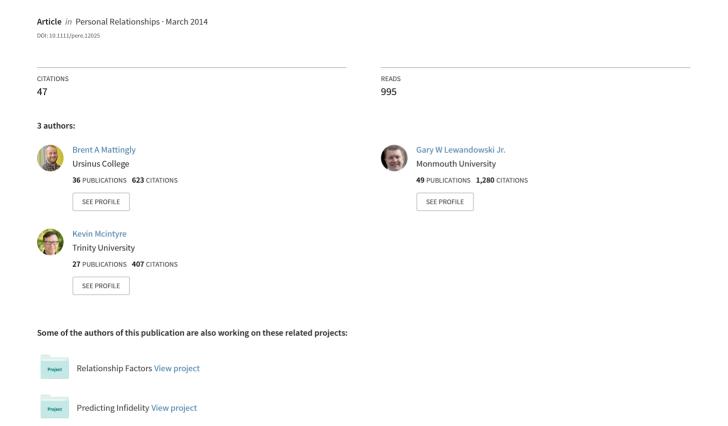
"You make me a better/worse person": A two-dimensional model of relationship self-change



Personal Relationships, **21** (2014), 176–190. Printed in the United States of America. Copyright © 2014 IARR; DOI: 10.1111/pere.12025

"You make me a better/worse person": A two-dimensional model of relationship self-change

BRENT A. MATTINGLY, a GARY W. LEWANDOWSKI Jr., b and KEVIN P. MCINTYRE c

^aUrsinus College; ^bMonmouth University; and ^cTrinity University

Abstract

For better or worse, relationships have the potential to affect individuals' self-concepts; however, currently no integrative model exists to explain the variety of these self-concept changes. We propose that self-concept changes occur along two independent dimensions: direction (increase vs. decrease in content) and valence (positivity vs. negativity of content). These two dimensions combine to create four processes of relationship-induced self-concept change: self-expansion (increasing positive content), self-contraction (decreasing positive content), self-pruning (decreasing negative content), and self-adulteration (increasing negative content). Using community and university samples, we developed a measure of self-concept change (Study 1) and examined how the four self-processes were associated with love (Study 1), relationship quality (Studies 2 and 3), and infidelity (Study 3). The self-concept improvement processes (i.e., self-expansion and self-pruning) were associated with greater love and relationship quality, whereas in Study 3 self-concept degradation processes (i.e., self-contraction and self-adulteration) predicted infidelity.

Individuals in satisfying romantic relationships often report experiencing positive changes to their self-concepts as a result of their relationship partners. For example, it is common to hear someone speak glowingly of their romantic partner by stating, "He makes me a better person" or "I like the person I am when I'm around her." However, not all relationship partners positively affect individuals' self-concepts. In fact, some romantic partners

may *negatively* affect individuals' self-views, leading to statements such as, "I don't like who I have become in this relationship" or "I'm not the same person I used to be." Why do some relationships cause people to change their self-concepts in ways they deem beneficial, whereas other relationship-induced self-concept changes are unwanted or undesired? We propose four ways of how romantic relationships can affect an individual's sense of self, and we empirically test how these self-concept change processes are associated with relationship functioning.

Relationships are closely linked to individuals' self-concepts. Although, historically, work on the self-concept emphasized individual attributes and traits as independent from others, recent work reveals that individuals' self-concepts are not only defined partly in terms of close relationships (e.g., Cross, Bacon, & Morris, 2000; Cross, Mor-

ris, & Gore, 2002), but also that relationships

Brent A. Mattingly, Department of Psychology, Ursinus College, Collegeville, PA; Gary W. Lewandowski Jr., Department of Psychology, Monmouth University, West Long Branch, NJ; Kevin P. McIntyre, Department of Psychology, Trinity University, San Antonio, TX.

This research was supported with funding from a Monmouth University Grant-in-Aid of Creativity. We would like to thank the following individuals for their help on this project: Ashlea Baron, Stephanie Kocsik, Cori Palermo, Chelcie Piasio, and Julianne Nestor.

Correspondence should be addressed to Brent A. Mattingly, Department of Psychology, Ursinus College, Collegeville, PA 19426, e-mail: bmattingly@ursinus.edu.

can alter individuals' self-concepts in a variety of ways. Individuals can develop a sense of cognitive interdependence in which the self becomes intertwined with a romantic partner such that individuals begin thinking in terms of the collective unit rather than individualistically (Agnew & Etcheverry, 2006). Similarly, as romantically involved individuals become emotionally closer, they perceive their selves as overlapping to a greater degree (Aron, Aron, & Smollan, 1992). Furthermore, romantic relationships affect the size, diversity, content, and clarity of individuals' self-concepts (Aron, Paris, & Aron, 1995; Lewandowski, Aron, Bassis, & Kunak, 2006; Slotter & Gardner, 2009, 2012; Slotter, Gardner, & Finkel, 2010).

Two-dimensional model of self-change

We propose that individuals' self-concepts can change as a result of a romantic relationship along two dimensions: direction and valence (see Figure 1). Direction of selfconcept change, represented by the horizontal line in Figure 1, refers to whether the size or diversity of an individual's self-concept increases or decreases. For example, a person who acquires an appreciation for the ballet or becomes a better painter from being with a romantic partner would experience an increase or augmentation of his or her self-concept. Conversely, a person who sacrifices skiing because a romantic partner dislikes the activity or becomes less outgoing as a result of his or her partner being more introverted would experience a decrease in self-concept content. Valence of self-concept change refers to the subjective positivity or negativity of the self-concept content, represented by the vertical line in Figure 1. For example, at the request of a romantic partner, an individual may modify his or her identity as a workaholic by limiting the amount of time that is spent working from home. For some individuals, this could be subjectively positive in that the extra work was stressful and unpleasant, whereas other individuals may find this subjectively negative because it violates their self-image as a "hard worker." Direction and valence of self-concept change

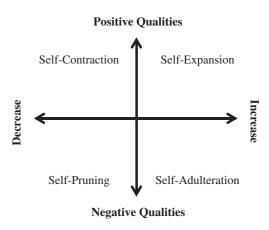


Figure 1. Two-dimensional model of self-concept change.

are independent dimensions, and as a result, they combine to create four ways in which individuals can affect their romantic partners' sense of self: self-expansion (increase positive aspects), self-contraction (decrease positive aspects), self-pruning (decrease negative aspects), and self-adulteration (increase negative aspects). Next, we explain each of these types of self-concept change in more detail and how they should be associated with relational outcomes.

