

Our adventures make me feel secure:

Novel activities boost relationship satisfaction through felt security

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Abstract

Past research has established the relational benefits of engaging in novel tasks with a romantic partner. However, little empirical evidence exists for the mechanisms responsible. The current research examined growth experiences—the proposed and tested mechanism in past work—as well as security experiences, a previously unexplored mechanism. Using a recall paradigm, Study 1 found that people reported high feelings of security (e.g., reliance, trust), in addition to growth (e.g., fun, excitement), when pursuing novel activities with a romantic partner. In Study 2, romantic couples engaged in a novel or control task. We assessed feelings of growth and security, and examined couples' post-task relationship satisfaction. Results revealed that while growth feelings mediated the link between task condition and relationship satisfaction, consistent with past work, so too did feelings of security. When growth and security were included as simultaneous mediators in the model, feelings of security emerged as a stronger mediator.

Keywords: close relationships, self-expansion, relationship satisfaction, growth, felt security

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The presence of satisfying close relationships strongly predicts people's likelihood of achieving health and happiness (e.g., Cohen, 2004; Diener & Seligman, 2002; King & Reis, 2012). It is no surprise then that relationship scientists have sought to determine interventions that effectively improve relationship well-being. One intervention that has gained significant traction over the past few decades is the act of pursuing novel, exciting activities with a romantic partner (Aron et al., 2000; Reissman, Aron, & Bergen, 1993). Based on self-expansion theory (Aron & Aron, 1986), Aron and his colleagues theorized that people are motivated to grow and expand the self, and that one way people can achieve such self-expansion is through experiencing novel activities with a partner (Aron & Aron, 1986; Aron, Aron, Tudor, & Nelson, 1991).

Indeed, dozens of studies have demonstrated that the pursuit of novel and arousing activities with a romantic partner boosts relationship well-being (e.g., Aron et al., 2000; Coulter & Malouff, 2013; Graham, 2008; Graham & Harf, 2015; Muise et al., 2019), and reduces the risk of relationship dissolution (Aron et al., 1992; Le et al., 2010; Tsapelas, Aron, & Orbuch, 2009). For example, one lab study found that couples who engaged in a novel activity together—crawling on their hands and knees across a room on gym mats while attached together by Velcro—experienced enhanced relationship satisfaction (Aron, et al., 2000). Longitudinal intervention studies (Reissman et al., 1993) and experience sampling diary studies (Graham, 2008) have replicated the effect.

The assumption in the literature has been that pursuing novel activities with one's partner creates positive, high arousal affective states (e.g., excitement, passion) that then get attributed to

positive feelings for the partner and relationship (Aron et al., 1991; see Strong & Aron, 2006 for a review). Specifically, Aron and his colleagues theorized that the pursuit of novel activities in romantic relationships increases excitement and decreases boredom, which in turn boosts relationship satisfaction (e.g. Aron & Aron, 1986; Aron et al., 2000). This theoretical proposal has mostly remained unquestioned. However, there is relatively little empirical work examining potential mechanisms.

A few studies are generally consistent with the argument above. For instance, Graham's (2008) experience sampling study found that people's reports of positive affect (i.e., how happy, cheerful, and friendly they felt) mediated the relationship between experiences with greater activation (i.e., exciting, arousing events) and relationship satisfaction. Slatcher (2010) found evidence that vigor-related positive affect (e.g., lively, energetic) mediated the increases in closeness as a result of engaging in high self-disclosure conversations with other couples. Finally, when couples engaged in a novel (vs. mundane) activity together, reported boredom mediated the relation between task condition and relationship satisfaction (Aron et al., 2000).

In contrast, other research has shown that arousal is not required to obtain relational benefits from a self-expanding activity with a partner (Lewandowski & Aron, 2004; Tomlinson, Hughes, Lewandowski, Aron, & Geyer, 2018). Additionally, Muise et al. (2019) found sexual desire as a mediator between novel task condition and relationship satisfaction, above and beyond positive affect, suggesting there may be other mediators responsible for the effect.

On one hand, it makes sense that positive, high arousal affect would mediate the association between shared novel activities and relationship well-being, because feeling excited and passionate strengthen feelings of growth, which are important for the well-being of the self (Higgins, 1997) and close relationships (Aron & Aron, 1997; Gable et al., 2006; Spielmann,

MacDonald, & Tackett, 2012; Reis et al., 2010). On the other hand, it is also possible that novel activities boost relationship satisfaction through other avenues. It has long been recognized that people have fundamental survival needs for *both* growth and security (Bowlby, 1969; Higgins, 1997). Relationship science has also emphasized the need for security as a critical ingredient for successful, high quality romantic relationships (e.g., Hazan & Shaver, 1987; Murray, Holmes, & Collins, 2006; Cavallo, Murray, & Holmes, 2013).

