



## Expanding me, loving us: self-expansion preferences, experiences, and romantic relationship commitment

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### ABSTRACT

Self-expansion is a process through which people increase the size of their self-concept by incorporating novel content into their sense of identity. Greater self-expansion predicts positive outcomes for individuals and romantic relationships. However, there are individual differences in the motivation to self-expand. In the present research, we predicted that the experience of relational self-expansion would be associated with relationship commitment most strongly for people who were more motivated to self-expand. We found support for this hypothesis across three studies (total  $N = 686$ ), with an online sample of individuals in relationships and two dyadic samples, using both cross-sectional and longitudinal methods. This research suggests that those who are motivated by personal self-expansion and experience self-expansion in their relationships are especially romantically committed.

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Self-expansion; relationship quality; motivation; self-concept; romantic relationships

At the start of George Eliot's *Middlemarch*, Dorothea is a young woman with "eagerness to know the truths of life" and a "soul hunger" for knowledge. She marries Casaubon, a middle-aged scholar, because she believes he can help her expand her sense of the world. Unfortunately, she discovers that "the large vistas and wide fresh air which she had dreamed of finding in her husband's mind were replaced by anterooms and winding passages which seemed to lead nowhither." In other words, he turns out to be pedantic and ponderous; Dorothea is painfully unhappy in her marriage. Dorothea's misery is partly because she hoped for her relationship to expand her sense of self, but it failed to provide the growth she desired. Essentially, Dorothea's marriage did not provide her with opportunities for self-expansion. Self-expansion refers to adding new attributes to one's own sense of self, which is often driven by having new and exciting experiences with one's romantic partner or by taking on one's partner's resources, perspectives, and identities as one's own (Aron & Aron, 1986; Aron et al., 2013). People are often happier in relationships that provide self-expansion than in relationships that do not (Aron et al., 2013). That said, not all people are motivated to seek self-expansion to the same extent (Hughes et al., 2020). Dorothea, for example, may have been unhappy in her marriage not only because it did not provide self-expansion, but especially because she had so hoped it would.

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The current research examines how people's general motivation for self-expansion and their experiences of self-expansion within a romantic relationship are associated with romantic relationship commitment. We hypothesized that experiencing self-expansion in a relationship should matter more for people's romantic commitment to the extent that they are strongly motivated to seek self-expansion opportunities in general. We tested this central hypothesis examining when, and for whom, relational self-expansion may be especially beneficial across three studies.

## The expanding self-concept

The self-concept refers to a person's sense of identity, encompassing everything that they claim as "me" or "mine," including their characteristics, beliefs, preferences, physical attributes, social relationships, and even material possessions (James, 1890; Markus, 1977). Although people often subjectively experience the self-concept as consistent over time, in reality, it is continuously constructed through both personal and social experiences (Markus & Wurf, 1987; McConnell, 2011). One way of constructing the self-concept is through self-expansion – adding positive content to the self-concept (Aron & Aron, 1986; Mattingly et al., 2014).<sup>1</sup> When people self-expand, they add new resources, perspectives, and identities into their sense of self (Aron et al., 2013).

Although people can self-expand on their own (Mattingly & Lewandowski, 2013), with friends (Tomlinson et al., 2019), or in the workplace (McIntyre et al., 2014), self-expansion often occurs in the context of romantic relationships. People can incorporate their romantic partner's resources, perspectives, or preferences into their own self-concepts, or engage in new activities together that provide self-expansion (Aron et al., 1992; Tomlinson et al., 2019). In the early stages of forming a new relationship, people often self-expand by incorporating their partner's attributes and preferences into their own self-concept, even with very little shared experience (Aron et al., 2013; Slotter & Gardner, 2009). As relationships mature, the rapidity with which people can add new content to their self-concept slows. Simply put, they have adopted all the new content from their relationship partner that they can. As such, in order to continue to self-expand within the context of their relationship, people can engage in new activities as a couple to maintain the self-expansion process (Aron et al., 2000).

The self-expansion that people have experienced in their relationship is often measured via the Inclusion of the Other in the Self scale (IOS; Aron et al., 1992). This measure consists of a series of 7 overlapping pairs of circles, representing the self and the partner. Each of the 7 pairs overlaps slightly more than the one before; that the first pair of circles do not overlap at all, and the seventh pair overlap almost completely. The circles also become larger as the overlap increases, indicating that the selves being represented by the circles are not only overlapping to a greater extent, but are also increasing in size (i.e., reflecting self-expansion). People are asked to select the pair that best represents them and their partner (e.g., Aron et al., 1992). The Inclusion of the Other in Self Scale has been theorized to be a face-valid measure of the by-product of taking on a partner's self-aspects through self-expansion (e.g., Aron et al., 1992; Aron et al., 2013). Essentially, people view themselves as "overlapping" to a greater extent with their partner because they have previously adopted aspects of that partner into their own sense of self. This process also increases the overall size of the person's self-

concept. Thus, one's partner can be an avenue for self-expansion through the adoption and integration of the partner's qualities as one's own (e.g., Aron et al., 1992; Aron et al., 2013).

Experiencing self-expansion predicts a variety of well-being outcomes for both individuals (Emery et al., 2022; Mattingly & Lewandowski, 2013) and their relationships (Aron et al., 2013). Perceiving one's relationship as self-expanding is associated with greater relationship quality (e.g., Aron et al., 2000; Mattingly et al., 2014). Additionally, people whose relationships lack in self-expansion do not experience the same distress after breakup as do those with a highly self-expanding relationship, indicating that self-expanding relationships may be more rewarding (Lewandowski & Bizzoco, 2007; Tashiro & Frazier, 2003). Furthermore, couples who engage in novel, self-expanding activities together experience greater relationship quality (Aron et al., 2000), less boredom (Tsapelas et al., 2009), greater passion and sexual desire (Muise et al., 2019), and reduced susceptibility to infidelity (Lewandowski & Ackerman, 2006).

Despite the benefits of self-expansion, there is variability in the extent to which people are motivated to self-expand (Hughes et al., 2020). Simply put, some people desire new experiences and to add to their sense of self more than others. As such, perhaps the benefits associated with self-expansion may vary among people based on how motivated they are to self-expand.

### Variability in Self-expansion

Although self-expansion is typically beneficial, people vary in their general motivation to self-expand (Hughes et al., 2020). Situational factors and individual differences can also influence people's motivation for self-expansion. For example, when looking at the dating profiles of potential romantic partners, people spontaneously self-expanded to include an attribute of a potential romantic partner, but only when attracted to that person (Slotter & Gardner, 2009). Individual differences, such as lower self-concept clarity (lacking a clear and coherent sense of self), can also predict lower motivation for and engagement in self-expansion (Emery et al., 2015). Moreover, recent research has identified the motivation to self-expand itself as a broad individual difference, which is associated with higher individual well-being (Hughes et al., 2020).