Self-expansion

Self-expansion is self-change where there is an increase in positively valenced content. According to Aron and Aron's self-expansion model (e.g., Aron & Aron, 1986, 1997; Aron, Aron, & Norman, 2001; Aron, Lewandowski, Mashek, & Aron, 2013), self-expansion occurs when individuals add desirable aspects to their self-concepts (e.g., perspectives, identities), augment existing self-aspects by improving capabilities or developing a more complex understanding of themselves (Gordon & Luo, 2011), or rediscover previously neglected aspects of their self-concept (Lewandowski & Bizzoco, 2007; Nardone, 2012). Experiencing self-expansion, in some cases, literally increases the size and diversity of the self-concept, measured either by individuals' responses to the openended question, "Who are you today" (Aron et al., 1995) or by identifying characteristics

potentially descriptive of the self (Mattingly & Lewandowski, in press). Additionally, research on the Michelangelo phenomenon shows how relationship partners may even encourage and affirm the acquisition and augmentation of positive self-content, allowing individuals to realize aspects of their ideal self (Drigotas, Rusbult, Wieselquist, & Whitton, 1999; Kumashiro, Rusbult, Wolf, & Estrada, 2006; Rusbult, Kumashiro, Stocker, & Wolf, 2005). Moreover, individuals motivated to grow and obtain positive outcomes are especially sensitive to opportunities for self-expansion (Mattingly, McIntyre, & Lewandowski, 2012), and self-expansion is an affectively positive experience (Aron et al., 2001), suggesting self-expansion is a desired relational process.

Self-expansion primarily occurs in close relationships when individuals begin incorporating a romantic partner into their own sense of self (Aron, Aron, Tudor, & Nelson, 1991; Aron, Mashek, & Aron, 2004; Aron, McLaughlin-Volpe, et al., 2004), the novelty and arousal of which results in a feeling of falling in love (Aron et al., 1995). Such positive self-concept growth is associated with a variety of positive outcomes such as selfefficacy and effort (Aron et al., 1995; Mattingly & Lewandowski, 2013a, 2013b), and when a relationship partner facilitates positive self-concept growth, individuals experience greater relationship quality (e.g., Aron & Aron, 1986) and intense romantic love for their partner (Aron, Norman, Aron, McKenna, & Heyman, 2000), and enact more relationship maintenance behaviors (Ledbetter, Stassen-Ferrara, & Dowd, 2013).

Self-contraction

Self-contraction is self-change where there is a decrease in positively valenced self-concept content. As with self-expansion, this process focuses on positive attributes, but unlike self-expansion, self-contraction involves the *subtraction or diminishment* of positive attributes due to the partner. For example, an individual may begin to neglect valued friendships if a romantic partner is not fond of the individual's friends, or an individual may become

less trustful of others following a partner's infidelity. Following such experiences, individuals may reduce their level of closeness and interdependence with their partner (e.g., Jones, Couch, & Scott, 1997), and thus experience further shrinking of the self-concept. Research shows that self-contraction also occurs when a positive relationship ends (e.g., Lewandowski et al., 2006). Self-contraction in this context results in individuals having impaired self-concepts, in terms of both content and self-concept clarity (Lewandowski et al., 2006; Slotter et al., 2010). If selfcontraction can occur through losing a positive relationship, it seems likely that a similar process can occur within an intact relationship.

As individuals are uncomfortable in relationships when their partners threaten their sense of self (Mashek & Sherman, 2004), the actual loss or diminishment of positive qualities (i.e., self-contraction) will likely lead to lower relationship quality. For example, individuals who perceive a reduced sense of autonomy as a result of being in a relationship with a controlling partner may respond by reducing their frequency of relationshipmaintaining behaviors (Knee, Patrick, Vietor, Nanayakkara, & Neighbors, 2002; LaGuardia & Patrick, 2008). Similarly, individuals who sacrifice self-interests while suppressing their emotional expression experience impaired relationship quality (Impett et al., 2012). Furthermore, individuals who end poor quality relationships experience less self-contraction postdissolution (Lewandowski & Bizzoco, 2007). Taken together, these results suggest that self-contraction in relationships impairs relationship quality.

Self-pruning

Self-pruning is a self-change where there is a decrease in negatively valenced self-concept content. In contrast to self-contraction, which involves the subtraction or diminishment of positive attributes, self-pruning involves the subtraction or diminishment of *negative* attributes, which should positively influence the self-concept. In this respect, self-pruning is analogous to the proverbial "addition by subtraction." For example, an individual's bad

habit (e.g., talking too loudly) may develop into a social allergy for a romantic partner (Cunningham, Shamblen, Barbee, & Ault, 2005). As a result, the romantic partner may help the individual break (or at least weaken) the bad habit, thereby subtracting (or diminishing) the negative attribute from the individual's self. When the partner directly influences and shapes the individual toward his or her ideal self, self-pruning takes the form of the Michelangelo phenomenon (Drigotas, Rusbult, et al., 1999; Kumashiro et al., 2006; Rusbult et al., 2005). As part of the Michelangelo phenomenon, a partner may attempt to sculpt the individual's self-concept toward his or her ideal self by adding or augmenting desired attributes (i.e., self-expansion) or subtracting or diminishing undesirable attributes (i.e., self-pruning) from the self-concept. While the Michelangelo phenomenon requires the purposeful intervention of the romantic partner, it is likely that the subtraction or diminishment of negative attributes can occur without the partner's intention or direct influence. For example, cohabitation may lead an individual to become less lazy because of added responsibilities toward maintaining the home (e.g., cooking, cleaning), even in the absence of a partner's direct request. That is, simply being in the relationship leads to the pruning of negative self-concept content.

Self-pruning should positively correlate with relationship quality because the individual experiencing a decrease in negative selfaspects should perceive self-improvement. Indeed, individuals who perceive their partner as helping them come closer to their ideal self experience a greater sense of personal wellbeing (Drigotas, 2002), as well as greater selfauthenticity (DiDonato & Krueger, 2010). As the self loses negative aspects, the relationship should not only have fewer sources of potential conflict (e.g., in the case of a partner with a social allergy), but also the individual should be a better relationship partner, which should benefit the relationship. Research on the Michelangelo phenomenon supports this notion, indicating that when partners help each other's ideal-self growth, their relationship is more satisfying and stable (e.g., Drigotas, Safstrom, & Gentilia, 1999).

Self-adulteration

Self-adulteration is a self-change where there is an increase in negatively valenced selfconcept content. In contrast to self-pruning, which involves the subtraction or diminishment of negative attributes, self-adulteration involves the addition or augmentation of negative attributes. This, in turn, increases the negativity of the self-concept. That is, selfadulteration occurs when an individual experiences an increase in negative or undesirable content due to the relationship or the purposeful or nonpurposeful influence of the partner. For example, an individual may develop new bad habits or have current bad habits intensified (e.g., smoking, eating unhealthy foods), become more neurotic, or merely acquire negative emotions (Neumann & Strack, 2000) as a result of being with a romantic partner. In support of this concept, individuals are willing to incorporate negative attributes into the self-concept if a desirable potential romantic partner possesses these traits (Slotter & Gardner, 2012). To a more extreme degree, self-adulteration may occur when an individual feels controlled by a partner's substance abuse and starts abusing themselves, or internalizes insults from a verbally abusive partner.

