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# Growing desire or growing apart? Consequences of personal self-expansion for romantic passion

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# **Supplemental Online Materials**

Table S.1

Passion at Three-Month Follow-Up Analyses in Studies 1 & 2 (Scale)

Predictor	b	SE	CI(95)	t	df	р
Study 1						
Baseline Passion	.69	.07	(.56, .83)	10.05	195.74	<.001
Personal Self-Expansion Scale	01	.17	(33, .32)	03	184.51	.973
Relational Self-Expansion Scale	.15	.16	(17, .46)	.91	184.86	.365
Time Together	.12	.07	(03, .26)	1.62	172.87	.107
Study 2						
Baseline Passion	.51	.10	(.32, .71)	5.17	79.63	<.001
Personal Self-Expansion Scale	22	.18	(57, .13)	-1.28	71.63	.206
Relational Self-Expansion Scale	.46	.19	(.08, .83)	2.41	69.94	.019
Time Together	02	.02	(06, .02)	-1.13	60.27	.264

Table S.2

Passion at One-Day Follow-Up Analysis in Study 2 (Scale)

Predictor	b	SE	CI(95)	t	df	р
Baseline Passion	.64	.09	(.45, .82)	6.82	82.38	<.001
Personal Self-Expansion Scale	21	.16	(53, .12)	-1.25	75.70	.216
Relational Self-Expansion Scale	.37	.18	(.02, .73)	2.10	74.30	.039
Time Together	001	.02	(04, .03)	08	63.62	.934

Table S.3

Passion at One-Day Follow-Up Analysis in Study 2 (Events)

Predictor	b	SE	CI(95)	t	df	р
Baseline Passion	.69	.08	(.52, .86)	8.16	83.67	<.001
Personal Self-Expansion Events	-1.44	.63	(-2.69,18)	-2.28	83.80	.025
Relational Self-Expansion Events	1.80	.68	(.45, 3.15)	2.65	80.74	.010
Time Together	.003	.02	(03, .04)	.18	66.81	.857

Table S.4

Passion at Three-Month Follow-Up Analysis in Study 2 (Events)

Predictor	b	SE	CI(95)	t	df	р
Baseline Passion	.59	.09	(.41, .77)	6.41	80.94	<.001
Personal Self-Expansion Events	-1.58	.69	(-2.95,21)	-2.29	80.97	.025
Relational Self-Expansion Events	1.85	.74	(.38, 3.32)	2.50	78.06	.014
Time Together	01	.02	(05, .02)	65	64.53	.518

### **Appendix S.A: Results for Sexual Activity**

In Studies 1 and 2, we also included an assessment of whether participants engaged in sexual activity with their partner that day as a behavioral proxy for sexual desire and/or romantic passion. However, because these results require analysis at the couple level (which restricts the ability to detect effects of individual personal self-expansion) and because there are many reasons why couples may not engage in sexual activity beyond simply having low passion for their partner, we have chosen to summarize these findings here rather than in the main body of the manuscript.

To assess daily sexual activity, participants rated whether or not they had engaged in sexual activity with their partner each day. Specifically, they answered the question, "Did you and your partner have sex today?" (0 = No; 1 = Yes; Study 1: M = .18; SD = .38; Study 2: M = .28; SD = .45). Because engagement in sexual activity with their partner would involve both members of a couple, we treated sexual activity as a couple-level outcome variable. If either couple member reported sexual activity with their partner that day, then our couple-level daily variable indicated they had engaged in sexual activity that day (0 = No; 1 = Yes; Study 1: M = .19; SD = .39; Study 2: M = .30; SD = .46).

#### **Results**

Using general linear mixed models in SPSS we conducted a multilevel logistic regression in which we regressed the dichotomous variable of whether the couple had sex each day on personal and relational self-expansion, as well as controlled for time spent together (grand-mean

<sup>&</sup>lt;sup>1</sup> On days when both couple members reported on whether or not they had sex that day, couples agreed 96.67% of the time in Study 1 and 96.52% of the time in Study 2. Because couples largely agreed and the bulk of the disagreement was due to one partner not completing the diary that day, we included all days where one or both partners reported engaging in sexual activity to maximize our number of observations.

centered), with each variable aggregated at the level of the couple. Paralleling daily passion analyses, but at the couple level, we within-couple centered personal and relational self-expansion, as well as included the couple-average (grand-mean centered) for personal and relational self-expansion in our model to separately examine within- and between-couple effects, respectively. A random intercept was included for each couple in the random statement to account for the nesting of multiple responses across the 21 days within each couple. We specified the covariance structure as variance components.