Given variability in the motivation to self-expand, perhaps those highest in this motivation also benefit the most from self-expanding. While not yet tested, other literature suggests the importance of motivations and experiences aligning. For example, regulatory focus theory suggests that people vary in their general motivational approach to various goals. When individuals pursue a goal in a way that runs counter to their default approach, they experience reduced enjoyment and success in the goal pursuit, as well as reduced well-being over time (Higgins, 2005). While experiencing regulatory fit, pursuing a goal with the strategy that feels right to the individual, people are often happier and more engaged in their goal pursuit. Ultimately, this previous work suggests that there is a benefit to having experiences that fit one's motivations.

As previously discussed, romantic relationships are one of the primary sources of self-expanding. Having a partner who provides self-expanding opportunities through engaging in new activities together or by enabling a person to incorporate aspects of their partner into their sense of self should be particularly beneficial to relationship commitment, but especially when a person is motivated to self-expand. Previous work has found that people's commitment to their relationship declines over time when their romantic partner does not meet their

core needs (Slotter & Finkel, 2009). Understanding the relationship experiences associated with commitment is especially crucial, because commitment is one of the strongest predictors of relationship longevity and stability (Le et al., 2010; Rusbult, 1983).

In the current research, we examined whether, similar to regulatory focus and need fulfillment, having a partner who helps meet a person's needs in terms of self-expansion would also be associated with commitment. In particular, those who are motivated to self-expand and see their partner as an avenue for self-expansion (i.e., have their need for self-expansion met) may have especially strong relationship well-being outcomes. In the current research, we investigate whether the link between experiencing self-expansion within a current romantic relationship and relationship commitment depends on people's general preferences to self-expand.

### Overview of the current research

People's motivation to self-expand varies (Hughes et al., 2020) as does the extent to which people's partners serve as an avenue for self-expansion (Aron et al., 2013). People's motivation to self-expand varies (Hughes et al., 2020) as does the extent to which people's partners serve as an avenue for self-expansion (Aron et al., 2013). Although self-expansion in romantic relationships is generally associated with relational benefits, the current research examined the circumstances under which this link emerges. Specifically, we hypothesized that the extent to which people's partners served as avenues for self-expansion would be beneficial to their relationships to the extent that they were individually motivated to experience self-expansion in the first place. If *Middlemarch's* Dorothea had not cared about self-expanding to know "the truths of life," she might have been perfectly content in her relationship with Casaubon. However, given her strong desire to self-expand, and the fact that Casaubon did not serve as a means to this end, she finds her relationship to be an unfulfilling union. We tested our hypothesized interaction between the extent to which the partner serves as an avenue for self-expansion and the individual desire for self-expansion predicting relationship outcomes, specifically commitment, across three studies.

We used both cross-sectional (Studies 1 and 2) and longitudinal (Study 3) methods, and we examined individuals in romantic relationships (Study 1) as well as romantic couples (Studies 2 and 3). Across these studies, we considered self-expansion through multiple measures. We measured Inclusion of Other in the Self (IOS) in Studies 1 through 3, which captures both the size of a person's self-concept and the extent to which a person perceived overlap between themselves and their partner. As previously mentioned, one avenue for achieving this overlap is self-expansion that has occurred between the two partners. In other words, having a larger self-concept overall and greater perceived overlap between a person's self-concept and their partner's self-concept may reflect having self-expanded with their partner via incorporating aspects of the partner into the self (Aron et al., 1992). For convergent validity, we also assessed relational self-expansion (Study 3) where participants reported whether being with their partner, specifically, had resulted in self-expansion within the most recent 6 months. Self-expansion as measured by IOS, in contrast, could have occurred at any point during participants' relationships. Thus, these two metrics examine slightly different time frames during which

a partner might serve as an avenue for self-expansion: ever (IOS) versus within the last 6 months (relational self-expansion). These different metrics enabled us to examine whether our effects emerged across different forms of assessing self-expansion.

## Study 1

In Study 1, we examined our primary hypothesis in an online sample of individuals in romantic relationships. Specifically, we assessed general self-expansion preferences, inclusion of the other in the self, and commitment. With these measures, we tested whether commitment was greater for those who were motivated to self-expand and included their partner in the self within their relationship.

### Participants and procedure

We recruited 200 participants via Prolific who were from the United States and in a romantic relationship. We removed 2 participants who reported not being in a romantic relationship, leaving a total of 198 participants.<sup>2</sup> Participants were 31.58 years old on average ( $SD = 10.91$ ) and included 58.6% women, 38.9% men, 2.0% nonbinary; 81.8% European-American, Anglo, or Caucasian; 9.6% African-American, Black, African, or Caribbean; 11.1% Asian-American, Asian, or Pacific Islander 8.6% Hispanic-American, Latino(a), or Chicano(a); 2.5% Native-American or American Indian; .5% other race<sup>3</sup>; 75.3% heterosexual, 13.6% bisexual, 5.1% gay or lesbian, 3.5% pansexual, .5% queer, 1.5% asexual; the average overall relationship length was 8.20 years ( $SD = 8.96$ ). The most common relationship type was married/in a committed life-long partnership (58.6% married/in a committed life-long partnership, 39.4% dating seriously, 2.0% dating casually). Participants completed all of the measures online in a single session. This research was approved by the IRB at Northwestern University.

### Measures

All of the relevant measures for the current study are reported here; see [Table 1](#) for bivariate correlations between key measures.<sup>4</sup>

**Self-Expansion Preferences.** This 24-item measure contains two subscales, each with 12 items (Hughes et al., 2020; 1 = Strongly disagree to 7 = Strongly agree). The self-expander subscale assesses the extent to which people desire and seek out self-expansion opportunities ( $\alpha = .93$ ), and includes items such as, "I embrace the opportunity to do things I've never done before." The self-conserver subscale assesses the extent to which people desire and seek out familiar opportunities ( $\alpha = .83$ ), and includes items such as, "I am a person who prefers a lot of familiarity in my life." As in previous research (Hughes et al., 2020), we reverse-scored the self-

**Table 1.** Correlations for main variables in study 1.

Measure	1	2
1. Self-Expansion Preferences	-	
2. Inclusion of the Other in the Self	.02	-
3. Relationship Commitment	-.13	.38**

\*\* $p < .001$

conservator subscale and created a composite of all items, such that higher scores on the scale indicated a stronger desire for self-expansion, whereas lower scores indicated a weaker desire for self-expansion ( $M= 4.22, SD = .76, \alpha = .90$ ).

**Inclusion of the Other in the Self.** We used the single item measure of Inclusion of Other in the Self, the degree to which people view their partner as a part of their own self (IOS; Aron et al., 1992). Thus, this scale may tap into the partner being an avenue for self-expansion (Aron et al., 2013). It displays a series of 7 pairs of circles labeled as “self” and “other” with increasing degree of overlap and size. Participants choose which circle pairing best represented their relationship ( $M= 4.86, SD = 1.48$ ).

**Relationship Commitment.** This 7-item scale assesses relationship commitment (Rusbult et al., 1998; 1 = Do not agree at all to 9 = Agree completely), and included items such as, “I want our relationship to last a very long time” ( $M= 7.97, SD = 1.35; \alpha = .86$ ).