Self-adulteration as a result of being with a romantic partner should be negatively associated with relationship quality because it involves the movement away from an individual's ideal self through the acquisition or intensification of unwanted and undesirable attributes. As a consequence, individuals should become dissatisfied with their romantic relationship. Moreover, this dissatisfaction should lead individuals to be less committed to the relationship (e.g., Le & Agnew, 2003).

Current research

The goal of the current research was to investigate the frequency of the four self-processes in intact relationships within the two-dimensional model of relational self-change (RQ1) and how each process is associated with relationship outcomes. Processes that result in the individual's sense of self becoming more positive—either by

increasing the amount of positive (i.e., selfexpansion) or reducing the amount of negative self-aspects (i.e., self-pruning)—tend to be positively associated with relationship quality (e.g., Aron et al., 2000; Kumashiro et al., 2006; Overall, Fletcher, & Simpson, 2010). As a result, we predicted that selfexpansion and self-pruning would be positively associated with feelings of romantic love (Study 1), relationship satisfaction (Studies 2 and 3), and commitment (Studies 2 and 3; H1). On the other hand, both selfcontraction and self-adulteration are processes that result in the individual's sense of self becoming more negative—either by decreasing the amount of positive or increasing the amount of negative self-aspects. As a result, we predicted that self-contraction and selfadulteration would be negatively associated with feelings of romantic love (Study 1), relationship satisfaction (Studies 2 and 3), and commitment (Studies 2 and 3), and positively associated with infidelity (Study 3; H2), as individuals perceive themselves as becoming worse as a result of being with their romantic partner. We also explored whether the four self-processes uniquely predicted love, satisfaction, and commitment, although no specific predictions were made (RQ2).

Furthermore, and consistent with existing typologies of relational processes (e.g., Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991; Yovetich & Rusbult, 1994), we examined the association of each independent dimension (direction and valence) with relationship quality. Because neither dimension of self-concept change is inherently beneficial (e.g., adding content to the self-concept may or may not be desirable), we did not expect that either dimension would be associated with satisfaction or commitment on its own. We did, however, expect that there would be a positive association between the perceived overall self-concept improvement (i.e., self-concept perceived to improve vs. self-concept perceived to degrade) and satisfaction and commitment (H3).

To facilitate investigation of the proposed model, and test the research questions and hypotheses identified above, we developed a measure of the two-dimensional model of relational self-change. Study 1 reports the development of this measure, as well the results of an investigation of its psychometric properties (i.e., reliability and factor structure). Because individuals in love experience relationship-induced self-concept malleability (Aron et al., 1995), we also examined whether our measure would be associated with the perception of different types of romantic love—in particular, passionate love (i.e., an intense feeling of longing for one's partner) and companionate love (i.e., an affectionate feeling of connectedness with one's partner). Studies 2 and 3 test our key predictions, examining the frequency of each self-change dimension, and the association between perceived self-change and relationship outcomes.

Study 1

Method

Participants

One hundred and ninety-four individuals (95 women, 99 men; $M_{\rm age} = 28.5$, $SD_{\rm age} = 8.9$) participated in the study. We recruited participants who were currently in romantic relationships through Amazon's Mechanical Turk. The average relationship length was 65.4 months (SD = 81.2). Additionally, 29.9% of the sample reported being married, 5.7% were engaged to be married, 56.7% were in exclusive dating relationships, 6.7% were dating casually, and 1.0% reported "other" as their relationship status.

Materials

Two-dimensional model of relational self-change. To measure the two-dimensional model of relational self-change, we created a brief 12-item scale, titled the Relational Self-Change Scale, modeled after the Self-Expansion Questionnaire (SEQ; Lewandowski & Aron, 2002). We developed three face valid items for each self-process, with the stem, "By being with my romantic partner..." preceding each item. The items assessing *expansion* very closely paralleled three SEQ items and were: "I have learned many great new things," "I have added positive qualities to my sense of self," and "I have

Table 1. Study 1 (N = 194) factor loadings, subscale means and standard deviations, and reliabilities

Item	Self- expansion	Self- pruning	Self- adulteration	Self- contraction
I have learned many great new things	.74	06	07	01
I have added positive qualities to my sense of self	.98	.07	.03	08
I have become more competent and capable	.53	-30	02	-03
I have decreased my number of negative attributes	.18	54	02	14
My bad habits have diminished	.19	59	21	.17
I have been able to lose undesirable aspects about myself	07	97	.04	08
I have learned more undesirable things about myself	.08	05	.54	.16
My bad habits have increased	08	.08	.89	06
I have more negative qualities	14	.07	.57	.24
Positive qualities about myself have been diminished	03	.03	.10	.74
I feel like I've become less competent and capable	07	02	.09	.65
My positive attributes have decreased	01	.07	01	.89
% variance explained by factor	48.50	3.80	2.70	14.05
M(SD)	5.60 (1.22)	4.69 (1.39)	2.27 (1.30)	2.25 (1.43)
Reliability	.88	.84	.80	.87

Note. Bolded factor loadings indicate on which factor the item was retained.

become more competent and capable." The items assessing *contraction* were: "Positive qualities about myself have been diminished," "I feel like I've become less competent and capable," and "My positive attributes have decreased." The items assessing *pruning* were: "I have decreased my number of negative attributes," "My bad habits have diminished," and "I have been able to lose undesirable qualities about myself." The items assessing *adulteration* were: "I have learned more undesirable things about myself," "My bad habits have increased," and "I have more negative qualities." Participants rated all items on a 7-point scale ranging from 1 (*not very much*) to 7 (*very much*).

Participants then completed a brief version of the Companionate and Passionate Love Scale (Sprecher & Regan, 1998). Participants completed three items measuring companionate love ($\alpha = .69$) and three items measuring

passionate love ($\alpha = .88$). Items included: "I care about my partner" (companionate love) and "I want my partner… physically, emotionally, mentally" (passionate love). Participants responded to all items on a 6-point scale ranging from 1 (*untrue*) to 6 (*true*).

Results and discussion

We first examined the factor structure of the 12 relational self-change items. To do this, we conducted a factor analysis, using maximum likelihood extraction and oblimin rotation (as recommended by Costello & Osborne, 2005) and extracted four factors. Overall, the four factors accounted for 69.04% of the variance. Each item loaded on its corresponding factor and each subscale demonstrated good reliability ($\alpha s \ge .80$). Table 1 presents factor loadings and reliabilities.