Feeling a sense of security involves trusting in your partner's care, support, and love and feeling that you can rely on your partner to meet your needs (Holmes & Rempel, 1989; Rempel, Holmes, & Zanna, 1985). In this vein, the pursuit of shared novel tasks often requires elements of trust, support, and coordination. Interdependence Theory (Kelley et al., 2003) contends that coordination tasks that put an onus on each person to do their part reliably and dependably play a large part in allowing couples to feel connected, enhancing their relational well-being. It may be that the experience of pursuing a novel task with a partner not only strengthens feeling of excitement and growth, but also strengthens feelings of security, reliability, and trust. Perhaps these feelings of enhanced security are just as important a mechanism for strengthening relationships as feelings of growth and excitement.

Understanding the mechanisms accounting for the positive effect of novel experiences on relationship well-being has important theoretical and practical value. If security related feelings play a key role in the operation of self-expansion in close relationships, it suggests that some types of novel experiences (e.g., those that involve coordination in the pursuit of excitement) may be more likely to benefit close relationships than others. Additionally, if the pursuit of novel activities boosts both feelings of growth and security in one's relationship, then such interventions may also help relationships that are more precarious.

The Present Research

The present research examined two mechanisms for the association between the pursuit of shared novel activities and relationship satisfaction: growth (e.g., feelings of excitement and passion), and security (feelings of reliance and support). In Study 1, using a recall paradigm, we examined whether people reported experiencing feelings of security, in addition to growth, when pursuing novel activities with their partner. In Study 2, we brought couples into the lab and had them complete a novel or mundane task (adapted from Aron et al.'s 2000 original procedure). After completing the task, participants reported on experiences of security and growth, as well as relationship satisfaction. We report how we determined our sample size, all data exclusions (if any), all manipulations, and all measures in both studies.

Study 1

Method

Participants. We conducted a power analysis prior to data collection. Based on a conservative effect size in the small-medium range ($d=.30$), estimated from previous research on growth experiences and relationship well-being (Cortes, Scholer, Kohler, & Cavallo, 2018), we determined a target sample size of 350 participants. We collected as much data as we could until the end of the academic semester, leaving us with a total of 395 (305 females, 87 males, 1 non-binary, 2 unspecified) undergraduate participants.

Based on a-priori exclusion criteria, we excluded nineteen people because they indicated they were only casually dating, seven people because they did not complete the writing task, and nine people because they did not follow the instructions for the writing task, leaving a final

sample of 360 (287 females, 71 males, 1 non-binary, 1 unspecified) undergraduate participants.¹ Participants were between 17 and 53 years of age ($M=20.71$, $SD=4.48$) and were in exclusive romantic relationships ($M_{length}=28.11$ months, $SD=40.09$).² A sensitivity power analysis for a one-way ANOVA conducted in G*Power (Faul, Erdfelder, Lang, & Buchner, 2007; $\alpha=.05$, $\beta=.80$, $groups=3$) indicated that, given this sample size, the study was powerful enough to detect a minimum effect size $\eta_p^2=.03$ ($f=.16$).

Procedure and measures. After completing demographic information, participants were exposed to a relationship memory manipulation, in which they were asked either to recall a novel experience with their partner (novel memory condition), a security-related experience (security memory condition), or a neutral experience (control condition). Participants were asked to vividly recall the event in as much detail as possible. In the novel memory condition, participants were asked to recall a time when they did something new and exciting with their partner. In the security memory condition, they were asked to think back to a time when they did something with their partner that allowed them to rely on and support each other. In the control condition, participants were asked to recall a routine, everyday experience with their partner.

After writing about the event, participants were asked to indicate the extent to which they experienced growth and security-related feelings during the event. Participants indicated on a 1 (*not at all*) to 7 (*very much*) point scale the extent to which they agreed with 10 items.

¹Results controlling for and testing moderation effects of gender and relationship length are reported in the Supplemental Material.

²The direction and significance of the results remained the same when the full sample was included in the analyses.

Participants responded to five growth-related items, which included: “During the experience you just described, at the time, how much did you feel like the event...” “brought about feelings of passion,” “was new and exciting,” and “was a growth experience for your relationship?” and five security-related items, including: “was an experience that made you feel solid as a couple,” “was an experience that allowed you to rely on your partner,” and “brought about feelings of security.” All 10 items were randomly ordered for each participant.³

Finally, we asked participants to indicate when the event occurred and debriefed them.