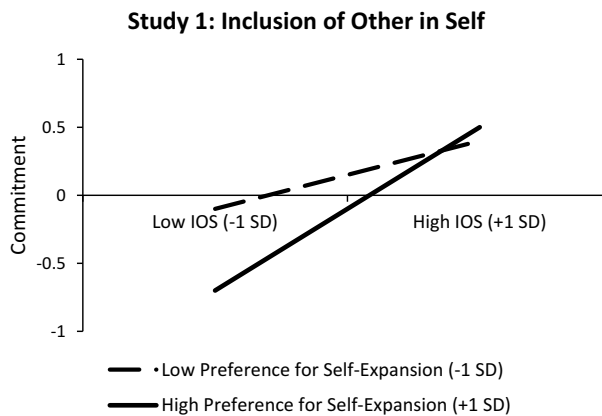
## Results

All variables were standardized prior to analysis ( $M= 0, SD = 1$ ). In order to test our primary hypothesis, we predicted participants’ relationship commitment from their self-expansion preferences, inclusion of the partner in the self, and their interaction.<sup>5</sup> See Table 2. We did not find a significant main effect of self-expansion preferences<sup>6</sup>. However, we did find a significant main effect of inclusion of the partner in the self, and, central to our predictions, a significant interaction; see, Figure 1.

**Table 2.** Full model of self-expansion preferences, past self-expansion, and their interaction in study 1.

Parameter	Beta	Standard errors	t-value	p-value	95% CI
Intercept	-0.001	0.07	-0.02	0.99	-0.13, 0.13
Self-Expansion Preference	-0.12	0.07	-1.87	0.06	-0.25, 0.01
IOS	0.41	0.07	6.22	<.001**	0.28, 0.54
SEP X IOS	0.17	0.06	2.65	.009*	0.04, 0.30

\* $p < .01$ , \*\* $p < .001$



**Figure 1.** Self-expansion preferences and inclusion of other in the self interaction predicting commitment in study 1.

Next, we examined simple effects within this interaction. Among people low in self-expansion preferences ( $-1$  *SD*), inclusion of their partner in the self was significantly and positively associated with commitment,  $\beta = .24$ ,  $t(194) = 2.78$ ,  $p = .006$ , 95% CI (0.07, 0.40); however, the effect was descriptively stronger among people high in self-expansion preferences ( $+1$  *SD*),  $\beta = .58$ ,  $t(194) = 5.87$ ,  $p < .001$ , 95% CI (0.38, 0.77). Overall, this indicates that for those high in self-expansion preferences, including the partner in the self was more strongly associated with romantic commitment.

Put differently, when including the partner in the self was high ( $+1$  *SD*), self-expansion preferences were not associated with commitment,  $\beta = .05$ ,  $t(194) = .52$ ,  $p = .61$ , 95% CI ( $-0.14$ , 0.24). However, when including the partner in the self was low ( $-1$  *SD*), self-expansion preferences were negatively associated with commitment,  $\beta = -.29$ ,  $t(194) = -3.31$ ,  $p = .001$ , 95% CI ( $-0.47$ ,  $-0.12$ ), suggesting that having a preference to self-expand and not having the partner as an avenue for that self-expansion may be especially detrimental to commitment.

## Discussion

Taken together, the results of Study 1 provided initial support for our hypothesis that self-expanding via their romantic partner would be more strongly associated with relationship outcomes for people who desired more individual self-expansion in the first place. When examining individuals in romantic relationships, we found an interaction between people's self-expansion preferences and their inclusion of the partner in the self on relationship commitment. This first study provides initial evidence that having the partner as an avenue for self-expansion, as measured by the IOS scale, more strongly predicts commitment for those with general self-expansion preferences.

## Study 2

Study 2 expanded on Study 1 to test our primary hypothesis in a sample of romantically involved couples. Again, we assessed general self-expansion preferences, inclusion of the partner in the self, and commitment.

## Participants and procedure

We recruited 155 adult, English-speaking, couples to take part in the present study via Qualtrics.com's panel platform.<sup>7</sup> Sample size was determined by using Ackerman et al.'s (2015) power calculator, which was designed specifically for estimating power for dyadic data analysis, specifying medium predicted effect sizes, ( $b = .15$ ) for actor and partner effects and allowing modest correlation ( $r = .30$ ) between them. This produced a recommended number of 167 couples. We were able to successfully recruit 155 couples; however, 19 individual participants were discarded from the dataset for failing data quality checks. If one member of the couple was discarded, the other member of the couple was also discarded. This left a sample size of 272 individuals (138 women; 134 men), and 136 full couples. This research was approved by the IRB at Villanova University.

Participants were 49.84 years old on average ( $SD = 13.39$ , range 22–78), predominantly in mixed gender relationships (98.53% mixed gender, 1.47% same gender); 87.9% European-American, White, Anglo, or Caucasian; 3.1% African-American, Black, African,

**Table 3.** Correlations for main variables in study 2.

Measure	1	2
1. Self-Expansion Preferences	-	
2. Inclusion of the Other in the Self	.03	-
3. Relationship Commitment	-.11	.33*

\* $p < .001$ 

or Caribbean; 5.2% Asian-American, Asian, or Pacific Islander; 1.8% Hispanic-American, Latino(a), or Chicano(a); 0.8% Native-American or American Indian; 1.2% multiracial; the mean relationship length was 19.50 years ( $SD = 14.87$ ).<sup>8</sup> The most common relationship type was married and cohabitating (81.6%), followed by dating and cohabitating (15.1%). The study took place entirely online in a single session. We emphasized that participants were to complete the measures privately and not discuss their responses with their partner.

## Measures

See, [Table 3](#) for the bivariate correlations among key measures.<sup>9</sup>

**Self-Expansion Preferences.** We used the same measure as in Study 1 ( $M = 3.85$ ,  $SD = .94$ ,  $\alpha = .92$ ).

**Inclusion of the Other in the Self.** As in Study 1, we used the IOS scale to assess whether participants included their partner into the self ( $M = 5.44$ ,  $SD = 1.63$ ).

