

© 2021 American Psychological Association ISSN: 0893-3200

2021, Vol. 35, No. 4, 500-509 https://doi.org/10.1037/fam0000823

Perceived Partner Sexual Responsiveness Buffers Anxiously Attached Individuals' Relationship and Sexual Quality in Daily Life

Stephanie Raposo and Amy Muise Department of Psychology, Behavioural Sciences Building, York University

Satisfying relationships are central to health and well-being, yet the insecurities of anxiously attached people can detract from the quality of their romantic relationships. One factor associated with relationship quality is perceiving a partner as responsive to one's needs, and responsiveness to a partner's sexual needs might be a particularly powerful way to signal responsiveness to anxiously attached partners. In a 21-day daily experience and longitudinal study of 121 couples, we tested perceived partner sexual responsiveness as a buffer against the lower relationship quality (satisfaction, commitment, trust) and sexual satisfaction that anxiously attached people typically experience. On days when anxiously attached people perceived their partner as responsive to their sexual needs, they reported similar levels of relationship and sexual satisfaction, trust, and commitment as people lower in anxiety. Perceived partner sexual responsiveness was also important for maintaining commitment over time. Our findings suggest that perceived partner sexual responsiveness is one promising protective factor for anxiously attached partners.

Keywords: attachment anxiety, commitment, perceived responsiveness, satisfaction, trust

Supplemental materials: https://doi.org/10.1037/fam0000823.supp

Sex is one way that romantic partners demonstrate responsiveness in their relationships (see Diamond & Huebner, 2012). Feeling sexually understood by a partner helps people feel more satisfied and committed to their relationships over time (Muise & Impett, 2015), and satisfying and frequent sex can buffer partners against the detrimental implications of negative traits, such as neuroticism and insecurities (e.g., Little et al., 2010; Russell & McNulty, 2011). Although there are demonstrated benefits of responsiveness in relationships, and the sexual domain is particularly crucial for highly anxious people to have their attachment needs met, it is unclear whether sexual responsiveness is particularly beneficial for buffering the insecurities of those who are higher in attachment anxiety. In the current research, we explore whether perceived partner sexual responsiveness—feeling that a partner is perceptive of and interested in meeting one's sexual needs-facilitates sexual and relationship quality in daily life and over time, and whether this

is particularly important for people higher in attachment anxiety whose chronic relationship insecurities are rooted in their fear of rejection and constant desire for reassurance from their partner.

Facilitating Relationship Quality: The Role of Sexual Responsiveness

Perceiving a partner as understanding and valuing your needs is associated with greater relationship quality (e.g., Lemay et al., 2007). When people perceive their partners to be responsive (e.g., understanding and caring), they tend to feel more satisfied, committed, and secure (Debrot et al., 2012; Segal & Fraley, 2016). Recent research has also demonstrated the specific benefits of responsiveness to a partner's sexual needs. Above and beyond a partner's general motivation to be understanding and caring toward fulfilling their partner's needs, people who have partners and who are motivated to fulfill their sexual needs (i.e., termed sexual communal strength; Muise et al., 2013) report higher sexual and relationship satisfaction and are more committed to their relationships over time (Day et al., 2015; Muise & Impett, 2015; for a review see Muise & Impett, 2016). Similarly, on days when a person is more communally motivated to be responsive to their partner's sexual needs, both partners report being more satisfied with the sexual experience and with their relationship in general (Impett et al., 2019).

Although research has demonstrated the general importance of being (and perceiving a partner as) sexually responsive, no research to date has explored whether perceived partner sexual responsiveness is most beneficial for people who struggle to recognize their partner's responsivity and tend to have more volatile sexual and relationship quality—people who are higher in attachment anxiety (Birnbaum, 2007; Birnbaum et al., 2006; Butzer & Campbell, 2008). Perceived responsiveness to sexual needs may be particularly beneficial for anxiously attached individuals, given their overall lack of perceived general responsiveness and tendency to rely on sexual

This article was published Online First March 18, 2021. Stephanie Raposo https://orcid.org/0000-0002-5338-5253

This work has been supported by a Social Sciences and Humanities Research Council of Canada (SSHRC) graduate scholarship awarded to Stephanie Raposo and a SSHRC Insight Grant awarded to Amy Muise.

The findings reported in this article were presented at the Society for Personality and Social Psychology 2020 Annual Convention in February 2020, The Love Consortium Community Virtual Event in August 2020, The Canadian Sex Research Forum Virtual Meeting in October 2020, and the Society for the Scientific Study of Sexuality Virtual Conference in November 2020.

Data used in this article will appear in three other papers exploring different research questions (Balzarini et al., in press; Raposo, Impett, & Muise, 2020; Raposo, Rosen, & Muise, 2020).

Correspondence concerning this article should be addressed to Stephanie Raposo, Department of Psychology, York University, Toronto, ON, Canada. Email: raposos@yorku.ca

interactions to reflect the quality of the rest of their relationship (Birnbaum et al., 2006; Butzer & Campbell, 2008). Understanding how sexual responsiveness can mitigate the insecurities of anxious partners has implications for strengthening the relationships and sex lives of those who tend to experience greater challenges in these areas than others, and it can assist in bolstering relationship quality over time.

The Buffering Effect of Perceived Partner Sexual Responsiveness for Attachment Anxiety

Individuals who are higher in attachment anxiety desire intense closeness in their relationships and fear abandonment from their partners (e.g., Hazan & Shaver, 1987; Mikulincer & Shaver, 2003). Anxiously attached people also typically perceive their partners as being less responsive than they actually are (e.g., Collins, 1996; Mizrahi et al., 2018) and are more susceptible to experiencing lower relationship and sexual satisfaction, trust, and mixed feelings of commitment in their relationship (Birnbaum, 2007; Butzer & Campbell, 2008; Hazan & Shaver, 1987; Li & Chan, 2012; Mikulincer & Shaver, 2003; Slotter & Finkel, 2009; Tran & Simpson, 2009). In the sexual domain, people higher in attachment anxiety tend to view sex as a way to meet their intense needs for intimacy, emotional closeness, and reassurance (Davis et al., 2004; Schachner & Shaver, 2004; Tracy et al., 2003) and use their sexual experiences to decipher the quality of their overall relationship (Butzer & Campbell, 2008). These ties between relationship quality and sexual experiences are unique to anxiously attached individuals or people with anxiously attached partners (Birnbaum et al., 2006; Butzer & Campbell, 2008). Given the importance they place on relationship experiences as a reflection of their relationship quality in general (Campbell et al., 2005), anxiously attached people may also be especially sensitive to cues of rejection or reassurance in the bedroom (Fraley & Shaver, 2000).