In Study 1, results revealed non-significant, negative associations between both withinand between-couple personal self-expansion and daily sexual activity (see Table S.A.1). In Study
2, in contrast to the null effect in Study 1, chronically higher personal self-expansion across the
21 days was associated with marginally lower sexual activity. Specifically, couples who were
one unit higher on average in personal self-expansion across the 21 days were 23% less likely to
have had sex on any given day. Study 2 also afforded examinations of the associations between
personal self-expansion events and sexual activity (see Table S.A.2). Experiencing more frequent
personal self-expansion events across the 21 days was also associated with significantly less
sexual activity. Specifically, a one-unit increase in the frequency of personal self-expansion
events was associated with being 71% less likely to have had sex on any given day. The withincouple associations of couples' personal self-expansion experiences and events with sexual
activity were non-significant, however, consistent with Study 1.

#### **Discussion**

In Study 1, both within- and between-person associations of couples' personal selfexpansion on the likelihood they engaged in sexual activity—a behavioral proxy for sexual desire and romantic passion—were non-significant. In Study 2, however, we did observe a marginally significant association between chronic personal self-expansion and a couples' likelihood of engaging in sexual activity. Couples who experienced more chronic personal self-expansion had a marginally lower likelihood of engaging in sexual activity on any given day. Similarly, couples who experienced more frequent personal self-expansion events had a significantly lower likelihood of engaging in sexual activity. However, as in Study 1, experiencing a daily increase in personal self-expansion or a specific personal self-expansion event were not significantly associated with a greater likelihood of having sex with their partner that day.

Given that there are numerous reasons why couples may or may not engage in sexual activity aside from feelings of passion (e.g., other demands on time, expressing feelings of passion in ways other than engaging in sex; Muise, Impett, & Desmarais, 2013), it is perhaps not surprising that we obtained mixed findings for this behavioral proxy of romantic passion.

Table S.A.1

Daily Sexual Activity Analysis in Studies 1 & 2 (Scale)

Predictor	b	SE	OR	OR CI(95)	t	df	p
Study 1							
Personal Self-Expansion Scale	03	.09	.97	(.82, 1.15)	33	2467	.744
(within-couple)							
Personal Self-Expansion Scale	24	.25	.78	(.48, 1.28)	97	2467	.331
(between-couple)							
Relational Self-Expansion Scale	.20	.08	1.22	(1.03,	2.33	2467	.020
(within-couple)				1.44)			
Relational Self-Expansion Scale	.32	.24	1.38	(.86, 2.19)	1.34	2467	.181
(between-couple)							
Time Together	.03	.08	1.03	(.87, 1.21)	.33	2467	.191
(within-couple)							
Time Together	.27	.08	1.30	(.12, 1.52)	3.44	2467	<.001
(between-couple)							
Study 2							
Personal Self-Expansion Scale	.04	.06	1.04	(.92, 1.18)	.69	1470	.492
(within-couple)							
Personal Self-Expansion Scale	26	.15	.77	(.57, 1.04)	-1.72	1470	.086
(between-couple)							
Relational Self-Expansion Scale	.52	.06	1.67	(1.48,	8.11	1470	<.001
(within-couple)				1.90)			
Relational Self-Expansion Scale	.25	.15	1.29	(.95, 1.74)	1.64	1470	.100
(between-couple)							
Time Together	01	.02	.99	(.96, 1.02)	34	1470	.732
(between-couple)							

Table S.A.2

Sexual Activity Analysis in Study 2 (Events)

Predictor	b	SE	OR	OR CI(95)	t	df	p
Personal Self-Expansion Events	02	.14	.98	(.74, 1.30)	15	1478	.877
(within-couple)							
Personal Self-Expansion Events	-1.24	.51	.29	(.11, .79)	-2.42	1478	.016
(between-couple)							
Relational Self-Expansion Events	1.38	.16	3.99	(2.93, 5.44)	8.78	1478	<.001
(within-couple)							
Relational Self-Expansion Events	40	.53	.67	(.23, 1.90)	76	1478	.449
(between-couple)							
Time Together	01	.02	.99	(.96, 1.02)	54	1478	.591

## Appendix S.B: Alternative multilevel mediation analyses

In addition to the mediation analyses presented in the main body of the paper, we also conducted a multilevel mediation analyses split by gender using the MLMED macro (Rockwood & Hayes, 2017) as an alternative method of analysis. This method has the advantage of fully accounting for nesting and the multilevel covariance structure, but the disadvantage of not being able to accommodate two-level crossed models, thus requiring us to split results by gender, greatly reducing our power and ability to detect effects. Results for Study 1 (Figure S.B.1 for women and Figure S.B.2 for men) and Study 2 (Figure S.B.3 for women and Figure S.B.4 for men) are displayed below. Results were in the same pattern as the main multilevel mediation analysis included in the main body of the manuscript, but due to being split by gender and thus reducing statistical power to detect effects, some indirect effects reduced in significance.