**Relationship Commitment: Perceived Relationship Quality Components Inventory.** This measure includes 18 items assessing overall relationship well-being, with 6 subscales assessing different aspects of this construct (Fletcher et al., 2000; 1 = Not at all to 7 = Extremely). For the current study, we focused on the commitment subscale (e.g., "How committed are you to your relationship?";  $M = 6.60$ ,  $SD = .80$ ,  $\alpha = .97$ ). The other subscales include relationship satisfaction, intimacy, trust, passion, and love.<sup>10</sup>

## Analytic strategy

All measures were standardized prior to analyses ( $M = 0$ ,  $SD = 1$ ) and we used a two-level multilevel model with individuals nested within dyads (Kenny et al., 2006).<sup>11</sup>

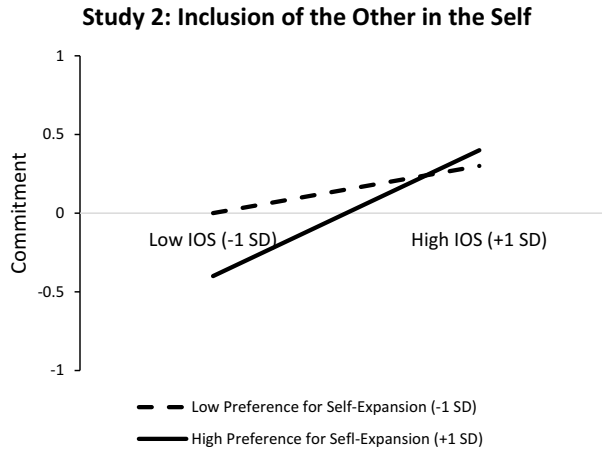
## Results

As in Study 1, we examined the interaction between self-expansion preferences and inclusion of the partner in the self predicting commitment. See [Table 4](#). There was a significant main effect of including the partner in the self as well as the predicted interaction<sup>12</sup>; see, [Figure 2](#). Tests of simple effects revealed that including the partner in the self was positively associated with relationship commitment for participants high on self-expansion preferences (+1  $SD$ ),  $\beta = .41$ ,  $t(267.68) = 5.87$ ,  $p < .001$ , 95% CI: 0.27, 0.55. However, including the partner in the self was not associated with relationship commitment for those with weaker self-expansion preferences (-1  $SD$ ),  $\beta = .14$ ,  $t(262.14) = 1.93$ ,  $p = .054$ , 95% CI: -0.002, 0.28. Put differently, among those with high inclusion of the partner in the self (+1  $SD$ ), their



**Table 4.** Full model of self-expansion preferences, past self-expansion, and their interaction in study 2.

Parameter	Beta	Standard Error	Df	t-value	p-value	95% CI
Intercept	0.08	0.06	131.56	1.31	0.19	−0.04, 0.20
Self-Expansion Preference	−0.07	0.05	242.60	−1.46	0.15	−0.17, 0.03
IOS	0.27	0.06	228.47	4.84	<.001*	0.16, 0.39
SEP × IOS	0.14	0.04	215.75	3.25	.001*	0.05, 0.22

\* $p < .001$ **Figure 2.** Self-expansion preferences and iOS interaction predicting relationship commitment in study 2.

self-expansion preferences were not associated with relationship commitment,  $\beta = .06$ ,  $t(247.12) = 0.87$ ,  $p = .384$ , 95% CI:  $-0.08, 0.21$ ; however, at lower levels of inclusion of the partner in the self ( $-1$  SD), those with stronger self-expansion preferences reported lower relationship commitment,  $\beta = -.21$ ,  $t(203.06) = -3.71$ ,  $p < .001$ , 95% CI:  $-0.32, -0.10$ . These results replicate the previous study and suggest that having a partner who is an avenue for self-expansion is more important for commitment among individuals who desire greater self-expansion.

## Discussion

Study 2 replicated Study 1 in a sample of romantic dyads. As in Study 1, we found a 2-way interaction between self-expansion preferences and inclusion of the partner in the self predicting commitment. People with strong self-expansion preferences experienced especially high commitment when their partner was a possible avenue for self-expansion, as measured by IOS. However, thus far we have only been able to test our hypotheses cross-sectionally. In Study 3, we examine our hypothesis in a relatively diverse sample of romantic couples longitudinally and with a second measure of self-expansion within the relationship.

### Study 3

In Studies 1 and 2, we found support for our hypothesis that having a partner who provides an avenue for self-expansion is especially important for relationship commitment among those with strong general preferences to self-expand. It also expanded on the first two studies in three ways. First, we tested our hypothesis longitudinally, with three waves of data collection over the course of one year. Second, we assessed both inclusion of the partner in the self and recent relational self-expansion. As in Studies 1 and 2, we assessed having a romantic partner as an avenue for self-expansion through IOS. In Study 3, we also measured whether people had self-expanded as a result of their relationship in the previous 6 months, enabling us to examine convergent validity across different metrics of relational self-expansion.

### Participants and procedure

As part of a larger study of relationship processes, we recruited 108 couples (216 individuals) from the greater Chicago area through online advertisements (e.g., on Craigslist) and targeted flyering in both higher-income and lower-income neighborhoods.<sup>13</sup> Our inclusion criteria required that participants be born in the United States, at least 25 years old, in a romantic relationship for at least 6 months, and have internet access either through a phone or a computer. This research was approved by the IRB at Northwestern University. Participants were 36.38 years old on average ( $SD = 12.64$ ); 49.1% male, 49.1% female, 1.4% nonbinary; 78.7% heterosexual, 6.0% gay or lesbian, 5.6% bisexual, 5.6% queer, 2.3% pansexual, 1.4% other sexual orientation; 63.4% European-American, White, Anglo, or Caucasian; 24.1% African-American, Black, African, or Caribbean; 8.3% Asian-American, Asian, or Pacific Islander; 7.9% Hispanic-American, Latino(a), or Chicano(a); 2.3% Native-American or American Indian; 2.8% other race or ethnicity; 44.4% in a committed/lifelong partnership, 37% married, 18.5% dating seriously; the average relationship length was 8.26 years ( $SD = 8.41$ ). At intake, 64.1% of the sample reported having at least a four-year college degree, and 34.1% of the sample reported not having a four-year college degree; 54.8% reported that at least one parent or guardian had at least a four-year degree and 44.2% reported that no parent or guardian had a four-year degree.

Participants completed a screening questionnaire and, after being deemed eligible, both members of the couple completed an online questionnaire. We emphasized that participants were to complete the measures privately and not discuss their responses with their partner. Participants received links to the second and third questionnaires six months and twelve months later, respectively. At the six month follow-up, 83% of the sample completed the survey and 5 couples reported having broken up. At the twelve month follow-up, 71% of the sample (75% of those in intact relationships) completed the follow-up and 3 couples reported having broken up. Analyses exclude waves at which a couple was broken up.

### Measures

See, [Table 5](#) for the bivariate correlations among key measures at intake.<sup>14</sup>

**Table 5.** Correlations among main variables in study 3.

Measure	1	2	3	4
1. Self-Expansion Preferences	-			
2. IOS	-.17*	-		
3. Relational Self-Expansion	.24**	.06	-	
4. Relationship Commitment	.12	.07	.14*	-

\* $p = .05$ , \*\*  $p = .01$

## Intake

**Self-Expansion Preferences.** Study 3 used a shortened version of the self-expansion preference scale at intake ( $\alpha = .76$ ;  $M = 4.72$ ,  $SD = .74$ ; Hughes et al., 2020; 1 = Strongly disagree to 7 = Strongly agree). Specifically, we used the top five highest loading self-expansion subscale items and the 5 highest loading self-conservation subscale items from the original scale. We reversed scored the self-conservation items and created a composite such that higher scores on the scale indicate a stronger desire for self-expansion while lower scores indicate a weaker desire for self-expansion.