Table 1 also provides means and standard deviations for each of the four types of relational self-change (RQ1). A repeated measures analysis of variance (ANOVA) revealed that the frequencies of the self-processes were significantly different, F(3, 597) = 301.42, p < .001, $\eta^2_p = .61$. All pairwise comparisons were significant, ps < .001, except the difference between contraction and adulteration (p = .80): Expansion was more frequent than pruning, adulteration, and contraction; and pruning was more frequent than adulteration and contraction.

We next examined whether the four types of perceived relational self-change would be associated with passionate and companionate love. We conducted zero-order correlations, which revealed, in support of H1, that expansion and pruning were both significantly positively associated with passionate love (rs = .66 and .53, respectively, ps < .001) and companionate love (rs = .65 and .53, ps < .001). Supporting H2, contraction and adulteration were negatively associated with passionate love (rs = -.38 and -.36, ps < .001) and companionate love (rs = -.45 and -.36, ps < .001).

We also examined the ability of each type of perceived relational self-change to uniquely predict love (RQ2) by conducting two multiple regression analyses. In both regressions, we entered all four self-processes as predictor variables and passionate love (Model 1) and companionate love (Model 2) as the outcome variables. In Model 1 predicting passionate love, overall model F(4,189) = 38.09, p < .001, $R^2 = .42$, only expansion was a significant positive predictor $(\beta = .54, t = 6.56, p = .001)$. Neither pruning $(\beta = .11, t = 1.44, p = .18)$, nor contraction $(\beta = -.06, t = -0.80, p = .42)$, nor adulteration ($\beta = -.02$, t = -0.26, p = .78) uniquely predicted passionate love. In Model 2 predicting companionate love, overall model F(4,189) = 39.34, p < .001, $R^2 = .45$, expansion was a significant positive predictor ($\beta = .52$, t = 6.30, p = .001) and adulteration was a significant negative predictor ($\beta = -.17$, t = -2.13, p = .03). However, neither pruning $(\beta = -.09, t = 1.15, p = .25)$ nor contraction $(\beta = -.03, t = -0.37, p = .71)$ uniquely predicted companionate love.

Study 2

In Study 1, we established the psychometric properties of a new two-dimensional measure of self-change and found evidence in support of the notion that these self-processes are associated with perceptions of romantic love. Next, in Study 2, we use a community sample to test one of our key predictions regarding the association between perceived self-change and positive relationship outcomes (i.e., satisfaction and commitment).

Method

Participants

Seventy-two romantically involved participants completed the study at various public locations (e.g., boardwalk, malls). Ten participants completed the study with their romantic partner present, and were eliminated from the sample. Thus, the final sample consisted of 62 participants (27 women, 33 men, 2 not recorded; $M_{\rm age} = 41.6$, $SD_{\rm age} = 18.7$). The average relationship length was 10.9 years (SD = 9.11). Nearly half of the sample was married (45.2%), with the remaining participants identifying the relationship status as dating exclusively (45.2%), dating casually (1.6%), other (1.6%), or not reported (6.5%).

Materials

Relational Self-Change Scale. Participants completed the 12-item Relational Self-Change Scale developed in Study 1. Each subscale again demonstrated acceptable reliability: $\alpha = .84$ (expansion), $\alpha = .89$ (contraction), $\alpha = .77$ (pruning), and $\alpha = .72$ (adulteration).

Relationship quality. Participants also completed the satisfaction (five items) and commitment (seven items) subscales of the Investment Model Scale (Rusbult, Martz, & Agnew, 1998). Each subscale is rated on a 9-point scale ranging from 0 (do not agree at all) to 8 (agree completely). Example items are: "Our relationship makes me very happy" (satisfaction) and "I am committed to maintaining my relationship with my partner" (commitment). Both subscales demonstrated good

	Expansion	Contraction	Pruning	Adulteration	Satisfaction	Commitment	
	Expansion	Contraction	Truilling	Addition	Satisfaction	Communicin	
Expansion	_						
Contraction	09	_					
Pruning	.64***	.05	_				
Adulteration	.01	.65***	.17	_			
Satisfaction	.60***	31*	.50***	10	_		
Commitment	.52***	30*	.51***	16	.67***	_	
M(SD)	5.37 (1.20)	1.88 (1.42)	4.39 (1.43)	2.40 (1.29)	6.05 (1.82)	6.43 (1.84)	

Table 2. Study 2 correlations between the four types of relational self-change, satisfaction, and commitment

reliability: $\alpha = .94$ (satisfaction) and $\alpha = .90$ (commitment).

Results and discussion

Table 2 provides means and standard deviations for each of the four self-processes (RQ1). A repeated measures ANOVA revealed that the frequencies of the self-processes were significantly different, F(3, 183) = 122.95, p < .001, $\eta^2_p = .67$. Largely replicating Study 1, all pairwise comparisons were significant, $ps \leq .001$: Expansion was more frequent than pruning, adulteration, and contraction; and pruning was more frequent than adulteration and contraction. Unlike Study 1, adulteration was more frequent than contraction.

To assess H1 and H2, we conducted zeroorder correlations (see Table 2). H1 was fully supported: Expansion and pruning were both significantly positively associated with satisfaction and commitment. H2 was partially supported: Contraction was negatively associated with satisfaction and commitment (supporting the hypothesis); however, adulteration was not associated with either satisfaction or commitment (failing to support the hypothesis).

We next examined the ability of each type of perceived relational self-change to uniquely predict relationship quality (RQ2) by conducting two multiple regression analyses. In both regressions, we entered all four self-processes as predictor variables and satisfaction (Model 1) and commitment (Model 2) as the outcome

variables. In Model 1 predicting satisfaction (overall model $R^2 = .42$, p < .001), expansion was a significant positive predictor $(\beta = .43, t = 3.34, p = .001)$, pruning was a marginally significant positive predictor $(\beta = .22, t = 1.72, p = .09)$, contraction was a significant negative predictor ($\beta = -.32$, t = -2.46, p = .02), and adulteration did not uniquely predict satisfaction ($\beta = .07$, t = 0.51, p = .61). In Model 2 predicting commitment (overall model $R^2 = .37$, p < .001), expansion $(\beta = .27, t = 2.01, p = .05)$ and pruning $(\beta = .36, t = 2.65, p = .01)$ were both significant positive predictors, contraction $(\beta = -.26, t = -1.94, p = .06)$ was a marginally significant negative predictor, and adulteration ($\beta = -.06$, t = -0.48, p = .64) did not uniquely predict of commitment.