Results

Ratings of growth feelings across condition. We first examined whether feelings of growth differed by relationship memory condition. See Figure 1 for the means of growth and security feelings across condition. A one-way ANOVA revealed a significant effect of condition on feelings of growth, $F(2, 357)=55.40, p<.001, \eta_p^2=.24$. Post-hoc comparisons using Tukey's HSD test indicated that reported feelings of growth were higher in the novel memory condition ($M=5.92, SD=0.96$) relative to the control condition ($M=4.30, SD=1.34$), $p<.001, 95\% CI [1.25, 1.97]$, and relative to the security memory condition ($M=5.10, SD=1.26$), $p<.001, 95\% CI [0.45,$

³We conducted an exploratory factor analysis to test the validity of our theorized components. A principal components analysis with varimax rotation indicated the existence of two interpretable factors (eigenvalues>1), security feelings and growth feelings, which accounted for 45.88% and 15.15% of the item variance respectively. The five security items loaded onto the first factor (all loadings>.70) and the five growth items loaded onto the second factor (all loadings>.40). Both scales also had good internal reliability (Growth Scale $\alpha=.80$, Security Scale $\alpha=.84$).

1.18]. Feelings of growth were also higher in the security memory condition relative to the control condition, $p < .001$, 95% CI [0.43, 1.16].

Ratings of security feelings across condition. We examined whether feelings of security differed by relationship memory condition. A one-way ANOVA revealed a significant effect of condition on feelings of security, $F(2, 357) = 34.51$, $p < .001$, $\eta_p^2 = .16$. Post-hoc comparisons using Tukey's HSD test indicated that, as hypothesized, reported feelings of security were higher in the security memory condition ($M = 6.40$, $SD = .68$) relative to the control condition ($M = 5.37$, $SD = 1.12$), $p < .001$, 95% CI [0.73, 1.32]. Feelings of security were also higher in the novel memory condition ($M = 5.97$, $SD = 1.02$) relative to the control condition, $p < .001$, 95% CI [0.31, 0.89]. Feelings of security were higher in the security memory condition than in the novel memory condition, $p = .002$, 95% CI [0.13, 0.72].

Ratings of growth and security within each condition. We next tested our hypothesis that feelings of security would not differ from feelings of growth in the novel memory condition. Indeed, a paired sample t-test revealed that feelings of security ($M = 5.97$, $SD = 1.02$) did not significantly differ from feelings of growth ($M = 5.92$, $SD = 0.96$) in the novel recall condition, $t(120) = -0.74$, $p = .464$, 95% CI [-0.20, 0.09], Hedges' $g_{av} = 0.05$. In contrast, in the security recall condition, feelings of security ($M = 6.40$, $SD = 0.68$) were higher than feelings of growth ($M = 5.10$, $SD = 1.26$), $t(114) = -11.69$, $p < .001$, 95% CI [-1.51, -1.08], Hedges' $g_{av} = 1.27$. In the control condition, feelings of security ($M = 5.37$, $SD = 1.12$) were also higher than feelings of growth ($M = 4.30$, $SD = 1.34$), $t(123) = -9.92$, $p < .001$, 95% CI [-1.28, -0.85], Hedges' $g_{av} = 0.86$.