**Inclusion of the Other in the Self.** Study 3 used the same IOS measure as Studies 1 & 2 ( $M = 5.05$ ,  $SD = 1.39$ ).

**Relational Self-Expansion.** This 3-item measure examines the extent to which people have experienced self-expansion as a function of being in their particular romantic relationship (Mattingly et al., 2014; 1 = Not very much, 7 = Very much). Specifically, it taps into the extent to which one has experienced new things, or gained novel attributes due to their romantic relationship ( $M = 5.33$ ,  $SD = 1.36$ ;  $\alpha = .84$ ; e.g., "In the past 6 months, by being with my partner . . . I have learned many great new things," "I have added positive qualities to my sense of self," and "I have become more competent and capable").

**Relationship Commitment.** We assessed commitment (intake  $M = 6.55$ ,  $SD = .67$ ;  $\alpha = .74$ ; e.g., "I want our relationship to last a very long time") with the same measure as in Study 1.

## Six and twelve-month follow ups

**Relationship Commitment.** We used the same measure of commitment from intake at both the 6 and 12 month follow-ups (6 month  $M = 6.39$ ,  $SD = 1.04$ ;  $\alpha = .90$ ; 12 month  $M = 6.48$ ,  $SD = .77$ ,  $\alpha = .86$ ).

## Analytic strategy

All measures were standardized prior to analyses ( $M = 0$ ,  $SD = 1$ ). For analyses conducted with just the intake questionnaire, we used a two-level multilevel model with individuals nested within dyads (Kenny et al., 2006). For the longitudinal analysis across the 3 waves of the study, we used a two-level crossed model with individuals nested within dyads, and with individuals and waves crossed to account for both members of the couple completing the questionnaires at the same time point (Kenny et al., 2006).<sup>15</sup>

## Results

First, we examined the effect of the interaction between self-expansion preferences and inclusion of the partner in the self on relationship commitment at the intake wave of data collection. See, [Table 6](#). While we did find a main effect of self-expansion preferences, unlike Studies 1 and 2 we did not find a main effect of IOS nor, contrary to our hypothesis and the previous two studies, a significant interaction.

**Table 6.** Full model of self-expansion preferences, inclusion of the partner in the self, and their interaction at intake in study 3.

Parameter	Beta	Standard Error	Df	t-value	p-value	95% CI
Intercept	-0.0004	0.08	107.62	-0.004	0.99	-0.17, 0.17
Self-Expansion Preference	0.13	0.06	184.63	2.01	0.046*	0.002, 0.26
IOS	0.11	0.06	185.99	1.73	0.086	-0.02, 0.24
SEP X IOS	0.02	0.06	169.20	0.34	0.73	-0.10, 0.14

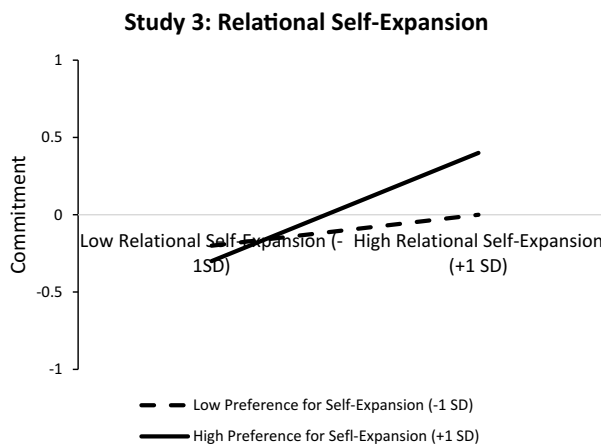
\* $p < .05$

Next, we examined the effect of the interaction between self-expansion preferences and relational self-expansion predicting relationship commitment at the intake wave of data collection. See, [Table 7](#). We found a significant main effect of relationship self-expansion and an interaction between self-expansion preferences and relational self-expansion; see, [Figure 3](#).

**Table 7.** Full model of self-expansion preferences, relational self-expansion, and their interaction at intake in study 3.

Parameter	Beta	Standard Error	Df	t-value	p-value	95% CI
Intercept	-0.04	0.08	108.30	-.45	0.65	-0.20, 0.13
Self-Expansion Preference	0.07	0.06	183.69	1.09	0.28	-0.06, 0.19
Relational Self-Expansion	0.21	0.07	200.83	3.13**	0.002	0.07, 0.34
SEP × RSE	0.14	0.06	188.15	2.47*	0.015	0.03, 0.26

\* $p < .05$ , \*\* $p < .01$



**Figure 3.** Self-expansion preferences and relational self-expansion interaction predicting relationship commitment in study 3.

Tests of simple effects showed that for those low on self-expansion preferences ( $-1$  *SD*), relational self-expansion is not associated with relationship commitment,  $\beta = .07$ ,  $t(203.88) = .83$ ,  $p = .41$ , 95% CI:  $-0.09$ ,  $0.22$ . However, for those high on self-expansion preferences ( $+1$  *SD*), relational self-expansion was positively associated with relationship commitment,  $\beta = .35$ ,  $t(189.20) = 3.62$ ,  $p < .001$ , 95% CI:  $0.16$ ,  $0.55$ . Put differently, among people who had low relational self-expansion ( $-1$  *SD*), self-expansion preferences were not associated with relationship commitment,  $\beta = -.07$ ,  $t(176.40) = -.90$ ,  $p = .37$ , 95% CI:  $-0.25$ ,  $0.09$ . However, for those who had high relational self-expansion ( $+1$  *SD*), self-expansion preferences were positively associated with relationship commitment,  $\beta = .21$ ,  $t(194.28) = 2.49$ ,  $p = .014$ , 95% CI:  $0.04$ ,  $0.38$ .

### Longitudinal results

Next, we examined these effects longitudinally across the intake, six, and twelve month follow-ups. Similar to our results at intake, we did not find a significant interaction between self-expansion preferences at intake and inclusion of the partner in the self at intake predicting commitment across the year. See, [Table 8](#). However, we did find an interaction between self-expansion preferences at intake and relational self-expansion at intake predicting commitment longitudinally. See, [Table 9](#) and [Figure 4](#).

Tests of simple effects revealed that for those lower on self-expansion preferences ( $-1$  *SD*), relational self-expansion was not associated with relationship commitment,  $\beta = -.0004$ ,  $t(202.04) = .005$ ,  $p = .99$ , 95% CI:  $-0.14$ ,  $0.14$ . However, for those who were high on self-expansion preferences ( $+1$  *SD*), relational self-expansion positively predicted relationship commitment,  $\beta = .34$ ,  $t(188.20) = 3.90$ ,  $p < .001$ , 95% CI:  $0.17$ ,  $0.50$ . Put differently, among people who were low on relational self-expansion ( $-1$  *SD*), self-expansion preferences were not associated with relationship commitment,  $\beta = -.15$ ,  $t(178.60) = -1.96$ ,  $p = .051$ , 95% CI:  $-0.30$ ,  $0.0009$ . However, for those who were high on relational self-expansion ( $+1$  *SD*), self-expansion preferences were positively associated with relationship commitment,  $\beta = .19$ ,  $t(195.85) = 2.46$ ,  $p = .015$ , 95% CI:  $0.04$ ,  $0.36$ .