Finally, we examined whether the independent dimensions and overall self-concept change improvement were associated with satisfaction and commitment. Based on previous research that creates dimensional scores from typology responses (e.g., Rusbult et al., 1991; Yotevich & Rusbult, 1994), we formed direction and valence scores. We computed the direction score by subtracting the scores for decreased self-concept change from the sum of the scores for increased self-concept change, such that higher scores indicate increased perceived self-concept change. That is:

$$Direction = (Expansion + Adulteration) - (Contraction + Pruning).$$

^{*}*p* < .05. ****p* < .001.

We computed the valence score by subtracting the scores for negative self-concept change from the sum of the scores for positive self-concept change, such that higher scores indicate more positive perceived self-concept change. That is:

 $\begin{aligned} \text{Valence} &= (\text{Expansion} + \text{Contraction}) \\ &- (\text{Adulteration} + \text{Pruning}) \,. \end{aligned}$

We then computed a measure of overall self-concept change improvement by subtracting the scores for the processes that diminish the self-concept from the sum of the scores for the processes that improve the self-concept, such that higher scores indicate that the overall perceived self-concept has improved. That is:

Overall Improvement =

(Expansion + Pruning)

- (Contraction + Adulteration).

We chose to create the overall improvement score rather than examine the interaction between valence and direction for two primary reasons. First, our model proposes that self-concept improvement or decline is ultimately the mechanism driving positive or negative relationship outcomes. As a result, we believe it is intuitive and parsimonious to develop an overall score of self-concept improvement. Second, it is common to create composite scores when the measure of a twodimensional model contains items assessing each quadrant (e.g., research on accommodation; Rusbult et al., 1991; Yotevich & Rusbult, 1994) rather than each underlying dimension (as is the case with research on attachment anxiety and avoidance; e.g., Brennan, Clark, & Shaver, 1998).

To assess H3 (i.e., that only the overall self-concept change improvement would be associated with satisfaction and commitment), we correlated these composite scores with satisfaction and commitment. Neither direction nor valence of self-concept change was associated with satisfaction and commitment: direction (r = .16, p = .17, and)

r=.08, p=.51, respectively) and valence (r=-.19, p=.12, and r=-.18, p=.14, respectively). However, as predicted, overall self-concept change improvement was positively associated with both satisfaction and commitment (r=.62, p<.001, and r=.54, p<.001, respectively). Thus, perceived improvements in the self-concept are associated with greater relationship quality.

Study 3

In Study 2, we established the association between self-change processes and relationship quality. However, relationships are also prone to negative outcomes. For instance, between 24% and 34% of married couples and 68% and 75% of college students report engaging in some form of infidelity (Tafoya & Spitzberg, 2007; Wiederman & Hurd, 1999), and infidelity is associated with lower satisfaction and commitment in the primary relationship (Mattingly et al., 2011; Treas & Giesen, 2000). Additionally, relationships that lack self-expansion are associated with greater susceptibility to infidelity (Lewandowski & Ackerman, 2006), suggesting that the selfchange provided by relationships may make individuals more or less prone to negative relational outcomes. Thus, in Study 3, we replicate and extend the findings of Study 2 by testing how self-change processes are associated with a negative relationship outcome such as infidelity.

Method

Participants

Eighty-six romantically involved undergraduates (66 women, 20 men; $M_{\rm age} = 19.4$, $SD_{\rm age} = 1.17$) participated in the study. The average relationship length was 19.8 months (SD = 16.8). The majority of participants were in exclusive dating relationships (89.5%), with the remaining participants identifying the relationship status as dating casually (2.3%), engaged to be married (3.5%), or other (4.6%).

	SE	SC	SP	SA	SAT	COM	EI	SI
Expansion	_							
Contraction	18^{\dagger}	_						
Pruning	.43***	.00	_					
Adulteration	08	.64***	12	_				
Satisfaction	.47***	31**	.41***	28**	_			
Commitment	.64***	17	.40***	09	.72***	_		
Emotional infidelity	16	.27*	04	.21†	32**	28**	_	
Sexual infidelity	27*	.24*	03	.29**	30**	26*	.47***	_
M (SD)	5.45 (1.15)	1.81 (0.97)	4.14 (1.22)	2.17 (1.07)	6.05 (1.65)	6.46 (1.68)	2.52 (2.34)	1.98 (2.51

Table 3. Study 3 correlations between the four types of relational self-change, satisfaction, commitment, emotional infidelity, and sexual infidelity

Note. SE = self-expansion; SC = self-contraction; SP = self-pruning; SA = self-adulteration; SAT = satisfaction; COM = commitment; EI = emotional infidelity; SI = sexual infidelity.

Materials

Relational self-change. Participants first completed the 12-item Relational Self-Change Scale developed in Study 1. Each scale again demonstrated good reliability: $\alpha = .84$ (expansion), $\alpha = .84$ (contraction), $\alpha = .79$ (pruning), and $\alpha = .72$ (adulteration).

Relationship quality. As in Study 2, we used the Investment Model Scale (Rusbult et al., 1998) to assess satisfaction and commitment. Both subscales demonstrated good reliability: $\alpha = .94$ (satisfaction) and $\alpha = .91$ (commitment).

Infidelity. Participants completed an 11-item measure assessing emotional and sexual infidelity since the beginning of their romantic relationship (Drigotas, Safstrom, et al., 1999). The two types of infidelity were assessed with one item each: "How emotionally intimate were you with this person?" (emotional infidelity) and "How physically intimate were you with this person?" (sexual infidelity). Participants rated each item on a 9-point scale ranging from 0 (not at all emotionally/physically intimate) to 8 (extremely emotionally/physically intimate).

Results and discussion

Table 3 provides means and standard deviations for each of the four self-processes (RQ1). A repeated measures ANOVA revealed that the frequencies of the self-processes were significantly different, F(3, 255) = 230.81, p < .001, $\eta^2_p = .731$. Replicating Study 2, all pairwise comparisons were significant, ps < .001: Expansion was more frequent than pruning, adulteration, and contraction; pruning was more frequent than adulteration and contraction; and adulteration was more frequent than contraction.

Relationship quality

To assess H1 and H2, we conducted zeroorder correlations (see Table 3). H1 was fully supported: Expansion and pruning were significantly positively associated with satisfaction and commitment. H2 was partially supported: Contraction and adulteration were negatively associated with satisfaction; however, neither contraction nor adulteration was associated with commitment.