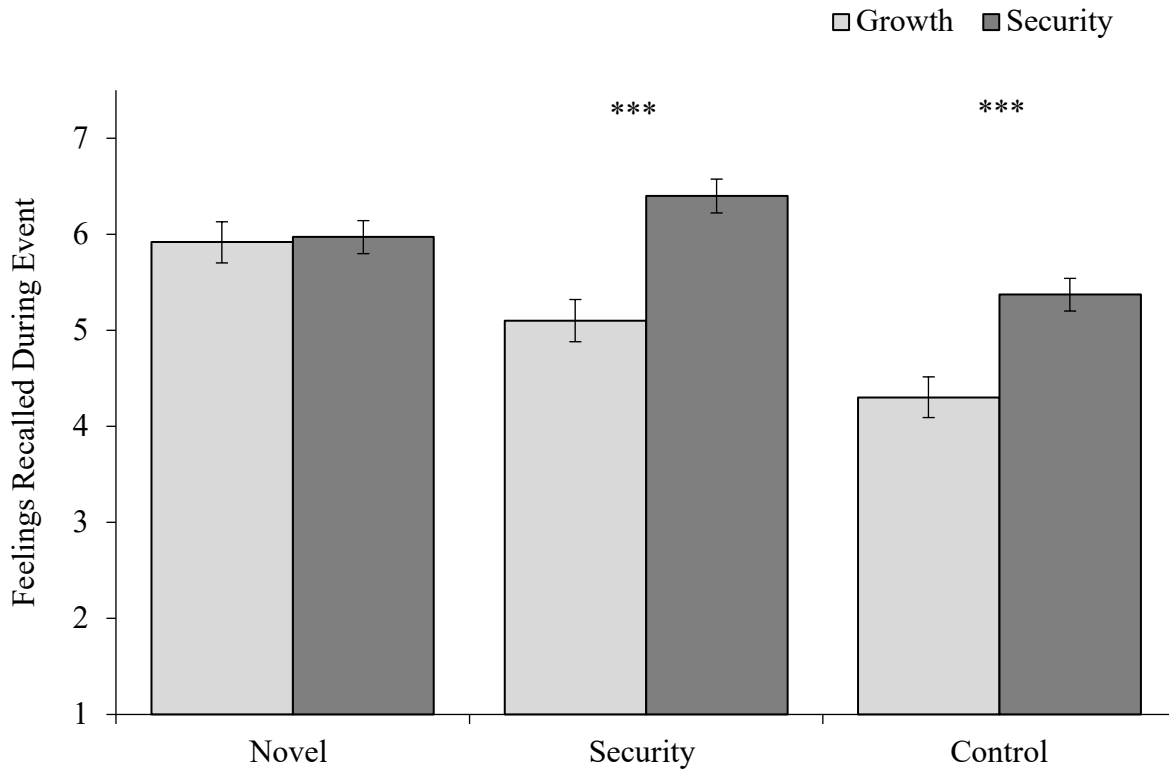


Figure 1. Mean growth and security feelings across the three memory recall conditions. Error bars represent 95% confidence intervals around the mean. *** $p < .001$

Discussion

When people recalled pursuing novel, exciting activities with their partner, they reported experiencing high levels of security-related feelings in addition to growth-related feelings. In other words, when people try new things with their partner, passion and arousal are not the only kinds of feelings they experience; people also feel like they can rely on their partners and feel comfortable and secure with their partners.

Study 2

Romantic couples were randomly assigned to complete a novel task with their partner or a control task. There was an additional experimental manipulation within the novel task that was designed to make growth or security particularly salient during the experience. Participants either

focused on how the experience would facilitate excitement and passion (growth framing condition) or reliance and support (security framing condition). We hypothesized that the current study would replicate Aron and colleagues' previous findings—that people in either novel task condition would report feeling more satisfied in their relationship than people in the control condition.

The framing manipulation allowed us to examine if the relationship between the proposed mediators (growth, security feelings) and relationship satisfaction was affected by the task framing. One possibility is that the framing manipulation would intensify the role of the framing-consistent mediator, such that, for example, growth feelings would be more strongly associated with relationship satisfaction in the growth-framed novel task condition. Alternatively, the experiential impact of the novel task itself may overpower such cognitive framings, and the relationship between growth and security feelings and relationship satisfaction may hold regardless of novel task framing.⁴

Method

Participants. We conducted a power analysis prior to data collection. Based on effect sizes in the small-medium range from previous research on growth experiences and relationship well-being (Cortes, Scholer, Kohler, & Cavallo, 2018), we determined a target sample size of a minimum of 100 couples, but collected as much data as we could before the end of the semester.

⁴Although the novel task manipulation is relevant for the current research question, the manipulation was originally designed with a larger project in mind; other measures were included in this study with those separate objectives in mind. Full materials from the study, including the personality and demographic questionnaires, can be found in the SOM.

We recruited 107 romantic couples (109 females, 103 males, 2 unspecified) from an undergraduate research pool to participate in an in-lab couples study. Participants were between 17 and 48 years of age ($M=20.50$, $SD=3.09$) and were in exclusive romantic relationships ($M_{length}=20.93$ months, $SD=27.29$). At least one member of the couple was an undergraduate student who was recruited from the psychology department participant pool, but partners did not have to be affiliated with the university. Participants received course credit or money in appreciation for their participation. A sensitivity power analysis for a mixed-model ANOVA between factor conducted in G*Power (Faul, Erdfelder, Lang & Buchner, 2007; $\alpha=.05$, $1 - \beta=.80$, groups=3, measurements=2, $M_{ICC}=.40$) indicated that, given this sample size, the study was powerful enough to detect a minimum effect size $\eta_p^2=.06$ ($f=.25$).⁵

Procedure and measures. Upon arrival at the lab, participants were told that the purpose of the study was to investigate how couples complete tasks together. First, members of the couple were separated and asked to complete demographic and personality questionnaires on a computer.

Joint task manipulation. Once both partners completed their computer surveys, the experimenter brought the couple to a larger lab room where they would complete their joint task.

Couples were randomly assigned to one of three conditions. In the two experimental

⁵ We report the results of our a priori and sensitivity power analyses based on a mixed-model ANOVA design. However, we ultimately decided to analyze the data using multilevel modeling as it is generally a more flexible approach with a number of advantages over ANOVA, including increased statistical power (Hoffman & Rovine, 2007; Kenny, Kashy, & Cook, 2006). Thus, the results reported here are likely conservative estimates.

conditions, couples completed the same novel task together. The task was adapted from Aron et al.'s (2000) original novel task study (the primary differences were that couples in our study were not velcroed together, had no time limit, and were not told they could win a prize). Couples were instructed to crawl across the mats on their hands and knees, while holding a pillow between the two of them without using their hands or arms, without dropping the pillow, and while staying on the mats (which were two feet wide). There was a bell placed at each end of the mats, which couples were instructed to push. See Figure 2 for a depiction of the lab setup.