### Study 3 discussion

Study 3 enabled us to test our hypotheses in a relatively diverse community sample of couples both cross-sectionally and longitudinally and with 2 measures of self-expansion within the relationship. We found a significant interaction between self-expansion preferences and relational self-expansion both at intake and at the follow-up waves. We

**Table 8.** Full model of self-expansion preferences, inclusion of the partner in the self, and their interaction longitudinally in study 3.

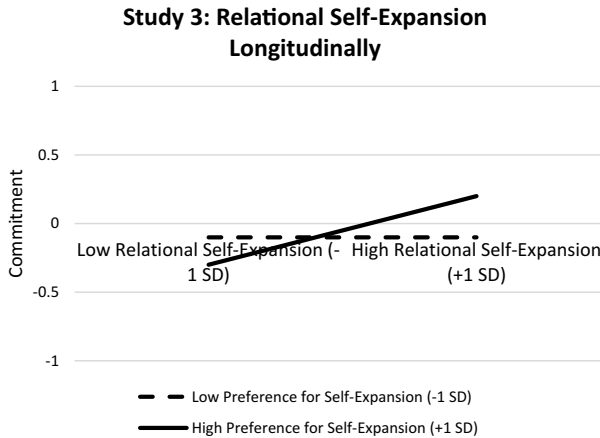
Parameter	Beta	Standard Error	Df	t-value	p-value	95% CI
Intercept	-0.04	0.08	105.81	-0.572	0.57	-0.20, 0.11
Self-Expansion Preference	0.07	0.06	175.82	1.18	0.24	-0.04, 0.18
IOS	0.12	0.06	182.82	2.08*	0.04	0.006, 0.23
SEP $\times$ IOS	-0.001	0.05	166.72	-0.03	0.98	-0.11, 0.12

\* $p < .05$

**Table 9.** Full model of self-expansion preferences, relational self-expansion, and their interaction longitudinally in study 3.

Parameter	Beta	Standard Error	<i>Df</i>	<i>t</i> -value	<i>p</i> -value	95% CI
Intercept	-0.08	0.08	107.39	-1.04	0.30	-0.23, 0.07
Self-Expansion Preference	0.02	0.05	177.50	0.35	0.73	-0.09, 0.17
Relational Self-Expansion	0.17	0.06	189.37	2.86*	0.005	0.05, 0.28
SEP × RSE	0.17	0.05	199.25	3.19**	0.002	0.06, 0.27

$p < .05$ , \*\* $p < .01$

**Figure 4.** Self-expansion preferences and relational self-expansion interaction longitudinally predicting relationship commitment in study 3.

found that having high self-expansion preferences and greater relational self-expansion predicted greater commitment, both concurrently and over the following year. Contrary to our hypotheses, we did not find the predicted interaction of self-expansion preferences on inclusion of the other in the self predicting commitment at intake or at the follow-up waves. While we find this to be surprising, it could be due to the use of a truncated version of the self-expansion preference scale or to the differences in the demographic profile of the samples. To determine the robustness of this effect, we conducted an internal mini-meta-analysis on the proposed interaction.

### Internal meta-analysis of self-expansion preferences and inclusion of the other in the self interaction

Our hypothesized interaction between self-expansion preferences and including the partner in the self emerged in Studies 1 and 2, but not Study 3. To obtain a more precise estimate of this effect, we conducted an internal meta-analysis of this two-way interaction. For Study 3, we used the longitudinal effect size since this incorporated commitment across intake, 6 months, and 12 months. We calculated an overall meta-analytic fixed effect  $\beta$  for the two-way interaction by calculating standardized  $\beta$ s for each study and weighting each  $\beta$  by the inverse of its variance. We calculated the meta-analytic standard error for each hypothesized effect by taking the square root of the reciprocal of the sum of

the weights. Then, by dividing the meta-analytic  $\beta$  by this meta-analytic standard error, we calculated a  $z$  statistic (Borenstein et al., 2009). We found a significant meta-analytic effect for the interaction,  $\beta = 0.094$   $z = -2.804$ ,  $p = .005$ .

## General discussion

Self-expansion is a motivational principle that suggests people seek to add to and expand their self-concept (Aron et al., 2013). Generally, self-expansion is beneficial to individuals (Mattingly & Lewandowski, 2013), as well as their relationships (Aron et al., 2013). However, not all people are motivated to self-expand to a similar extent (Hughes et al., 2020). The current research tested the hypothesis that having experienced self-expansion as a result of one's relationship should be especially linked with commitment among people who have a strong preference to self-expand. Three studies provided support for this hypothesis.

In Study 1, we found initial evidence that having the relationship as an avenue for self-expansion (as measured by inclusion of the other in the self) was associated with relationship commitment among those with greater motivation to self-expand. Study 2 replicated this finding with a sample of romantic dyads. In Study 3, we examined this hypothesis in a community sample of romantic couples, both at a single intake wave, and across two follow-ups spanning a one-year period. We considered both self-expansion measured by the inclusion of other in the self scale and relational self-expansion measured by whether a person had self-expanded as a result of the relationship within the past 6 months. We found an interaction between self-expansion preferences and relational self-expansion on commitment both at intake and across the two follow-up waves, indicating that those who are motivated to self-expand and are experiencing self-expansion in their relationship are especially committed. Contrary to Studies 1 and 2, we did not find an interaction between self-expansion preferences and inclusion of partner in the self on commitment. However, this interaction did emerge in an internal meta-analysis across the three studies.

Overall, these results suggest that when romantic relationships enable people to achieve their needs, in this case for self-expansion, people experience higher relationship quality (Slotter & Finkel, 2009). This work suggests that a general motivation to self-expand can be fulfilled through romantic relationships and that relational self-expansion is especially important for commitment when people are motivated to self-expand. Further, this work examines relationships as an avenue for self-expansion as measured by inclusion of the other in the self, as well as relational self-expansion within the last 6 months. A benefit to considering multiple measures is that it suggests that experiencing self-expansion in a multitude of ways is important, especially for those who are motivated to self-expand.

## Strengths, limitations, and future directions

Some strengths of the current research include the use of a variety of sample types. Across the three studies, recruitment involved Prolific, a Qualtrics panel of established couples, and a community sample of relatively diverse couples. The use of different samples suggests that these effects may generalize across different types of couples. In particular,

Study 3's community sample is more diverse compared to usual samples in relationship science in terms of socioeconomic status and race (Karney et al., 2004). Another strength within the methodology is the use of longitudinal data, which suggest that these effects hold over time to help sustain commitment.

Further, this work sought to bridge a gap between general self-expansion research and relational self-expansion research. We provide initial evidence that general self-expansion preferences interact with relational self-expansion to predict relationship commitment. As such, it is important for those who are motivated to self-expand to have their relationship as one avenue to do so. To further bridge this gap, future work would benefit from examining if self-expansion in the relationship affects individual well-being outcomes.