The adverse effects of attachment anxiety on relationship and sexual outcomes have been established in the existing literature (e.g., Birnbaum, 2007; Butzer & Campbell, 2008; Davis et al., 2006), and related work has begun to consider the role of protective factors in buffering these effects (e.g., Arriaga et al., 2018; Little et al., 2010; Overall & Simpson, 2015; Simpson & Overall, 2014; Tran & Simpson, 2009). In the sexual domain, research has shown that sex is one way to express responsiveness, reassurance, and caring to anxiously attached partners. For example, in two separate 7-day diary studies of newlywed couples, higher daily sexual satisfaction was associated with buffering anxiously attached people against the lower marital satisfaction that they typically reported (Little et al., 2010). One explanation for why satisfying sex buffered anxious people from lower marital satisfaction is because positive sexual experiences signaled partner availability (Little et al., 2010). Building from the existing literature, seeing a partner as responsive in the sexual domain might be particularly important for facilitating greater security for anxiously attached people. However, no research to our knowledge has explicitly assessed how perceiving a partner as sexually responsive (rather than reporting more satisfying sex) buffers anxiously attached people's insecurities and impacts their relationships and sex lives. Given that perceiving a partner as available indicates openness to an anxiously attached person's proximity-seeking attempts and bids for intimacy (Birnbaum et al., 2006), we suggest that perceiving a partner as being sexually

responsive can uniquely buffer the negative relational consequences of anxious attachment, leading them to feel similar levels of relationship and sexual quality as those who are lower in attachment anxiety.

The Current Study

In the current research, we conducted a dyadic multi-part study (i.e., baseline survey, 21-day daily experience surveys, follow-up survey 3 months later) of 121 romantic couples to test whether perceived partner sexual responsiveness buffers highly anxiously attached people from lower sexual and relationship quality in daily life. Specifically, our key research aims are to test whether (a) on days when anxious people perceive their partners as higher (compared to lower) in sexual responsiveness, they are buffered against the lower relationship satisfaction, sexual satisfaction, trust, and commitment that they typically report; (b) the benefits of perceived partner sexual responsiveness persist over time; and (c) are incurred above and beyond general perceived partner responsiveness. Our questions are centered on the potential protective qualities of perceived partner sexual responsiveness for anxiously attached individuals' relationship outcomes (e.g., given how powerful the sexual domain is for signaling a partner's availability, and given their intense need for reassurance and closeness; Davis et al., 2004; Schachner & Shaver, 2004). Because avoidant people tend to be uncomfortable with closeness, we did not think that perceived partner sexual responsiveness would buffer their insecurities the way it buffers those of anxious people; therefore, our key predictions are focused on the buffering effect for anxious people. However, we control for attachment avoidance in all analyses and report effects for attachment avoidance in the Supplementary Materials for interested readers. We also conducted exploratory tests to determine if the effects carried over to the next day were consistent for men and women, and accounted for the buffering effects of sexual satisfaction on relationship quality (see Supplementary Materials).

Method

Participants

Couples were recruited through online (e.g., Reddit, Kijiji, Facebook, Craigslist) and physical (e.g., university campuses, public transportation centers) advertisements in Canada and the U.S. as part of a larger study. Eligible couples were currently living together or seeing each other at least 5 out of 7 days, sexually active, 18 years of age or older, residing in Canada or the U.S., able to read and understand English, and had daily access to a computer with internet. Both partners had to agree to participate. We aimed to recruit at least 125 couples based on an actor-partner interdependence model (APIM) power analysis and recommendations for achieving sufficient power with dyadic data by Kenny et al. (2006). Based on screening criteria and timing, our final sample consisted of 121 couples at baseline and the daily level (N = 115men, 124 women, 2 "others," 1 missing), and 215 participants at follow-up (89% retention). One couple was excluded because they only completed the baseline survey of the study. This study received research ethics committee approval from York University (title of study: "Couples Daily Relationship Experiences Study"; granting body: Human Participant Research Committee). Participants ranged in age from 20 to 78 years (M = 32.63, SD = 10.19). The sample was primarily White/Caucasian (65.3%), straight/heterosexual (81.4%), and married (46.7%), and the average relationship length was 8.50 years (SD = 8.41; see Table 1).

Procedure

Couples were pre-screened for eligibility via email and telephone. Once eligibility and consent were confirmed, each partner completed a 60-min online background survey, followed by 10–15-min online surveys for 21 consecutive days, and a 20-min online followup survey 3 months later. Participants were asked to complete the surveys before bed each night and to begin the study on the same day as their partner. Each partner was compensated up to \$60 CAD (\$48 USD). Participants completed an average of 18.39 (out of 21) daily entries, and 215 participants (89%) completed the follow-up survey. To promote retention, participants were compensated for the background survey and any daily surveys that they completed following the 21 days, and additional compensation was provided as an incentive for completing the follow-up survey 3 months later. Participants also received frequent email reminders to provide sufficient notice of any upcoming surveys, and truncated versions of select measures were assessed to circumvent fatigue (see below for more details). We tested whether those who did (vs. did not)

Table 1 Sample Characteristics (N = 242)

Characteristics	M (range) or n	SD or %
Age (years)	32.63 (20–78)	10.19
Ethnicity		
White (e.g., North American,	158	65.3%
European, etc.)		
East Asian (e.g., Chinese,	20	8.3%
Korean, etc.)		
South Asian (e.g., Indian,	18	7.4%
Pakistani, etc.)		
Bi- or multi-ethnic/ racial (e.g., White/	14	5.8%
Black, East Asian/South Asian, etc.)		
Other ethnicities	31	12.7%
Relationship status		
Dating	3	1.2%
Cohabitating	71	29.3%
Common law	33	13.6%
Engaged	19	7.9%
Married	113	46.7%
Others	1	.4%
Sexual orientation		
Asexual	7	2.9%
Bisexual	22	9.1%
Lesbian	6	2.5%
Straight/heterosexual	197	81.4%
Pansexual	4	1.7%
Other sexual orientations	6	2.4%
Relationship duration (years)	8.5 (1.5–58.25)	8.4
Sexual frequency	1.97	.88

Note. "Other ethnicities" include participants who did not identify with one of the presented categories, as well as all ethnicities representing 5% or less of the sample (i.e., Black [e.g., African, Caribbean, etc.], Latin American [e.g., Mexican, Columbian, etc.]). "Other sexual orientations" include participants who did not identify with one of the presented categories, as well as orientations representing less than 1% of the sample (i.e., Gay, Queer). Percentages may not add up to 100% due to a small amount of missing data.

complete the follow-up survey differed in our key variables of interest, but we did not find any significant differences (see Supplemental Materials for details).