Figure 2. A depiction of the laboratory setup for the couples' novel task.

The two experimental conditions differed by how the task was framed. Before the experimenter described the task in detail, she described the experience of the task. In the “novel task, growth framing condition,” the experimenter emphasized how the task was a growth-enhancing experience, emphasizing the novelty, fun, and excitement in the task. In the “novel task, security framing condition”, the experimenter emphasized how the task was a security-enhancing experience, emphasizing how the task involved relying on and supporting each other.

The third condition was a control condition. Participants were instructed to roll a ball across the mats from one end to the other. Each partner completed the task individually. Both

partners were in the room.

After receiving instructions about the task, participants were asked to complete a brief writing task on their separate computers before completing the task with their partner. This was done to bolster the manipulation. In the novel, growth condition, the computer prompted participants to write about how they thought the task might be fun and exciting and how they may expect to feel while completing the task. In the novel, secure condition, participants wrote about how they thought the task might allow them to rely on and support each other and how they expected to feel during the task. In the control condition, participants were simply prompted to write about how they thought the task would go.

Once both members of the couple completed their writing task, they returned to the joint lab room and completed their respective task.

Relationship satisfaction. Upon completion of the crawling task, participants were brought back into their separate rooms to complete measures of relationship satisfaction. We administered two well-validated scales, and framed them “in the moment”: The first was the satisfaction component of the Overall Perceived Relationship Quality Scale (Fletcher, Simpson, & Thomas, 2000). There were a total of three items presented on a 7-point scale (1=*not at all* and 7=*extremely*). Participants responded to the items “Right now...”: “how _____ are you with your relationship?” with the options being “satisfied,” “content,” and “happy.” The second scale was the satisfaction component of Rusbult’s Investment Model Scale (Rusbult, Martz, & Agnew, 1998). Participants indicated, in that moment, their agreement with five items, including: “I feel that my relationship is close to ideal,” and “Our relationship makes me very happy” on a 1- (*do not agree at all*) to 9- (*agree completely*) point scale. The two relationship satisfaction scales were highly correlated, $r(212)=.80, p<.001$. We standardized each scale and created a composite

measure to serve as overall relationship satisfaction. The relationship satisfaction measure had high reliability ($\alpha=.90$).

Ratings of growth and security experiences. Next, participants were asked to describe their experience with the task in an open-ended textbox. They then rated the extent to which the task brought about feelings of growth or security using the same items from Study 1. The 10 items (5 growth, 5 security), were answered on a 7-point scale (1=*not at all* and 7=*very much*). Example growth items included: “How much did you feel like...” “this task was new and exciting?” “this task brought about feelings of passion?” “and “this was a growth experience for your relationship?” Example security items included: “How much did you feel like...” “this was an experience that allowed you to rely on your partner?” “this was an experience that made you feel solid as a couple?” and “this task brought about feelings of security?”. All items were presented in a random order. Both the growth ($\alpha=.85$) and security ($\alpha=.94$) experiences scale had good reliability.

Once both partners completed their surveys, they were brought back together, debriefed, and thanked for their participation.

Results

We followed the procedure outlined by Kenny, Kashy, and Cook (2006) and analyzed the data using a series of multilevel models. Given the dyadic structure of the data, we modeled the intercept terms as varying randomly across couples and the slope terms as fixed effects.

Condition effects on relationship satisfaction. We modeled post-task relationship satisfaction as a function of dummy coded task condition (level-2; 0=control). The results indicated that there was a significant effect of condition on relationship satisfaction, $F(2, 107.67)=4.32, p=.016, \eta_p^2=.06$. Participants who completed the novel task with their partners and

who received the growth framing reported higher levels of relationship satisfaction compared to participants in the control condition, $b=0.54$, $SE=0.18$, $t(105.85)=2.92$, $p=.004$, 95% CI [0.17, 0.90]. Differences in relationship satisfaction across the novel task, security framing condition and the control condition did not reach statistical significance, $b=0.32$, $SE=0.19$, $t(111.58)=1.74$, $p=.084$, 95% CI [-0.04, 0.69]. Additionally, collapsing across the two novel conditions (growth framing and security framing), we found that participants who completed the novel task with their partner reported higher levels of relationship satisfaction relative to those who completed the control task, $b=0.43$, $SE=0.16$, $t(110.46)=2.69$, $p=.008$, 95% CI [0.11, 0.74], $\eta_p^2=.05$.