However, some results were not consistent across samples. Specifically, the interaction between self-expansion preferences and inclusion of the partner in the self from Studies 1 and 2 did not emerge in Study 3 (although Study 3 did conceptually replicate the previous two studies with the measure of relational self-expansion). Our internal meta-analysis offers some potential insight into the robustness of these effects. We hope that future work examines the extent to which this effect replicates to further clarify the interaction between general self-expansion preferences and self-expansion through inclusion of the partner in the self, as well as the circumstances under which it does or does not emerge.

A second limitation is that the current studies do not provide causal links between constructs, limiting how many conclusions we can draw about the direction of our effects. In future work, it would be interesting to examine whether general self-expansion preferences moderates the beneficial effects of couples engaging in experimentally assigned self-expanding activities compared to more mundane activities. Another potential future direction would be to develop a manipulation to enhance or dampen one's general self-expansion preferences, such as having people imagine engaging in new activities they have wanted to try compared to those that they deem overwhelming or unenticing. We could then examine potential causal effects on relationship outcomes based on experienced self-expansion.

A third limitation is the use of the inclusion of the other in the self scale as a measure of self-expansion in the relationship. While inclusion of the other in the self was created and theorized to be a measure of incorporating the partner's self-aspects into the self (Aron et al., 2013), a key form of self-expansion, the scale has also been used as a measure of closeness or interdependence (e.g., Simpson et al., 2003). Although it is possible that the inclusion of the other in the self scale could be tapping into all of these related but different constructs, its original intent was to capture self-expansion and in this paper we use the scale in the way it was originally designed. While we contend that the inclusion of the other in the self represents a byproduct of self-expanding by taking on one's partner's qualities as one's own, future work could examine what is brought to mind for participants when they see the scale.

Furthermore, future work could consider how these effects may be more beneficial for certain types of people and for certain issues within romantic relationships. Past research has shown that self-expansion can alleviate boredom within the relationship (Tsapelas et al., 2009). Since boredom is often detrimental to relationship well-being, it may be important to find ways to continue to self-expand with one's partner, but especially so if a person is motivated by self-expansion. Perhaps for those who are especially motivated to self-expand, the effects of boredom would be exacerbated.



Another future direction could be to consider how people's different perceptions of what would be self-expanding could influence how engaging in certain activities may differentially affect outcomes for each partner. As of now, less work has examined what people consider to be self-expanding and whether this perception differs between romantic partners.

## Conclusion

Self-expansion is a motivational principle that has been examined individually and within romantic relationships (e.g., Aron et al., 2013). In the present research, we examined whether having a self-expanding relationship would be particularly important for those with a higher general motivation to self-expand. We found that self-expanding in a person's relationship is associated with higher commitment, but especially so for those with a greater desire to self-expand. This suggests that for people who have a general tendency toward self-expansion, being in a relationship that offers self-expansion is especially rewarding and being in a relationship that does not is especially detrimental. Thus, one reason Dorothea was so unhappy in her marriage to Casaubon may have been because she had a "soul hunger" for self-expansion, and her new husband could not provide her with opportunities to self-expand.

## Notes

1. In the current research, we focus on self-expansion, the motivation to add positively valenced content to the self; however, self-change can also include adding negative content (self-adulteration), subtracting positive content (self-contraction), and subtracting negative content (self-pruning; Mattingly et al., 2014).
2. A post hoc power analysis showed we were at 80% power to achieve an effect size of .19.
3. Participants could select as many groups as they identified with; thus, the numbers may not add up to 100%.
4. As the measures used in Study 1 were drawn from a broader study of identity processes, we collected additional measures that are not reported here. A full list of measures is included in our online supplemental materials.
5. Please see the online supplemental materials for the analytic syntax.
6. We controlled for relationship satisfaction as a supplementary analysis and the hypothesized interaction remains significant. Please see the online supplemental materials for the tables with those results.
7. Procedure and materials for Study 2 were pre-registered prior to study execution ([https://osf.io/v2bnt/?view\\_only=b8f99023fe9547258ed359da9dcec8eb](https://osf.io/v2bnt/?view_only=b8f99023fe9547258ed359da9dcec8eb)); however, the specific analyses and hypotheses tested in the present study were not pre-registered. Specifically, the addition of the Inclusion of Other in Self scale was not part of the pre-registered hypotheses. Please see the supplemental online materials for a complete list of measures and a table presenting the results of the pre-registered approach. The present analyses expand on this analysis. The target number of couples changed from the initial pre-registration after reconsidering the effect sizes used for the power analysis.
8. We examined participant gender, age, ethnicity, and relationship type in auxiliary analyses for both Study 2 and 3 as covariates. All reported results emerged as robust beyond these factors.
9. We also assessed individual well-being measures, specifically hedonic and eudaimonic well-being (Diener et al., 1985; Ryff & Keyes, 1995), and a big five personality measure (Gosling et al., 2003) in this study. All reported effects in this study yielded identical conclusions, even

- with the inclusion of the main effects of each of these covariates. Furthermore, the correlations between these factors and the self-expansion preferences scale replicate those found in Hughes et al. (2020). Please see the online supplementary material for the correlation table.
10. We also conducted auxiliary analyses employing the entire measure. Results are highly similar to those reported here. See the supplemental materials. We also conducted the central analysis while controlling for relationship satisfaction and the hypothesized interaction remains significant. Please see supplementals for tables including the full model.
  11. See the online supplementary materials for the analytic syntax.
  12. In Study 2, we also tested an exploratory model where we examined the interactive role of one's own self-expansion preferences, one's partner's self-expansion preferences, and one's own experience of self-expansion in the relationship predicting relationship quality. We found a significant 3-way interaction where, among those who desire self-expansion but do not perceive their relationship to be providing it, having a partner who also desires self-expansion may be beneficial to relationship quality. See supplementals for a full breakdown of those results.
  13. We originally aimed to collect 150 couples; however, we had to stop enrolling new participants in March 2020 due to the COVID-19 pandemic, resulting in the final sample size of 108 couples.
  14. As study 3 was a broader investigation of relationship processes, we have included a full list of measures analyzed for this paper in the online supplementals.
  15. See the online supplementary materials for the analytic syntax. We also controlled for openness to experience and the results yielded identical conclusions in our intake and follow-up analyses. Similarly, we controlled for relationship satisfaction and again, the results yielded identical conclusions in our intake and follow-up analyses. Please see the online supplementary materials for the tables including these covariates in the models.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## References