Measures

In addition to the key variables, both partners reported their age, sexual frequency, and relationship duration (a couple-level variable calculated by taking the mean of each partner's report; see Table 2 for correlations). For the daily (within-person) measures, we used truncated versions with only one or a few items to reduce participant attrition and bolster efficiency (Bolger et al., 2003).

Person-Level Measures

Attachment

Attachment was measured at background with the Experiences in Close Relationships Short-Form scale (Wei et al., 2007). Six items assessed *attachment anxiety* (e.g., "I need a lot of reassurance that I am loved by my partner"; $\alpha = .71$, M = 3.40, SD = 1.12) and six items assessed *attachment avoidance* (e.g., "I try to avoid getting too close to my partner"; $\alpha = .79$, M = 2.03, SD = .90). Items were rated on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*).

Relationship Satisfaction

Relationship satisfaction was assessed with the Perceived Relationship Quality Components (PRQC) Inventory (Fletcher et al., 2000; $\alpha = .95$, M = 6.14, SD = .92). Participants rated three items (e.g., "How satisfied are you with your relationship?") on a 7-point scale (1 = not at all to 7 = extremely). The same items were administered at follow-up ($\alpha = .94$, M = 5.97, SD = 1.16).

Sexual Satisfaction

Sexual satisfaction was measured with the Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1998; $\alpha = .96$, M = 6.01, SD = 1.41). Participants rated five items on bipolar 7-point scales (e.g., "My sex life is bad/good"). The same items were administered at follow-up ($\alpha = .97$, M = 5.83, SD = 1.50).

Trust

Trust was assessed with the PRQC Inventory (Fletcher et al., 2000; M = 6.15, SD = 1.21). Participants rated one item (e.g., "How dependable is your partner?") on a 7-point scale (1 = not at all to 7 = extremely). The same item was assessed at follow-up (M = 6.18, SD = 1.18).

Commitment

Commitment was assessed with the PRQC Inventory (Fletcher et al., 2000; $\alpha = .83$, M = 6.69, SD = .59). Participants rated two items (e.g., "How committed are you to your relationship?") on a 7-point scale (1 = not at all to 7 = extremely). One item was administered at follow-up ("How committed are you to your relationship?"; M = 6.58, SD = .86).

Table 2 *Correlations*

	1	2	3	4	5	6	7	8	9	10	11
1. Age 2. Rel. duration 3. Avoidance 4. Anxiety 5. Rel. sat. 6. Commitment 7. Sexual sat. 8. Trust 9. Sex. freq. 10. PPSR 11. PPR	_	.76*** —	.09 .04 —	01 03 .42***	.04 .04 42*** 31***	.03 .00 40*** 25*** .77***	.12 .06 24*** 20** .61*** .42***	.04 .02 43*** 36*** .90*** .78*** .53***	.06 04 .05 .09 .14* .04 .28***	05 06 22** 19** .64*** .35*** .69*** .56***	002 01 42*** 30*** .66*** .66*** .65*** .24***

Note. Age, relationship duration, avoidance, anxiety, and sexual frequency were assessed at background. All other variables were at the daily level. Daily variables were aggregates across the diary. Rel. duration = relationship duration; Rel. sat. = relationship satisfaction. Sexual sat. = sexual satisfaction; Sex freq = sexual frequency; PPSR = perceived partner sexual responsiveness; PPR = perceived partner general responsiveness. p < .05. p < .01. p < .01. p < .01.

Sexual Frequency

Sexual frequency during the past 30 days was assessed with seven items about different types of sexual activity (i.e., oral sex [giving to partner], oral sex [receiving from partner], giving manual stimulation [touching or massaging your partner's genitals], receiving manual stimulation [your partner touching or massaging your genitals], manual stimulation [masturbation; alone], sexual intercourse with vaginal penetration, sexual intercourse with anal penetration). Response options included: $0 = not \ at \ all$, $1 = once \ or \ twice$, $2 = once \ a \ week$, $3 = 2-3 \ times \ a \ week$, $4 = 4-5 \ times \ a \ week$, $5 = once \ a \ day$, $6 = more \ than \ once \ a \ day$. Partners' reports of sexual frequency were highly correlated $(r = .65, \ p < .001)$; therefore, we used the mean of partners' scores to create a couple-level variable (M = 1.97, SD = .88).

Daily-Level Measures

Perceived Partner Sexual Responsiveness

Perceived partner sexual responsiveness was measured with one item from a scale of positive relationship-enhancing behaviors (Joel et al., 2020) assessed on a 7-point scale (1 = not at all to $7 = very \, much$): "Today, my partner was perceptive of my sexual needs"; M = 4.84, SD = 2.03). Given that this item is a key predictor variable in our analyses but has yet to be validated (unlike the other single-item assessments in this study), we aimed to first provide evidence of its validity. To do so, we conducted a study using Prolific (n = 242; https://www.prolific.co/) to compare the item to the more comprehensive Sexual Communal Strength Scale (adapted to be about perceptions of a current romantic partner; Muise et al., 2013). Following guidelines from Kline (2016), we conducted a confirmatory factor analysis and found that this single item had a standardized factor loading of .75 (i.e., the third highest loading item) on the perceived partner sexual responsiveness latent variable, demonstrating strong construct validity. In addition, the single item and the Sexual Communal Strength scale were highly positively correlated (r = .67, p < .001) and similarly associated with our outcomes of interest. See Supplementary Materials for more details about the validation process.

Perceived Partner Responsiveness

Perceived partner responsiveness was assessed with three items (i.e., "Today, I felt validated by my partner; cared for by my partner, understood by my partner"; M = 3.44, SD = .72; modified from Maisel & Gable, 2009). Items were assessed with a 4-point scale (1 = not at all to 4 = a lot). Within-person reliability of the items (indicated by R_c ; Bolger & Laurenceau, 2013) was .87.

Relationship Satisfaction

Relationship satisfaction was assessed with one item from the PRQC Inventory (Fletcher et al., 2000) adapted to be about that day. The item ("Today, how satisfied were you with your relationship?") was assessed on a 7-point scale ($1 = not \ at \ all \ to \ 7 = extremely; M = 6.04, SD = 1.25$).

Sexual Satisfaction

Sexual satisfaction was measured with the GMSEX adapted to be about that day (e.g., "Today, I felt my sex life was bad/good"; Lawrance & Byers, 1998). Participants rated five items on bipolar 7-point scales (M = 5.55, SD = 1.68; $R_c = .96$).

Trust

Trust was assessed with one item from the PRQC Inventory (Fletcher et al., 2000) adapted to be about that day. The item ("Today, how much could you count on your partner?") was assessed on a 7-point scale ($1 = not \ at \ all \ to 7 = extremely; M = 6.19, SD = 1.21$).