Finally, to test whether the framing of the novel task affected levels of relationship satisfaction, condition was re-coded such that the novel task with growth framing was the reference group (0=growth). The results indicated that post-task relationship satisfaction in the two novel task conditions did not significantly differ, $b=-0.21$, $SE=0.19$, $t(105.93)=-1.15$, $p=.251$, 95% CI [-0.58, 0.15]. See Table 1 for means of relationship satisfaction across condition.

Feelings of growth versus security across condition. Next, we modeled feelings of growth and security as a function of dummy coded condition (level-2; 0=control). There was a significant effect of condition on both feelings of growth, $F(2, 105.94)=33.72$, $p < .001$, $\eta_p^2=.26$, and feelings of security, $F(2, 105.58)=69.53$, $p < .001$, $\eta_p^2=.40$. Unsurprisingly, people who completed the novel task with growth framing experienced more feelings of growth than did people in the control condition, $b=1.75$, $SE=0.22$, $t(104.99)=7.80$, $p<.001$, 95% CI [1.31, 2.20]. Participants in the novel task with security framing also experienced more feelings of relationship growth relative to the control condition, $b=1.40$, $SE=0.23$, $t(107.91)=6.13$, $p<.001$, 95% CI [0.94, 1.85]. Collapsing across the two novel conditions (growth and security framing), we found that participants who completed the novel task reported more feelings of growth than

participants who completed the control task, $b=1.52$, $SE=0.20$, $t(107.86)=7.69$, $p<.001$, 95% CI [1.13, 1.91], $\eta_p^2=.24$.

Participants in the novel task with security framing condition reported experiencing more feelings of security than did participants in the control condition, $b=2.11$, $SE=0.23$, $t(107.17)=9.29$, $p<.001$, 95% CI [1.66, 2.56]. Participants in the novel task with growth framing condition also experienced more feelings of relationship security than those in the control condition, $b=2.44$, $SE=0.22$, $t(104.81)=10.95$, $p<.001$, 95% CI [2.00, 2.88]. Collapsing across the two novel conditions, we found that participants who completed the novel task reported more feelings of security relative to participants who completed the control task, $b=2.24$, $SE=0.19$, $t(107.23)=11.51$, $p<.001$, 95% CI [1.85, 2.62], $\eta_p^2=.39$.

To test whether feelings of growth and security differed across the two novel conditions, condition was re-coded such that the novel task with growth framing was the reference group (0 = growth). The results indicated that participants did not report significantly different experiences of relationship growth in the growth framing condition compared to the security framing condition, $b=-0.35$, $SE=0.23$, $t(105.04)=-1.57$, $p=.120$, 95% CI [-0.80, 0.09]. Similarly, feelings of relationship security were not significantly different between the growth framing condition and the security framing condition, $b=-0.33$, $SE=0.22$, $t(104.84)=-1.49$, $p=.140$, 95% CI [-0.78, 0.11]. Finally, we tested whether feelings of growth were significantly different from feelings of security following the novel task. Feelings were nested within partners who were nested within couples, so we estimated a 3-level multi-level model, including only participants from the two novel task conditions. We regressed relationship feelings on dummy coded feeling type (level-3; 0=growth, 1=security). The results indicated that among participants who

completed the novel task, reported feelings of security were higher relative to feelings of growth, $b=0.62$, $SE=0.08$, $t(142)=8.23$, $p<.001$, 95% CI [0.47, 0.77], $\eta_p^2=.29$.

Table 1

Mean Relationship Satisfaction, Growth Feelings, and Security Feelings Across Conditions

| Condition | <i>n</i> | Satisfaction | | Growth | | Security | |
|------------------------|----------|--------------|-----------|----------|-----------|----------|-----------|
| | | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> |
| Novel – growth frame | 74 | 0.25 | 0.82 | 5.31 | 1.08 | 5.91 | 1.03 |
| Novel – security frame | 69 | 0.04 | 0.85 | 4.95 | 1.33 | 5.58 | 1.29 |
| Control | 71 | -0.30 | 1.09 | 3.55 | 1.40 | 3.47 | 1.61 |

Note: Relationship satisfaction scores are standardized.

Mediation analyses. We examined feelings of relationship growth and relationship security as mediators of the effect of condition on post-task relationship satisfaction using the MLmed macro for SPSS (Rockwood, N. J. & Hayes, A. F., 2017). The macro simultaneously estimates all parameters in the model and produces Monte Carlo confidence intervals around all indirect effects for inference. Since feelings of growth and security did not differ depending on the framing of the novel task, we collapsed across these two framing conditions such that the novel task was coded 1 and the control condition was coded 0. We first examined each mediator separately, then examined both mediators simultaneously.

