scale (Gable et al., 2004) as a way to assess such attempts. Future research should also assess the level of enjoyability of the type of control activity we utilized, given that some may have seen it as mundane or perhaps consider adding a more powerful control activity.

Another possibility for future research would be to test the perceived authenticity of each person's active–constructive responding. It could be that the intervention failed to produce effects on self-reported gratitude and relationship satisfaction because the participants felt that their attempts at active constructive responding were sincere, but that their study partners' attempts were not. In addition, we suspect that the intervention may have a longer term effect on relationship satisfaction, as a virtuous cycle is begun and as dyads more regularly engage in active–constructive responding. These areas should be further explored in an attempt to improve how such interventions could be administered in the future.

## *Implications of active–constructive responsiveness intervention*

As previously noted, research suggests several positive outcomes result from capitalizing on positive events that one experiences, especially in regard to close relationship partners. Research further indicates the importance of responding to these capitalization attempts in an active–constructive or enthusiastic manner. Results of our study suggest that the skill of active–constructive responding can be effectively taught in a cost-efficient manner. Although teaching the relevant skills may come in many different forms and situations, the present study provides preliminary evidence of the effectiveness of training these skills to

partners in close relationships. Further research should examine the best way to teach active–constructive responding and how such an intervention may be delivered on a larger scale basis or as part of therapeutic interventions in couples' therapy. Similarly, research on social support interventions often focuses on improving perceived support, with a focus on peers and friend relationships (Hogan, Linden, & Najarian, 2002). Given that much of the present sample included friend pairs, our results may suggest including active–constructive response training in social support interventions to enhance the support levels and perceived support of, for example, persons in need of developing their friendships into a primary source of social support.

To our knowledge, this is the first study to examine an intervention that trains active–constructive responding. The findings provide an important contribution to the literature and have implications for practical applications, especially in connection to the primary prevention programs for couple relationship education that have arisen in several countries (Ooms, 2005). Although future research needs to examine these effects across different types of relationships (e.g., distressed or conflictual vs. nondistressed, heterosexual vs. homosexual), the results of this study can be used to inform practitioners who work with couples about the utility of training clients to use active–constructive responding in an attempt to improve their perceived relationship satisfaction and gratitude receipt within the relationship.

## Conclusion

Our research contributes to the literature as it is the first study to our knowledge to examine a training intervention for capitalizing on positive events and active–constructive responding to such attempts. Our findings suggest that teaching individuals to share positive experiences and to provide active–constructive, enthusiastic responses promotes relationship well-being by increasing gratitude expressed within the relationship and the perceived relationship satisfaction of one's close friend or romantic partner. As research provides evidence for the plethora of positive outcomes from capitalizing on the positive events in one's life, it is imperative that we continue forward to understand this phenomenon. The current study indicates that these skills can be learned and enhanced to the betterment of relationships.

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### Note

1. We also tested the reverse model and found that gratitude receipt was mediated by perceived satisfaction, suggesting a bidirectional effect.

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