- Ackerman, R. A., Ledermann, T., & Kenny, D. A. (2015). *Power considerations for the actor-partner interdependence model* [PowerPoint slides]. <https://osf.io/6g7mx/>
- Aron, A., & Aron, E. N. (1986). *Love and the expansion of self: Understanding attraction and satisfaction*. Hemisphere.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of the other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63(4), 596–612. <https://doi.org/10.1037/0022-3514.63.4.596>
- Aron, A., Lewandowski, G. W., Mashek, D., & Aron, E. N. (2013). The self-expansion model of motivation and cognition in close relationships. In J. Simpson & L. Campbell (Eds.), *The Oxford handbook of close relationships* (pp. 90–115). Oxford University Press.
- Aron, A., Norman, C. C., Aron, E. N., McKenna, C., & Heyman, R. E. (2000). Couples' shared participation in novel and arousing activities and experienced relationship quality. *Journal of Personality and Social Psychology*, 78(2), 273–284. <https://doi.org/10.1037/0022-3514.78.2.273>
- Borenstein, M., Cooper, H., & Hedges, L. (2009). *Introduction to meta-analysis*. John Wiley & Sons, Ltd.
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. [https://doi.org/10.1207/s15327752jpa4901\\_13](https://doi.org/10.1207/s15327752jpa4901_13)
- Emery, L. F., Hughes, E. K., & Gardner, W. L. (2022). Confusion or clarity? Examining a possible tradeoff between self-expansion and self-concept clarity. *Social Psychological and Personality Science*, . <https://doi.org/10.1177/19485506211067040>

- Emery, L. F., Walsh, C., & Slotter, E. B. (2015). Knowing who you are and adding to it: Reduced self-concept clarity predicts reduced self-expansion. *Social Psychological and Personality Science*, 6(3), 259–266. <https://doi.org/10.1177/1948550614555029>
- Fletcher, G. J., Simpson, J. A., & Thomas, G. (2000). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. *Personality & Social Psychology Bulletin*, 26(3), 340–354. <https://doi.org/10.1177/0146167200265007>
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the big-five personality domains. *Journal of Research in Personality*, 37(6), 504–528. <https://doi.org/10.1016/S0092-65660300046-1>
- Higgins, E. T. (2005). Value from regulatory fit. *Current Directions in Psychological Science*, 14(4), 209–213. <https://doi.org/10.1111/j.0963-7214.2005.00366.x>
- Hughes, E. K., Slotter, E. B., & Lewandowski, G. W., Jr. (2020). Expanding who I am: Validating the self-expansion preference scale. *Journal of Personality Assessment*, 102(6), 792–803. <https://doi.org/10.1080/00223891.2019.1641109>
- James, W. (1890). *The principles of psychology*. Harvard University Press.
- Karney, B. R., Kreitz, M. A., & Sweeney, K. E. (2004). Obstacles to ethnic diversity in marital research: On the failure of good intentions. *Journal of Social and Personal Relationships*, 21(4), 509–525. <https://doi.org/10.1177/0265407504044845>
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic Data Analysis*. Guilford.
- Le, B., Dove, N. L., Agnew, C. G., Korn, M. S., & Mutso, A. A. (2010). Predicting nonmarital romantic relationship dissolution: A meta-analytic synthesis. *Personal Relationships*, 17(3), 377–390. <https://doi.org/10.1111/j.1475-6811.2010.01285>
- Lewandowski, G. W., Jr., & Ackerman, R. A. (2006). Something's missing: Need fulfillment and self-expansion as predictors of susceptibility to infidelity. *Journal of Social Psychology*, 146(4), 389–403. <https://doi.org/10.3200/SOCP.146.4.389-403>
- Lewandowski, G. W., Jr., & Bizzoco, N. M. (2007). Addition through subtraction: Growth following the dissolution of a low quality relationship. *The Journal of Positive Psychology*, 2(1), 40–54. <https://doi.org/10.1080/17439760601069234>
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35(2), 63–78. <https://doi.org/10.1037/0022-3514.35.2.63>
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology*, 38(1), 299–337. <https://doi.org/10.1146/annurev.ps.38.020187.001503>
- Mattingly, B. A., & Lewandowski, G. W. (2013). An expanded self is a more capable self: The association between self-concept size and self-efficacy. *Self and Identity*, 12(6), 621–634. <https://doi.org/10.1080/15298868.2012.718863>
- Mattingly, B. A., Lewandowski, G. W., & McIntyre, K. P. (2014). “You make me a better/worse person”: A two-dimensional model of relationship self-change. *Personal Relationships*, 21(1), 176–190. <https://doi.org/10.1111/per.12025>
- McConnell, A. R. (2011). The multiple self-aspects framework: Self-concept representation and its implications. *Personality and Social Psychology Review*, 15(1), 3–27. <https://doi.org/10.1177/108868310371101>
- McIntyre, K. P., Mattingly, B. A., Lewandowski, G. W., Jr., & Simpson, A. (2014). Workplace self-expansion: Implications for job satisfaction, commitment, self-concept clarity, and self-esteem among the employed and unemployed. *Basic and Applied Social Psychology*, 36(1), 59–69. <https://doi.org/10.1080/01973533.2013.856788>
- Muise, A., Harasymchuk, C., Day, L. C., Bacev-Giles, C., Gere, J., & Impett, E. A. (2019). Broadening your horizons: Self-expanding activities promote desire and satisfaction in established romantic relationships. *Journal of Personality and Social Psychology*, 116(2), 237. <https://doi.org/10.1037/pspi0000148>
- Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology*, 45(1), 101–117. <https://doi.org/10.1037/0022-3514.45.1.101>

- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships, 5* (4), 357–391. <https://doi.org/10.1111/j.1475-6811.1998.tb00177.x>
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*(4), 719–727. <https://doi.org/10.1037/0022-3514.69.4.719>
- Simpson, J. A., Oriña, M. M., & Ickes, W. (2003). When accuracy hurts, and when it helps: A test of the empathic accuracy model in marital interactions. *Journal of Personality and Social Psychology, 85* (5), 881–893. <https://doi.org/10.1037/0022-3514.85.5.881>
- Slotter, E. B., & Finkel, E. J. (2009). The strange case of sustained dedication to an unfulfilling relationship: Predicting commitment and breakup from attachment anxiety and need fulfillment within relationships. *Personality & Social Psychology Bulletin, 35*(1), 85–100. <https://doi.org/10.1177/0146167208325244>
- Slotter, E. B., & Gardner, W. L. (2009). Where do you end and I begin? Evidence for anticipatory, motivated self-other integration between relationship partners. *Journal of Personality and Social Psychology, 96*(6), 1137–1151. <https://doi.org/10.1037/a0013882>
- Tashiro, T., & Frazier, P. (2003). “I’ll never be in a relationship like that again:” Personal growth following romantic relationship breakups. *Personal Relationships, 10*(1), 113–128. <https://doi.org/10.1111/1475-6811.00039>
- Tomlinson, J. M., Hughes, E. K., Lewandowski, G. W., Jr., Aron, A., & Geyer, R. (2019). Do shared self-expanding activities have to be physically arousing? *Journal of Personal and Social Relationships, 36*(9), 2781–2801. <https://doi.org/10.1177/0265407518801095>
- Tsapelas, I., Aron, A., & Orbach, T. (2009). Marital boredom now predicts less satisfaction 9 years later. *Psychological Science, 20*(5), 543–545. <https://doi.org/10.1111/j.1467-9280.2009.02332.x>