As in Study 2, we assessed RQ2 by conducting two multiple regression analyses in which we entered all four self-processes as predictor variables and satisfaction (Model 1) and commitment (Model 2) as the outcome variables. In Model 1 (overall model $R^2 = .31$, p < .001), expansion ($\beta = .32$, t = 3.32, p = .002) and pruning ($\beta = .26$, t = 2.59, p = .01) were both significant predictors of relationship satisfaction, whereas contraction ($\beta = -.17$, t = -1.41, p = .16) and adulteration ($\beta = -.12$, t = -0.96, p = .34) were

 $[\]dagger p < .10. \ ^*p < .05. \ ^{**}p < .01. \ ^{***}p < .001.$

not uniquely predictive of satisfaction. In Model 2 testing commitment (overall model R^2 = .40, p < .001), expansion (β = .56, t = 5.84, p < .001) was a significant predictor and pruning (β = .16, t = 1.71, p = .09) was a marginally significant predictor, whereas contraction (β = -.09, t = -0.78, p = .44) and adulteration (β = .03, t = 0.31, p = .76) were not uniquely predictive of commitment.

Finally, we examined the correlation of the independent dimensions and overall self-concept change improvement with satisfaction and commitment (H3). Replicating Study 2, neither direction nor valence of self-concept change was associated with satisfaction and commitment: direction (r = .04, p = .75 and r = .14, p = .22, respectively) and valence (r = .02, p = .87 and r = .19, p = .08, respectively). However, as predicted, overall self-concept change improvement was positively associated with both satisfaction and commitment (r = .57, p < .001 and r = .51, p < .001, respectively).

Infidelity

To examine whether the four self-processes would be associated with infidelity, we conducted zero-order correlations (see Table 3). Expansion was negatively associated with tendencies to engage in sexual infidelity, and both contraction and adulteration were positively associated with sexual and emotional infidelity. Pruning was not significantly associated with either type of infidelity.

Next, we assessed whether the dimensions or overall self-concept change improvement were correlated with emotional and sexual infidelity. Emotional infidelity was unrelated to both the direction (r=-.07, p=.53) and valence (r=-.11, p=.33) dimensions, but was negatively associated with the overall improvement of the self-concept (r=-.25, p=.02). Sexual infidelity was unrelated to the valence dimension (r=-.12, p=.28), but was negatively associated with both the direction dimension (r=-.25, p=.02) and the overall improvement of the self-concept (r=-.31, p=.004).

These results indicate that the processes associated with perceived self-concept improvement (i.e., expansion and pruning) are positively and uniquely associated with relationship quality, whereas the processes associated with perceived self-concept degradation (i.e., contraction and adulteration) are inconsistently associated with relationship quality. With very few exceptions, the results of Study 3 fully replicate Study 2 while using a university (vs. community) sample. Study 3 also extended the findings of Study 2 by examining how the self-processes were associated with infidelity. In particular, the processes associated with perceived self-concept degradation were associated with greater sexual and emotional infidelity, whereas improved perceived self-concept change was generally not related to infidelity (the only exception was expansion's association with sexual infidelity). This indicates that although the processes associated with perceived self-concept degradation are less frequent, when they occur they may lead to negative relational outcomes.

General Discussion

Across three studies, we developed an integrative model of relationship-induced self-concept change that extends theories empirical vious and findings (e.g., self-expansion model, Michelangelo phenomenon). Our model identifies two dimensions by which the self-concept can change (i.e., direction and valence) and that combine to create four distinct processes: self-expansion, self-contraction, self-pruning, and self-adulteration. We also examined the relative frequency of each process and provided empirical evidence that these relationship-initiated self-concept changes are associated with relationship functioning. Specifically, processes that improve individuals' self-concepts (i.e., self-expansion and self-pruning) are associated with greater love, satisfaction, and commitment, whereas processes that degrade individuals' self-concepts (i.e., self-contraction and self-adulteration) are associated with decreased satisfaction and commitment, as well as increased infidelity. Although these findings are generally consistent with self-expansion research (Aron et al., 2013), the present integrative model extends this work by accounting for the additional possibilities of adding negative self-aspects, as well as subtracting positive or negative aspects of the self-concept.

Importantly, the current results also suggest that it is important to consider all four types of relational self-concept change, rather than just accounting for broader selfimprovement and self-degradation processes. In particular, our regression results identified several instances where only one of the corresponding self-change processes was uniquely associated with a relational outcome. For example, in Study 1, self-expansion was the only self-improvement variable to predict passionate and companionate love, whereas self-adulteration was the only self-degrading variable to (negatively) predict companionate love. We believe such results highlight the ability of our two-dimensional model to detect subtle nuances in relationship functioning that might otherwise be missed using a simpler model.

As we examined intact relationships, it is not surprising that we observed higher rates of self-expansion and self-pruning than selfcontraction and self-adulteration. Due to our model's focus on self-change from relationships, we have only examined intact relationships in this article where self-adulteration and self-contraction may always be less likely. Given that both self-contraction and selfadulteration are undesirable processes, relationships with greater rates of these processes are more likely to dissolve. Conversely, relationships with self-expansion and self-pruning would be more rewarding; thus, individuals should want to maintain such relationships, and our data from both studies support this

One could additionally argue that self-expansion and self-pruning are particularly important during the early stages of relationship development since opportunities for self-concept improvement are particularly attractive (Mattingly et al., 2012). In this respect, individuals would avoid entering relationships that lack sufficient self-expansion. Once a relationship is established, however, self-contraction and self-adulteration might become more common, particularly if self-expansion slows and individuals learn

about or pay more attention to negative aspects of the relationship. Although relationship duration was virtually unrelated to the frequency of self-processes in both the university and community samples, future research should more directly examine the possibility that each of the self-processes changes in frequency across the course of a relationship.

Interestingly, although we might expect that the processes associated with self-concept improvement would negatively correlate with the processes associated with self-concept degradation, this was not the case. Reported levels of self-expansion and self-pruning were largely unrelated to self-contraction and selfadulteration (rs ranged from -.09 to .17 in Study 2 and from -.18 to .00 in Study 3, all ps > .05). Rather, because self-contraction and self-adulteration are considerably less frequent than self-expansion and self-pruning, it is possible that more frequently occurring processes (i.e., self-expansion and self-pruning) are more strongly associated with relationship quality, and Studies 2 and 3 both support this notion.

Importantly, although self-contraction appears to be a relatively rare process for intact relationships, it is potentially quite potent when it does occur. Self-contraction is negatively associated with satisfaction (Studies 2 and 3) and commitment (Study 3), and positively associated with infidelity (Study 3). This indicates that relationships that require individuals to sacrifice or lose desired aspects of the self-concept are aversive, and individuals are likely motivated to dissolve such relationships, as evidenced by their decreased commitment. In a broad sense, self-contraction may make individuals' aversion to loss more salient (e.g., Tversky & Kahneman, 1991).