Feelings of relationship growth as a mediator. There was a significant between-group indirect effect of condition (novel vs. control) on post-task relationship satisfaction, through feelings of growth, *indirect effect* = 0.30, $SE = 0.13$, $Z = 2.38$, $p = .017$, 95% CI [0.07, 0.56]. Participants who completed the novel task reported higher feelings of growth than participants who completed the control task, $b = 1.55$, $SE = 0.20$, $t(105) = 7.77$, $p < .001$, 95% CI [1.15, 1.94], and higher feelings of growth led to higher post-task relationship satisfaction, $b = 0.19$, $SE = 0.08$,

$t(104) = 2.52, p = .013, 95\% \text{ CI } [0.04, 0.35]$.

Feelings of relationship security as a mediator. There was also a significant between-group indirect effect of condition (novel vs. control) on post-task relationship satisfaction, through feelings of security, *indirect effect* = 0.76, $SE = 0.18, Z = 4.22, p < .001, 95\% \text{ CI } [0.42, 1.12]$. Participants who completed the novel task reported higher feelings of security than participants who completed the control task, $b = 2.27, SE = 0.20, t(105) = 11.61, p < .001, 95\% \text{ CI } [1.88, 2.66]$, and higher feelings of security led to higher post-task relationship satisfaction, $b = 0.33, SE = 0.07, t(104) = 4.55, p < .001, 95\% \text{ CI } [0.19, 0.48]$.

Feelings of relationship growth and security as simultaneous mediators. When feelings of relationship growth and security were modeled as parallel mediators, feelings of security mediated the effect of condition on post-task satisfaction, *indirect effect* (a_1b_1) = 0.99, $SE = 0.27, Z = 3.65, p < .001, 95\% \text{ CI } [0.47, 1.55]$; however, feelings of growth did not, *indirect effect* (a_2b_2) = -0.20, $SE = 0.17, Z = -1.14, p = .253, 95\% \text{ CI } [-0.55, 0.14]$. A pairwise contrast of the indirect effects indicated that the indirect effect through feelings of security was significantly different from the indirect effect through feelings of growth, $a_2b_2 - a_1b_1 = -1.18, 95\% \text{ CI } [-2.01, -0.38]$. See Figure 3.

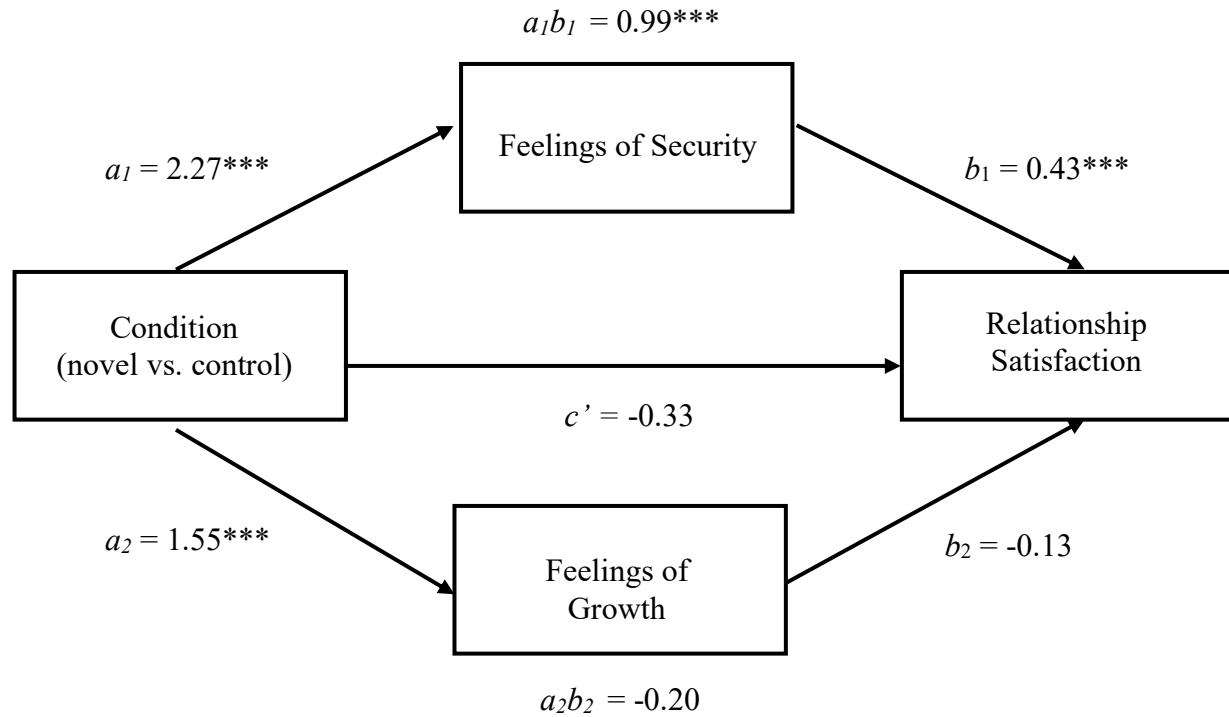


Figure 3. Mediation model of the parallel indirect effects of condition (novel = 1, control = 0) on relationship satisfaction through feelings of security and growth. All estimates are unstandardized regression coefficients. *** $p < .001$

Discussion

Using an experimental manipulation in which couples were assigned to pursue a novel task together or not, we found that pursuing novel tasks together boosted relationship satisfaction, and that feelings of security significantly mediated the effect of task type on satisfaction. Although feelings of growth also mediated the effect, when both growth and security feelings were included in the model, feelings of security appeared to be more strongly related to relationship satisfaction than feelings of growth.