Commitment

Commitment was assessed with one item from PRQC Inventory (Fletcher et al., 2000) adapted to be about that day. The item ("Today, how committed were you with your relationship?") was assessed on a 7-point scale ($1 = not \ at \ all \ to \ 7 = extremely; M = 6.46, SD = 1.00$).

Data Analyses

Data were analyzed using multi-level modeling in SPSS 23.0. Data and syntax for the analyses are available on the

Open Science Framework: https://osf.io/5hy8v/?view_only= 3988d0dcd7cf4eeeac3abe7cb121fda1. Our first research aim was focused on (a) how participants' perceived responsiveness of their partner buffers anxiously attached people from lower sexual satisfaction and relationship quality. To test these questions, we assessed two-level cross models with random intercepts where persons were nested within dyads, and persons and days were crossed given that both partners completed the daily surveys on the same days (Kenny et al., 2006). Background predictors (i.e., attachment anxiety) were grand-mean centered such that they represented between-person differences. Daily predictors (i.e., perceived partner sexual responsiveness) were partitioned into their within- and between-variance components, which were person-mean centered and aggregated (and grand-mean centered), respectively (Raudenbush et al., 2004). We were focused on the associations between the within-person predictors and daily outcomes, where the unstandardized betas (b) can be interpreted as the change in the dependent variable for every oneunit deviation from the person's own mean predictor value. Moderations were cross-level interactions between attachment and daily perceived partner sexual responsiveness. We did, however, also test our predictions in full APIMs that controlled for partner effects (Kenny et al., 2006). These are reported in the Supplementary Materials. All main effects were included in the models and, although our key predictions were about attachment anxiety, we controlled for attachment avoidance and interactions between attachment avoidance and perceived partner sexual responsiveness in all analyses (see Supplementary Materials for effects for avoidant attachment). We probed significant interactions by calculating the simple slope effects using one standard deviation value below and above the mean of the moderator to assess how the effects of higher (vs. average and lower) perceived partner sexual responsiveness on outcomes varied for people who were higher (vs. lower) in attachment anxiety (Aiken et al., 1991). In other words, we tested the association between anxious attachment and sexual and relationship quality at high and low levels of perceived partner sexual responsiveness. These tests would demonstrate whether, on days when people perceive their partners as low in sexual responsiveness, highly anxious people would report lower sexual and relationship quality than people low in anxiety, or whether, on days when people perceive their partners as highly sexually responsive, highly anxious people would be buffered against their lower sexual and relationship quality and report similar levels to people low in anxiety. We also conducted additional analyses controlling for gender. Men and women did not report mean level differences on our key variables of interest and largely, the effects were consistent for men and women (see Supplementary Materials for details of the analyses).

Our second research aim was to assess (b) whether daily perceived partner sexual responsiveness was associated with outcomes 3 months later. To assess this, we entered an aggregated and grandmean centered version of actor and partner daily perceived partner sexual responsiveness into the model as predictors, and we accounted for an aggregated and grand-mean centered version of the outcome variable as assessed at background. We also tested attachment anxiety (aggregated and grand-mean centered reports at the background, controlling for aggregated and grand-mean centered reports of attachment avoidance at background) as a moderator of the associations between perceived partner sexual responsiveness and our key outcomes over time (see above). Our final research aim

was to assess (c) whether the benefits of perceived partner sexual responsiveness at the daily level (aggregated and person-mean centered) and over time (aggregated and grand-mean centered) were specific to the sexual domain. As such, we controlled for general perceived partner responsiveness in the models with the same level of centering as perceived partner sexual responsiveness.

Our goal was to extend, rather than replicate, the existing findings by Little et al. (2010). In other words, we aimed to test the theoretical prediction that perceiving a partner as highly sexually responsive to one's needs might be particularly beneficial for anxiously attached folks, and we consider sexual satisfaction as an outcome, in addition to relationship quality. In response to a reviewer's comment, we conducted additional exploratory analyses to test whether our predicted buffering effects differ from the effects shown by Little et al. (2010). We also exploratorily tested whether there is evidence for lagged day effects (e.g., whether perceived partner sexual responsiveness predicted higher sexual and relationship quality the next day), as well as whether significant interaction effects differed by gender (see Supplemental Materials for data analytic strategies and results of the exploratory analyses).

Results

Daily Perceived Partner Sexual Responsiveness and Relationship and Sexual Quality

First, consistent with previous research, people higher in attachment anxiety reported lower daily relationship satisfaction (b = -.11, SE = .04, t[180.32] = -2.56, p = .011, 95% CI [-.19, -.02]), sexual satisfaction (b = -.18, SE = .07, t[167.11] = -2.54,p = .012, 95% CI [-.32, -.04]), and trust (b = -.13, SE = .04,t[192.12] = -3.06, p = .003, 95% CI[-.22, -.05]) compared to less anxiously attached people. However, there was no significant association between attachment anxiety and daily commitment (b = -.04, SE = .04, t[156.39] = -1.21, p = .228, 95% CI [-.11, .03]). In addition, we found daily associations between perceived partner sexual responsiveness and our key outcomes. On days when people perceived their partner as being more sexually responsive than they typically perceived them to be across the daily diary study, they reported higher relationship satisfaction (b = .22, SE = .01, t[4064.71] = 24.87, p < .001, 95% CI [.20, .24]), sexual satisfaction (b = .31, SE = .01, t[3893.26] = 35.61, p < .001, 95% CI [.30, p].33]), trust (b = .19, SE = .01, t[3910.08] = 21.81, p < .001, 95% CI [.18, .21]), and commitment (b = .09, SE = .01,t[3826.11] = 13.09, p < .001, 95% CI [.08, .10]).