Our results also indicate that self-adulteration is an infrequent process in intact relationships and is largely unrelated to relationship quality. One possibility for the lack of association with satisfaction and commitment is that when self-adulteration occurs, individuals feel a need to justify their involvement in such relationships. Individuals who are ostensibly in a valued relationship

should experience cognitive dissonance when considering the possibility that the relationship is adding negative qualities to their self-concept (e.g., Festinger, 1957). To resolve this dissonance, individuals may modify their cognitions to reduce the perceived negativity of the new self-concept content. For example, an individual who becomes more irresponsible may interpret his or her actions as being "free-spirited." However, extreme forms of self-adulteration (e.g., codependency) are likely more difficult to justify. In these more rare cases, it is possible that there is a much stronger association with relationship quality.

We should also point out that due to the correlational nature of our data, there is the potential for reverse causality. That is, it could also be the case that high-quality relationships lead individuals to focus more on positive self-change. Future research should explore these phenomena longitudinally to help determine the direction of effect.

A noteworthy strength of the current model is that it more easily integrates a wide range of relational processes than existing models. For example, the self-expansion model focuses solely on self-concept improvement through the addition of positive content (Aron et al., 2013). This view is limited because two individuals may view the same self-concept change through different lenses. For example, one individual may feel that his or her romantic partner has made him or her more responsible (i.e., addition of positive content), whereas another individual may feel that his or her partner has made him or her less irresponsible (i.e., subtraction of negative content). According to the self-expansion model, the first individual would be classified as having self-expanded but the second individual would not, despite the fact that the second individual's improved self-concept should also produce benefits for the self. Additionally, two individuals may have both become more responsible, yet one views this as a positive change (e.g., the individual feels more mature) whereas another views this as an undesired change (e.g., the individual feels greater stress due to the added responsibilities). Again, the self-expansion model would classify the first individual as having self-expanded while being unable to account for the second individual's

self-concept change. By allowing individuals to express both the direction and valence of self-concept change, the current model is better able to assess the nuances inherent in partners' subjective relationship experience.

The two-dimensional model of selfconcept change also provides a theoretical framework for examining relational processes that, to this point, have been virtually unexplored. Specifically, the current model identifies two processes that result in a degraded self-concept: self-contraction and self-adulteration. Although these processes may be less common than those that lead to self-concept improvement (i.e., self-expansion and self-pruning), there are likely circumstances in which these processes are prevalent (e.g., dysfunctional, high-conflict relationships). Identifying when these maladaptive self-processes occur is an important first step in understanding how their negative effects (e.g., decreased relationship quality, increased susceptibility to infidelity) can be mitigated.

Conclusion

Individuals change as a result of being in romantic relationships. Some individuals' self-concepts improve whereas others' selfconcepts degrade. The impacts of these self-changes are contingent upon both the direction and valence of the self-concept change, and the nature of this change is associated with relationship quality. Ultimately, individuals are more satisfied with and committed to their relationships when their self-concept has improved (either by the addition of positive content or the subtraction of negative content), whereas others are dissatisfied and less committed when their self-concept has degraded (either by the addition of negative content or the subtraction of positive content).

References

Agnew, C. R., & Etcheverry, P. E. (2006). Cognitive interdependence: Considering self-in-relationship. In K. D. Vohs & E. J. Finkel (Eds.), Self and relationships: Connecting intrapersonal and interpersonal processes (pp. 274–293). New York, NY: Guilford Press.

- Aron, A., & Aron, E. (1986). Love and the expansion of the self: Understanding attraction and satisfaction. New York, NY: Hemisphere.
- Aron, A., & Aron, E. N. (1997). Self-expansion motivation and including other in the self. In S. Duck (Ed.), Handbook of personal relationships: Theory, research and interventions (2nd ed., pp. 251–270). London, England: Wiley.
- Aron, A., Aron, E. N., & Norman, C. (2001). The self expansion model of motivation and cognition in close relationships and beyond. In M. Clark & G. Fletcher (Eds.), Blackwell handbook of social psychology: Vol. 2: Interpersonal processes (pp. 478–501). Oxford, England: Blackwell.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 596–612.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991).
 Close relationships as including other in the self.
 Journal of Personality and Social Psychology, 60, 241–253.
- Aron, A., Lewandowski, G. W., Jr., Mashek, D., & Aron, E. N. (2013). The self-expansion model of motivation and cognition in close relationships. In J. A. Simpson & L. Campbell (Eds.), *The Oxford handbook of close* relationships (pp. 90–105). New York, NY: Oxford University Press.
- Aron, A., Mashek, D., & Aron, E. N. (2004a). Closeness as including other in the self. In D. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 27–41). Mahwah, NJ: Erlbaum.
- Aron, A., McLaughlin-Volpe, T., Mashek, D., Lewandowski, G., Wright, S. C., & Aron, E. N. (2004b). Including others in the self. European Review of Social Psychology, 15, 101–132.
- 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, 273–284.
- Aron, A., Paris, M., & Aron, E. N. (1995). Falling in love: Prospective studies of self-concept change. *Journal of Personality and Social Psychology*, 69, 1102–1112.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measures of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), Attachment theory and close relationships (pp. 46–76). New York, NY: Guilford Press.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research, & Evaluation*, 10, 1–9.
- Cross, S. E., Bacon, P. L., & Morris, M. L. (2000). The relational-interdependent self-construal and relationships. *Journal of Personality and Social Psychology*, 78, 791–808.
- Cross, S. E., Morris, M. L., & Gore, J. S. (2002). Thinking about oneself and others: The relational-interdependent self-construal and social cognition.