General Discussion

How can people's close relationships improve? One solution, with rigorous empirical support, is the act of pursuing novel activities with a romantic partner (e.g., Aron et al., 2000). Indeed, in the current research we replicated this effect—couples who pursued a novel task

together in the lab experienced higher subsequent relationship satisfaction than couples assigned to a control condition.

While the positive effects of engaging in novel tasks for relationship satisfaction are robust, less is known about the mechanisms that account for such positive effects. Across two studies, we found evidence that higher feelings of security, not just higher feelings of growth, are related to subsequent higher relationship satisfaction. Participants reported higher feelings of security, in addition to growth, when recalling engaging in a novel (vs. mundane) task with their partners (Study 1); further, when participants were randomly assigned to actually engage in a novel task with their partner or control task, both growth and security-related feelings were positively associated with higher relationship satisfaction (Study 2). Interestingly, when both mediators were included in the model simultaneously, the presence of security-related feelings was more closely related to relationship satisfaction than feelings of growth.

Theoretical and Practical Implications

The present research suggests that an overlooked aspect of people's experiences when pursuing novel tasks with their partner—feelings of security—may be strongly linked to subsequent boosts in relationship satisfaction. In other words, it is not just feeling excitement and passion that leads to enhanced relationship satisfaction, but also about a sense of security that develops from relying on one's partner. Interestingly, in Study 2 feelings of security were highest when the novel task had growth framing. This suggests that a key ingredient to increasing feelings of security may be going into a task focusing on its excitement and novelty, rather than its potential for increasing security. In other words, a focus on growth may be important not only for its own sake, but for its role in facilitating an increased sense of security. In contrast, thinking about a task as increasing relationship security from the beginning may feel anxiety-provoking or

high-stakes in a way that undermines the very quality it seeks to enhance. Exploring these dynamics further will be an important direction for future research.

In addition, this security-related mechanism suggests the need to reevaluate the assumptions about *what* pursuing a novel task does for couples. It may be that increased feelings of security support the expansion of the self in relation to the other, as classically proposed. Alternatively, there may be different paths to self-expansion that support increases in relationship satisfaction. Specifically, perhaps one path to self-expansion draws on passion and excitement, and increases passionate love, as previously suggested. A second, previously unexplored path may also facilitate self-expansion, but instead through connection and trust, increasing companionate love.

Limitations and Future Research

One limitation of the current research is that we recruited student samples in relatively short-term relationships. Although we suspect that the results are generalizable to longer-term relationships given past work demonstrating the generalizability of the effect of novel tasks on relationship satisfaction (e.g., see Reissman, Aron, & Bergen, 1993), it would be useful for future work to examine how relationship length or stage may moderate the effect. We also did not include a no-frame control condition in which couples completed the novel task without a frame. Without this comparison control condition, we cannot be certain that the frame alone did not cause the observed effect. However, we do not believe that the frame alone caused the effect (without the presence of the novel task) because past work has shown that even without any framing attached to the task, couples who complete novel tasks report higher relationship well-being than couples in control conditions (e.g., see Study 2 of Aron et al., 2000). However, future research could better unpack the factors that are really essential for seeing changes of

relationship well-being. Additionally, although we experimentally manipulated the novel experience, we did not assess relationship satisfaction pre- and post-manipulation to examine the degree of change across time. Future work could examine such changes. Finally, future work should examine the patterns longitudinally, which could reveal how long-lasting increased feelings of security, growth, and satisfaction are post-novel task, and whether changes in these variables affect relationship longevity.

Conclusion

It has been proposed and assumed that positive arousal emotions are responsible for the relationship boost that occurs after pursuing novel activities with a partner. However, the current work suggests that opportunities for relying on one's partner, receiving and offering support, and trusting one's partner are also associated with increases in relationship satisfaction. The current work suggests that to better understand why pursuing novel tasks boosts couples' satisfaction, we need to consider the important role of felt security.

Open Practices

The studies in this article earned Open Materials and Open Data badges for transparent practices.

Materials and data for the studies are available at:

https://osf.io/dq79n/?view_only=59319b98b14d4e6a93adc3498bb3b0d8

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