Next, we tested our key effects of interest (our first research aim) that daily perceived partner sexual responsiveness would buffer highly anxiously attached people from lower relationship and sexual quality in daily life (see Table 3 for interaction effects between perceived partner sexual responsiveness and attachment anxiety). Although people higher in attachment anxiety tended to perceive their partner as less responsive to their sexual needs in daily life (r = -.19, p = .003), when highly anxious people perceived their partner as higher (vs. lower) in sexual responsiveness in daily life, they were buffered against lower daily relationship and sexual quality. Specifically, on days when people perceived their partner as lower (vs. higher) in sexual responsiveness, anxiously attached people reported lower relationship satisfaction (b = -.13, SE = .04, t[234.79] = -3.44, p = .001, 95% CI [-.20, -.05]),

 Table 3

 Interaction Terms for Associations Between Attachment Anxiety and Outcomes Moderated by Perceived Partner Sexual Responsiveness

	b	SE	t	df	p	95% CI	
						Low	High
Daily PPSR moderated by attach	ment anxiety						
Relationship satisfaction	.05	.01	5.60	3916.20	<.001	.03	.06
Sexual satisfaction	.07	.01	8.72	3989.67	<.001	.06	.09
Trust	.05	.01	5.68	4068.05	<.001	.03	.07
Commitment	.02	.01	3.50	4135.33	<.001	.01	.04
PPSR over time moderated by at	tachment anxiety	,					
Relationship satisfaction	.03	.04	.89	132.16	.376	04	.10
Sexual satisfaction	.06	.05	1.18	199.84	.238	04	.16
Trust	.05	.04	1.10	176.77	.275	04	.13
Commitment	.07	.03	2.27	167.95	.025	.01	.12

Note. Beta values are unstandardized coefficients. PPSR = perceived partner sexual responsiveness. Effects represent moderations between daily PPSR and attachment anxiety, controlling for attachment avoidance and all main effects and interactions.

sexual satisfaction (b = -.20, SE = .05, t[175.85] = -3.65,p < .001, 95% CI [-.31, -.09]), and trust (b = -.17, SE = .04,t[250.38] = -4.10, p < .001, 95% CI [-.25, -.09]), but not lower commitment (b = -.06, SE = .04, t[187.58] = -1.73, p = .086, 95% CI [-.14, .01]), compared to people who were lower in attachment anxiety. However, on days when people perceived their partner as higher (vs. lower) in sexual responsiveness, people higher in attachment anxiety were buffered against these negative associations and reported the same levels of relationship satisfaction (b = .01, SE = .04, t[233.40] = .35, p = .731, 95% CI [-.06, .09]),sexual satisfaction (b = .02, SE = .05, t[175.69] = .34, p = .736, 95% CI [-.09, .13]), trust (b = .02, SE = .04, t[249.85] = -.57, p = .571, 95% CI [-.10, .06]), and commitment (b = .01, SE = .04, t[187.29] .15, p = .884, 95% CI [-.07, .08]) as people lower in attachment anxiety (see Figure 1S and Figure 2S in the Supplemental Materials for interpretations of the simple effects). Results did not differ by couples' relationship length or sexual frequency (see Supplemental Materials).

Perceived Partner Sexual Responsiveness and Relationship and Sexual Quality Over Time

Next, we tested our second research aim that the benefits of perceived partner sexual responsiveness for relationship and sexual quality would persist over time. People who perceived their partners as more responsive to their sexual needs over the course of the 21-day daily experience study reported higher relationship satisfaction (b = .20, SE = .06, t[207.36] = 3.58, p < .001, 95% CI[.09, .31]),sexual satisfaction (b = .52, SE = .06, t[160.56] = 8.04, p < .001, 95% CI [.39, .65]), trust (b = .15, SE = .06, t[182.91] = 2.72, p = .007, 95% CI [.04, .26]), and commitment (b = .11, SE = .04, t[177.81] = 3.02, p = .003, 95% CI [.04, .19]) 3 months later. One of these associations was moderated by anxious attachment (see Table 3). However, although neither of the simple effects were significant, when people higher in attachment anxiety perceived their partner as lower in sexual responsiveness over the course of the diary study, there was a negative association with commitment 3 months later (did not reach significance; b = -.12, SE = .06, t[162.44] = -1.84, p = .068, 95% CI [-.24, .01]). In contrast, when a partner was perceived as higher in sexual responsiveness over the course of the diary study, the

association was positive, although nonsignificant (b = .07, SE = .06, t[174.37] = 1.15, p = .253, 95% CI [-.05, .20]). Results did not differ by couples' relationship length or sexual frequency.

Ruling Out an Alternative Explanation

Lastly, we assessed our third research aim of whether the demonstrated buffering effects of perceived partner sexual responsiveness are unique to responsiveness to one's sexual needs (compared to one's needs in general). Importantly, although general perceived partner responsiveness also buffered highly anxiously attached people from lower daily relationship satisfaction (b = .07, SE = .02, t[4151.35] = 2.95, p = .003, 95% CI [.02, .11]) and trust (b = .07, SE = .02, t[4187.30] = 3.03, p = .002, 95% CI [.03, .12]), the effects of perceived partner sexual responsiveness remained significant above and beyond perceived partner general responsiveness, with one exception (see results controlling for general perceived partner responsiveness and Table S3 in Supplemental Materials). When general perceived partner responsiveness was controlled, the interaction between perceived partner sexual responsiveness and attachment anxiety predicting daily commitment was reduced to nonsignificance, b = .01, SE = .01, t(4151.51) = 1.67, p = .096, 95% CI (-.002, .03). This finding suggests that the buffering effects of perceived partner sexual responsiveness on commitment are at least partially accounted for by general perceptions of a partner's responsiveness. However, overall, these findings suggest that, even after accounting for general perceptions of responsiveness, on days when anxiously attached people perceive their partner as highly responsive to their sexual needs, they report similar levels of sexual satisfaction, relationship satisfaction, and trust as people lower in attachment anxiety.

Similar to the daily effects, although general perceived partner responsiveness did not significantly buffer associations between attachment anxiety and outcomes over time, the moderation between perceived partner sexual responsiveness and attachment anxiety predicting commitment was reduced to nonsignificant when controlling for general perceptions of responsiveness, b = .05, SE = .05, t(159.29) = 1.01, p = .313, 95% CI (-.05, .15). Therefore, having a sexually responsive partner does not buffer people higher in attachment anxiety from declines in their feelings of commitment over time above and beyond general partner responsiveness.

Discussion

People higher in attachment anxiety tend to perceive their partners as unresponsive to their needs (e.g., Collins, 1996) and have volatile feelings of satisfaction, trust, and commitment (e.g., Birnbaum, 2007; Hazan & Shaver, 1987). Our findings emphasize that the sexual domain is one key way for partners to express responsiveness (Diamond & Huebner, 2012), particularly to partners who are higher in attachment anxiety. In the current study, we extend past research and demonstrate that perceiving a partner as being highly sexually responsive in daily life can buffer highly anxiously attached people from lower relationship and sexual quality and evoke similar levels of relationship satisfaction, sexual satisfaction, trust, and commitment as people lower in attachment anxiety. Importantly, these effects were above and beyond general perceptions of partner responsiveness, suggesting that there are unique effects of perceiving a partner as responsive to one's sexual needs specifically.