- Journal of Personality and Social Psychology, 82, 399-418.
- Cunningham, M. R., Shamblen, S. R., Barbee, A. P., & Ault, L. K. (2005). Social allergies in romantic relationships: Behavioral repetition, emotional sensitization, and dissatisfaction in dating couples. *Personal Relationships*, 12, 273–295.
- DiDonato, T. E., & Krueger, J. I. (2010). Interpersonal affirmation and self-authenticity: A test of Roger's self-growth hypothesis. Self & Identity, 9, 322–336.
- Drigotas, S. M. (2002). The Michelangelo phenomenon and personal well-being. *Journal of Personality*, 70, 59–77.
- Drigotas, S. M., Rusbult, C. E., Wieselquist, J., & Whitton, S. W. (1999). Close partner as sculptor of the ideal self: Behavioral affirmation and the Michelangelo phenomenon. *Journal of Personality and Social Psychology*, 77, 293–323.
- Drigotas, S. M., Safstrom, C. A., & Gentilia, T. (1999).
 An investment model prediction of dating infidelity.
 Journal of Personality and Social Psychology, 77, 509–524.
- Festinger, L. (1957). A theory of cognitive dissonance. Stanford, CA: Stanford University Press.
- Fletcher, G. J. O., Simpson, J. A., & Thomas, G. (2000). The measure of Perceive Relationship Quality Components: A confirmatory factor analytic approach. *Personality and Social Psychology Bulletin*, 26, 340–354.
- Gordon, C. L., & Luo, S. (2011). The Personal Expansion Questionnaire: Measuring one's tendency to expand through novelty and augmentation. *Personality and Individual Differences*, 51, 89–94.
- Impett, E. A., Kogan, A., English, T., John, O., Oveis, C., Gordon, A. M., & Keltner, D. (2012). Suppression sours sacrifice: Emotional and relational costs of suppressing emotions in romantic relationships. *Person*ality and Social Psychology Bulletin, 38, 707–720.
- Jones, W. H., Couch, L. L., & Scott, S. (1997). Trust and betrayal: The psychology of trust violations. In R. Hogan, J. Johnson, & S. R. Briggs (Eds.), *Handbook* of personality psychology (pp. 466–482). New York, NY: Academic Press.
- Knee, C. R., Patrick, H., Vietor, N. A., Nanayakkara, A., & Neighbors, C. (2002). Self-determination as growth motivation in romantic relationships. *Personality and Social Psychology Bulletin*, 28, 609–619.
- Kumashiro, M., Rusbult, C. E., Wolf, S. T., & Estrada, M. (2006). The Michelangelo phenomenon: Partner affirmation and self-movement toward one's ideals. In K. D. Vohs & E. J. Finkel (Eds.), Self and relationships: Connecting intrapersonal and interpersonal processes (pp. 317–341). New York, NY: Guilford Press.
- LaGuardia, J. G., & Patrick, H. (2008). Selfdetermination theory as a fundamental theory of close relationships. *Canadian Psychology*, 49, 201–209.
- Le, B., & Agnew, C. R. (2003). Commitment and its theorized determinants: A meta-analysis of the Investment Model. *Personal Relationships*, 10, 37–57.

- Ledbetter, A. M., Stassen-Ferrara, H. M., & Dowd, M. M. (2013). Comparing equity and self-expansion theory approaches to relational maintenance. *Personal Relationships*, 20, 38–51.
- 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, 389–403.
- Lewandowski, G. W., Jr., & Aron, A. (2002, February). The Self-Expansion Scale: Construction and validation. Paper presented at the annual meeting of the Society of Personality and Social Psychology, Savannah. GA.
- Lewandowski, G. W., Jr., Aron, A., Bassis, S., & Kunak, J. (2006). Losing a self-expanding relationship: Implications for the self-concept. *Personal Relationships*, 13, 317–331.
- Lewandowski, G. W., Jr., & Bizzoco, N. M. (2007). Addition through subtraction: Growth following the dissolution of a low quality relationship. *Journal of Positive Psychology*, 2, 40–54.
- Mashek, D., & Sherman, M. (2004). Desiring less closeness with intimate others. In D. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 343–356). Mahwah, NJ: Erlbaum.
- Mattingly, B. A., Clark, E. M., Weidler, D. J., Bullock, M., Hackathorn, J., & Blankmeyer, K. (2011).Sociosexual orientation, commitment, and infidelity:A mediation analysis. *Journal of Social Psychology*, 151, 222–226.
- Mattingly, B. A., & Lewandowski, G. W., Jr. (2013a).
 The power of one: Benefits of individual self-expansion. *Journal of Positive Psychology*, 8, 12–22.
- Mattingly, B. A., & Lewandowski, G. W., Jr. (2013b). An expanded self is a more capable self: The association between self-concept size and self-efficacy. Self and Identity.
- Mattingly, B. A., & Lewandowski, G. W., Jr. (in press). Expanding the self brick by brick: Non-relational self-expansion and self-concept size. Social Psychological and Personality Science.
- Mattingly, B. A., McIntyre, K. P., & Lewandowski, G. W., Jr. (2012). Approach motivation and the expansion of self in close relationships. *Personal Relationships*, 19, 113–127.
- Nardone, N. (2012). Self-expansion and self-concept clarity: The effect of expanding and rediscovery activities on perceptions of the self and relationships (Doctoral dissertation, Stony Brook University. Stony Brook, NY).
- Neumann, R., & Strack, F. (2000). "Mood contagion": The automatic transfer of mood between persons. *Journal of Personality and Social Psychology*, 79, 211–223.

- Overall, N. C., Fletcher, G. J. O., & Simpson, J. A. (2010). Helping each other grow: Romantic partner support, self-improvement, and relationship quality. Personality and Social Psychology Bulletin, 36, 1496–1513.
- Rusbult, C. E., Kumashiro, M., Stocker, S. L., & Wolf, S. T. (2005). The Michelangelo phenomenon in close relationships. In A. Tesser, J. Wood, & D. A. Stapel (Eds.), On building, defending, and regulating the self: A psychological perspective (pp. 1–29). New York, NY: Psychology Press.
- 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, 357–391.
- Rusbult, C. E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, I. (1991). Accommodation processes in close relationships: Theory and preliminary empirical evidence. *Journal of Personality and Social Psychology*, 60, 53–78.
- 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, 1137–1151.
- Slotter, E. B., & Gardner, W. L. (2012). The dangers of dating the bad boy (or girl): When does romantic desire encourage us to take on the negative qualities of potential partners? *Journal of Experimental Social Psychology*, 48, 1173–1178.
- Slotter, E. B., Gardner, W. L., & Finkel, E. J. (2010). Who am I without you? The influence of romantic breakup on the self-concept. *Personality and Social Psychology Bulletin*, 36, 147–160.
- Sprecher, S., & Regan, P. C. (1998). Passionate and companionate love in courting and young married couples. *Sociological Inquiry*, 68, 163–185.
- Tafoya, M. A., & Spitzberg, B. H. (2007). The dark side of infidelity: Its nature, prevalence, and communicative functions. In B. H. Spitzberg & W. R. Cupach (Eds.), *The dark side of interpersonal communication* (2nd ed., pp. 201–242). Mahwah, NJ: Erlbaum.
- Treas, J., & Giesen, D. (2000). Sexual infidelity among married and cohabiting Americans. *Journal of Mar*riage and the Family, 62, 48–60.
- Tversky, A., & Kahneman, D. (1991). Loss aversion in riskless choice. *Quarterly Journal of Economics*, 106, 1039–1061.
- Wiederman, M. W., & Hurd, C. (1999). Extradyadic involvement during dating. *Journal of Social and Personal Relationships*, 16, 265–274.
- Yovetich, N. A., & Rusbult, C. E. (1994). Accommodative behavior in close relationships: Exploring transformation of motivation. *Journal of Experimental Social Psychology*, 30, 138–164.