The Benefits of Perceived Partner Sexual Responsiveness for Anxiously Attached Partners

Anxiously attached people have a chronic need for closeness, acceptance, reassurance, and love (Birnbaum et al., 2006). They often seek affection (Hazan et al., 1994) and tend to be needy and controlling in relationships—all of which contribute to an overinvestment in their relationships and more conflict than less anxiously attached partners (Davis et al., 2004; Dunkley et al., 2016; Hazan & Shaver, 1987; Li & Chan, 2012). Although anxiously attached people are focused on being closely connected with their partner, they are highly sensitive to cues that threaten this connection and their fears of abandonment may ultimately harm their overall relationship stability (Li & Chan, 2012; Shaver & Mikulincer, 2002).

Perceiving a partner as being sexually responsive serves many relationship benefits, including higher satisfaction and commitment (e.g., Muise & Impett, 2015). While anxiously attached people long for intense closeness and intimacy, partner support is often unappreciated and not enough to satisfy their intense needs (e.g., Collins & Feeney, 2004; Girme et al., 2015; Moreira et al., 2003). In the current study, we find that perceiving a partner as sexually responsive was associated with higher relationship quality for anxiously attached people. In fact, we demonstrate that perceptions of partner's sexual responsiveness were linked to highly anxiously attached people reporting similar levels of satisfaction, trust, and commitment as less anxiously attached people.

What is it about sexual responsiveness specifically that is so important for facilitating relationship and sexual quality among anxiously attached partners? In general, feeling sexually understood by a partner is associated with increases in satisfaction and commitment over time (Muise & Impett, 2015), and highly anxiously attached people tend to rely heavily on sexuality to fulfill their attachment needs (Davis et al., 2004; Schachner & Shaver, 2004). Through sexual connection, anxious people can access what they are most in need of to feel secure in their relationship—perceived partner availability and intimacy (see Little et al., 2010). Thus, compared to perceptions of general responsiveness, perceiving a partner as being sexually responsive may more reliably reassure anxious people that the intimacy, closeness, and commitment they long for are reciprocated by their partner and may signal their partner's availability to meet their needs. Our research extends past

work on protective factors of sexuality for anxiously attached people by showing that, in addition to having satisfying sex (Little et al., 2010), perceiving a partner as sexually responsive is an important buffer against the lower sexual and relationship quality anxiously attached people typically experience.

Limitations and Future Directions

The current study is a novel investigation of how perceived partner sexual responsiveness buffers people higher in anxious attachment from low sexual and relationship quality in daily life. Despite the strengths of this work—an ecologically valid study of romantic couples over time—there are limitations. First, although we provide evidence that daily changes in perceptions of a partner's sexual responsiveness were associated with daily sexual and relationship quality, and perceptions of a partner's sexual responsiveness predicted increases in sexual and relationship quality over time, we cannot confirm causality. Moreover, the buffering effects of daily perceived partner sexual responsiveness for highly anxious individuals did not substantially impact changes in sexual and relationship outcomes 3 months later. This finding of a reduced effect over time suggests that perceiving a partner as sexually responsive in the moment or over a short window of time may not be enough to buffer anxious people's sexual and relationship quality over time, which reaffirms their constant needs for intense, ongoing feedback (rather than short or occasional bouts of reassurance). However, previous experimental work finds that manipulating perceptions of a partner's responsiveness (both in general and for sexual needs specifically) can enhance relationship quality, at least temporarily. In one study, manipulating general perceived responsiveness helped people to capitalize on positive experiences and, in turn, experience increased trust and intimacy (Reis et al., 2010). In another recent study in which perceptions of a partner's sexual responsiveness were manipulated, perceiving a partner as highly sexually responsive led to higher sexual and relationship satisfaction compared to a control group and a group who were made to believe their partner was low in sexual responsiveness (Balzarini et al., in press).

In addition, the current work does not indicate why perceived partner sexual responsiveness has specific benefits for anxiously attached people. For example, sexual responsiveness might signal that a partner is receptive and available to respond to an anxiously attached person's bids for intimacy and indicate that a partner similarly desires closeness and connection. People who are anxiously attached tend to have negative working models of the self (see Wei et al., 2005), which may lead them to underestimate their own mate value. It is possible that having a partner who demonstrates responsiveness to their sexual needs—even if temporarily—could increase anxiously attached people's feelings of being valued, and this may account for higher relationship quality. Future research could test possible mechanisms, such as perceived partner availability or felt desire, for the benefits of perceived partner sexual responsiveness for people higher in attachment anxiety.

Although we provide evidence for the validity of the oneitem measure of perceived partner sexual responsiveness, it is a single-item measure and a limitation to the current research. In the future, researchers could use a more comprehensive measure of perceived partner sexual responsiveness to include multiple indicators of responsiveness beyond perceptiveness of sexual needs (i.e., motivation to meet one's sexual needs; willingness to sacrifice for a partner's sexual fulfillment). In addition, participants completed the same items each day and it is possible that participants became more aware of their own and their partner's behaviors as a result of answering questions about their relationship experiences every day, and this may have led them to change their behaviors or responses accordingly (i.e., demonstrating demand characteristics).

An additional limitation of the current research is that the findings may not be generalizable to everyone high in attachment anxiety because the couples in our sample were fairly highly satisfied. Although there was a significant, negative link between attachment anxiety and relationship and sexual satisfaction (r = -.31, p < .001and r = -.20, p < .01, respectively), suggesting that higher levels of attachment anxiety are associated with lower levels of satisfaction in this sample, there may be other underlying protective characteristics of this sample that we did not consider that enabled the buffering effects of perceived partner sexual responsiveness. Despite this limitation and our concerns with generalizability to more vulnerable couples, we argue that the findings still have implications for family psychologists by highlighting a potential target for clinical interventions aimed at addressing insecurities of anxiously attached people by focusing on how to be more aware of responsiveness, both in the bedroom and in the relationship overall. In fact, other works suggest that having a sexually responsive partner is associated with higher sexual and relationship satisfaction in clinical samples of couples coping with a sexual dysfunction (Hogue et al., 2019; Muise et al., 2017) and can help couples maintain satisfaction even when they have different sexual interests (Balzarini et al., in press; Muise et al., 2017). Future research could explore more vulnerable samples in which people are less satisfied with their relationships and/or sex lives to demonstrate for whom these findings are most valuable and whether the buffering effects are weakened or emphasized in other types of relationships.

Finally, as demonstrated in the existing literature, people higher in attachment anxiety have a higher threshold for perceiving and benefiting from a partner's responsiveness (e.g., Collins & Feeney, 2004), so their partners might have a higher bar to reach in terms of being perceived as responsive. The current findings suggest that higher levels of perceived partner sexual responsiveness are associated with sexual and relationship quality for anxiously attached people; however, we have not identified specific behaviors that would signal this responsiveness and if this differs based on attachment anxiety. Future work might test whether anxiously attached people tend to underperceive their partner's sexual responsiveness—that is, do the partners of anxiously attached people have a higher bar to clear in terms of being perceived as a responsive partner? Related to this, are their specific indicators, such as expressions of sexual interest, that are perceived as most responsive by anxiously attached partners? These lines of inquiry could provide novel insights into how perceptions of sexual responsiveness are formed and, in turn, linked with sexual and relationship quality.

Conclusion

The current study extends previous work on responsiveness and attachment by demonstrating that, for highly anxiously attached people, perceiving a partner as more sexually responsive in daily life helps them to experience similar levels of relationship satisfaction, sexual satisfaction, trust, and commitment as less anxiously attached

people. Our findings contribute to a growing body of research that demonstrates the specific role of sexual responsiveness in the maintenance of relationship quality (for a review, see Muise & Impett, 2016) and to research on buffering anxiously attached people from lower sexual and relationship quality (Arriaga et al., 2018; Little et al., 2010; Overall & Simpson, 2015; Simpson & Overall, 2014). We also provide initial evidence that perceived partner sexual responsiveness in relationships has implications and may be a novel protective factor for anxiously attached partners to experience greater satisfaction, trust, and commitment, despite the relationship challenges they typically experience.

References

- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. SAGE Publications.
- Arriaga, X. B., Kumashiro, M., Simpson, J. A., & Overall, N. C. (2018).
 Revising working models across time: Relationship situations that enhance attachment security. *Personality and Social Psychology Review*, 22, 71–96. https://doi.org/10.1177/1088868317705257
- Balzarini, R. N., Muise, A., Dobson, K., Kohut, T., Raposo, S., & Campbell, L. (In press). The detriments of unmet sexual ideals and buffering effect of sexual responsiveness. *Journal of Personality and Social Psychology*. https://doi.org/10.31219/osf.io/a78gt
- Birnbaum, G. E. (2007). Attachment orientations, sexual functioning, and relationship satisfaction in a community sample of women. *Journal of Social and Personal Relationships*, 24, 21–35. https://doi.org/10.1177/ 0265407507072576
- Birnbaum, G. E., Reis, H. T., Mikulincer, M., Gillath, O., & Orpaz, A. (2006). When sex is more than just sex: Attachment orientations, sexual experience, and relationship quality. *Journal of Personality and Social Psychology*, 91, 929–943. https://doi.org/10.1037/0022-3514.91.5.929
- Bolger, N., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology*, *54*, 579–616. https://doi.org/10.1146/annurev.psych.54.101601.145030
- Bolger, N., & Laurenceau, J. P. (2013). Intensive longitudinal methods: An introduction to diary and experience sampling research. Guilford Press. Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and
- relationship satisfaction: A study of married couples. *Personal Relationships*, *15*, 141–154. https://doi.org/10.1111/j.1475-6811.2007.00189.x
- Campbell, L., Simpson, J. A., Boldry, J., & Kashy, D. A. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology*, 88, 510–531. https://doi.org/10.1037/0022-3514.88.3.510
- Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology*, 71, 810–832. https://doi.org/10.1037/0022-3514.71.4.810
- Collins, N. L., & Feeney, B. C. (2004). Working models of attachment shape perceptions of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology*, 87, 363–383. https://doi.org/10.1037/0022-3514.87.3.363
- Davis, D., Shaver, P. R., & Vernon, M. L. (2004). Attachment style and subjective motivations for sex. *Personality and Social Psychology Bulle*tin, 30, 1076–1090. https://doi.org/10.1177/0146167204264794
- Davis, D., Shaver, P. R., Widaman, K. F., Vernon, M. L., Follette, W. C., & Beitz, K. (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships*, 13, 465–483. https://doi.org/10.1111/j.1475-6811.2006.00130.x
- Day, L. C., Muise, A., Joel, S., & Impett, E. A. (2015). To do it or not to do it? How communally motivated people navigate sexual interdependence dilemmas. *Personality and Social Psychology Bulletin*, 41, 791–804. https://doi.org/10.1177/0146167215580129

- Debrot, A., Cook, W. L., Perrez, M., & Horn, A. B. (2012). Deeds matter: Daily enacted responsiveness and intimacy in couples' daily lives. *Journal of Family Psychology*, 26, 617–627. https://doi.org/10.1037/a0028666
- Diamond, L. M., & Huebner, D. M. (2012). Is good sex good for you? Rethinking sexuality and health. Social and Personality Psychology Compass, 6, 54–69. https://doi.org/10.1111/j.1751-9004.2011.00408.x
- Dunkley, C. R., Dang, S. S., Chang, S. C., & Gorzalka, B. B. (2016). Sexual functioning in young women and men: Role of attachment orientation. *Journal of Sex & Marital Therapy*, 42, 413–430. https://doi.org/10.1080/ 0092623X.2015.1061075
- Fletcher, G. J., Simpson, J. A., & Thomas, G. (2000). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. *Personality and Social Psychology Bulletin*, 26, 340–354. https://doi.org/10.1177/0146167200265007
- Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: Theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, 4, 132–154. https://doi.org/10.1037/ 1089-2680.4.2.132
- Girme, Y. U., Overall, N. C., Simpson, J. A., & Fletcher, G. J. (2015). "All or nothing": Attachment avoidance and the curvilinear effects of partner support. *Journal of Personality and Social Psychology*, 108, 450–475. https://doi.org/10.1037/a0038866
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524. https://doi.org/10.1037/0022-3514.52.3.511
- Hazan, C., Zeifman, D., & Middleton, K. (1994, July). Adult romantic attachment, affection, and sex [Conference session]. 7th International Conference on Personal Relationships, Groningen, The Netherlands.
- Hogue, J. V., Rosen, N. O., Bockaj, A., Impett, E. A., & Muise, A. (2019). Sexual communal motivation in couples coping with low sexual interest/ arousal: Associations with sexual well-being and sexual goals. *PLOS ONE*, 14, Article e0219768. https://doi.org/10.1371/journal.pone.0219768
- Impett, E. A., Muise, A., & Harasymchuk, C. (2019). Giving in the bedroom: The costs and benefits of responding to a partner's sexual needs in daily life. *Journal of Social and Personal Relationships*, 36, 2455–2473. https://doi.org/10.1177/0265407518787349
- Joel, S., Maxwell, J. A., Peetz, J., MacDonald, G., & Baucom, B. (2020).
 Expect and you shall receive: People who are happier with their relationships expect and in turn perceive more relationship effort from their partners [Manuscript in preparation].
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). Dyadic Data Analysis. Guilford.
- Kline, R. B. (2016). *Principles and practice of structural equational modeling* (4th ed.). The Guilford Press.
- Lawrance, K., & Byers, E. S. (1998). Interpersonal exchange model of sexual satisfaction questionnaire. In C. M. Davis, W. L. Yarber, R. Baureman, G. Schreer, & S. L. Davis (Eds.), Sexuality related measures: A compendium (2nd ed., pp. 514–519). Gage.
- Lemay, E. P., Jr., Clark, M. S., & Feeney, B. C. (2007). Projection of responsiveness to needs and the construction of satisfying communal relationships. *Journal of Personality and Social Psychology*, 92, 834–853. https://doi.org/10.1037/0022-3514.92.5.834
- Li, T., & Chan, D. K. S. (2012). How anxious and avoidant attachment affect romantic relationship quality differently: A meta-analytic review. *European Journal of Social Psychology*, 42, 406–419. https://doi.org/10.1002/ejsp.1842
- Little, K. C., McNulty, J. K., & Russell, V. M. (2010). Sex buffers intimates against the negative implications of attachment insecurity. *Personality and Social Psychology Bulletin*, 36, 484–498. https://doi.org/10.1177/ 0146167209352494
- Maisel, N. C., & Gable, S. L. (2009). The paradox of received social support: The importance of responsiveness. *Psychological Science*, 20, 928–932. https://doi.org/10.1111/j.1467-9280.2009.02388.x
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes.

- Advances in Experimental Social Psychology, 35, 53–152. https://doi.org/10.1016/S0065-2601(03)01002-5
- Mizrahi, M., Kanat-Maymon, Y., & Birnbaum, G. E. (2018). You haven't been on my mind lately: Partner responsiveness mediates the link between attachment insecurity and sexual fantasies. *Journal of Social and Personal Relationships*, 35, 440–459. https://doi.org/10.1177/0265407517743083
- Moreira, J. M., de Fátima Silva, M., Moleiro, C., Aguiar, P., Andrez, M., Bernardes, S., & Afonso, H. (2003). Perceived social support as an offshoot of attachment style. *Personality and Individual Differences*, 34, 485–501. https://doi.org/10.1016/S0191-8869(02)00085-5
- Muise, A., Bergeron, S., Impett, E. A., & Rosen, N. O. (2017). The costs and benefits of sexual communal motivation for couples coping with vulvodynia. *Health Psychology*, 36, 819–827. https://doi.org/10.1037/ hea0000470
- Muise, A., & Impett, E. A. (2015). Good, giving, and game: The relationship benefits of communal sexual motivation. Social Psychological and Personality Science, 6, 164–172. https://doi.org/10.1177/1948550614553641
- Muise, A., & Impett, E. A. (2016). Applying theories of communal motivation to sexuality. Social and Personality Psychology Compass, 10, 455–467. https://doi.org/10.1111/spc3.12261
- Muise, A., Impett, E. A., Kogan, A., & Desmarais, S. (2013). Keeping the spark alive: Being motivated to meet a partner's sexual needs sustains sexual desire in long-term romantic relationships. Social Psychological and Personality Science, 4, 267–273. https://doi.org/10.1177/1948550612457185
- Overall, N. C., & Simpson, J. A. (2015). Attachment and dyadic regulation processes. *Current Opinion in Psychology*, 1, 61–66. https://doi.org/10 .1016/j.copsyc.2014.11.008
- Prolific. (2014). Prolific. Retrieved October 2019, from https://www.prolific.co/
- Raposo, S., Impett, E. A., & Muise, A. (2020). Avoidantly Attached Individuals Are More Exchange-Oriented and Less Communal in the Bedroom. Archives of Sexual Behavior, 49, 2863–2881.
- Raposo, S., Rosen, N. O., & Muise, A. (2020). Self-expansion is associated with greater relationship and sexual well-being for couples coping with low sexual desire. *Journal of Social and Personal Relationships*, 37, 602–623.
- Raudenbush, S. W., Bryk, A. S., Cheong, Y. F., & Congdon, R. T. (2004). HLM 6: Hierarchical linear and nonlinear modeling. Scientific Software International.
- Reis, H. T., Smith, S. M., Carmichael, C. L., Caprariello, P. A., Tsai, F. F., Rodrigues, A., & Maniaci, M. R. (2010). Are you happy for me? How sharing positive events with others provides personal and interpersonal benefits. *Journal of Personality and Social Psychology*, 99, 311–329. https://doi.org/10.1037/a0018344
- Russell, V. M., & McNulty, J. K. (2011). Frequent sex protects intimates from the negative implications of their neuroticism. Social Psychological and Personality Science, 2, 220–227. https://doi.org/10.1177/ 1948550610387162
- Schachner, D. A., & Shaver, P. R. (2004). Attachment dimensions and sexual motives. *Personal Relationships*, 11, 179–195. https://doi.org/10.1111/j.1475-6811.2004.00077.x
- Segal, N., & Fraley, R. C. (2016). Broadening the investment model: An intensive longitudinal study on attachment and perceived partner responsiveness in commitment dynamics. *Journal of Social and Personal Relationships*, 33, 581–599. https://doi.org/10.1177/0265407515584493
- Shaver, P. R., & Mikulincer, M. (2002). Attachment-related psychodynamics. Attachment & Human Development, 4, 133–161. https://doi.org/10.1080/14616730210154171
- Simpson, J. A., & Overall, N. C. (2014). Partner buffering of attachment insecurity. *Current Directions in Psychological Science*, 23, 54–59. https://doi.org/10.1177/0963721413510933
- 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 and Social Psychology Bulletin, 35, 85–100. https://doi.org/10.1177/0146167208325244
- Tracy, J. L., Shaver, P. R., Albino, A. W., & Cooper, M. L. (2003). Attachment styles and adolescent sexuality. In P. Florsheim (Ed.), Adolescent romantic relations and sexual behavior: Theory, research, and practical implications (pp. 137–159). Lawrence Erlbaum Associates.
- Tran, S., & Simpson, J. A. (2009). Prorelationship maintenance behaviors: The joint roles of attachment and commitment. *Journal of Personality and Social Psychology*, 97, 685–698. https://doi.org/10.1037/a0016418
- Wei, M., Mallinckrodt, B., Larson, L. M., & Zakalik, R. A. (2005). Adult attachment, depressive symptoms, and validation from self versus others.
- Journal of Counseling Psychology, 52, 368–377. https://doi.org/10.1037/0022-0167.52.3.368
- Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The Experiences in Close Relationship Scale (ECR)-short form: Reliability, validity, and factor structure. *Journal of Personality Assessment*, 88, 187–204. https://doi.org/10.1080/00223890701268041

Received November 1, 2019
Revision received October 14, 2020
Accepted October 15, 2020