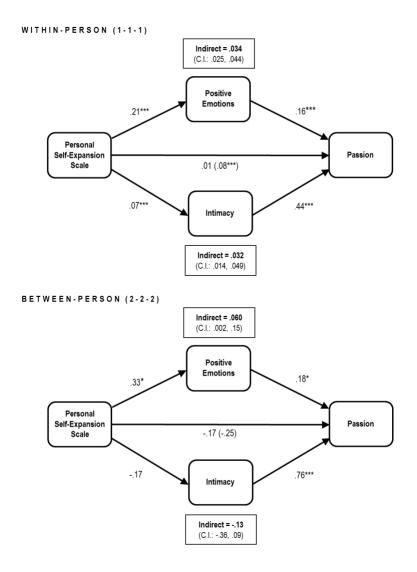


Figure S.B.1. Study 1: Simultaneous multilevel mediation by positive emotions and intimacy of both the within-person (i.e., the 1-1-1 model; top panel) and between-person (i.e., the 2-2-2 model; bottom panel) effect of personal self-expansion on romantic passion using MLMED among primarily women. Values in parentheses refer to unstandardized multilevel regression coefficients for the effect of personal self-expansion on passion without controlling for the indirect path. Relational self-expansion and time spent with their partner are controlled for in these analyses. Asterisks indicate statistical significance,  $^{\dagger}p < .10$ ,  $^{\ast}p < .05$ ,  $^{\ast\ast}p < .01$ ,  $^{\ast\ast\ast}p < .001$ .

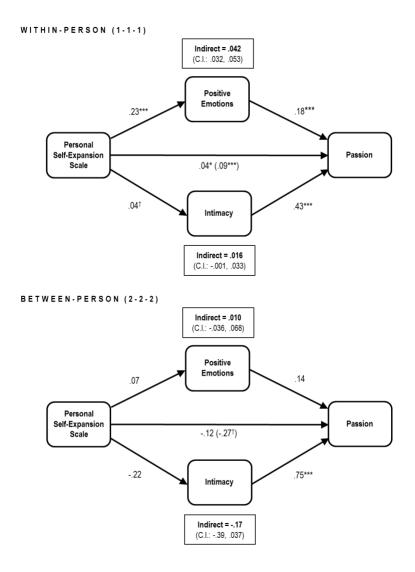


Figure S.B.2. Study 1: Simultaneous multilevel mediation by positive emotions and intimacy of both the within-person (i.e., the 1-1-1 model; top panel) and between-person (i.e., the 2-2-2 model; bottom panel) effect of personal self-expansion on romantic passion using MLMED among primarily men. Values in parentheses refer to unstandardized multilevel regression coefficients for the effect of personal self-expansion on passion without controlling for the indirect path. Relational self-expansion and time spent with their partner are controlled for in these analyses. Asterisks indicate statistical significance,  $^{\dagger}p < .10$ ,  $^{\ast}p < .05$ ,  $^{\ast\ast}p < .01$ ,  $^{\ast\ast\ast}p < .001$ .

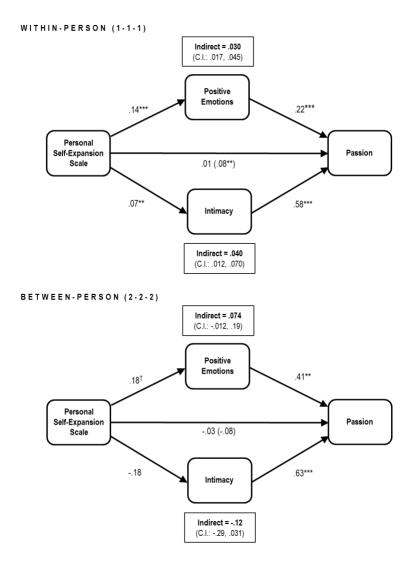


Figure S.B.3. Study 2: Simultaneous multilevel mediation by positive emotions and intimacy of both the within-person (i.e., the 1-1-1 model; top panel) and between-person (i.e., the 2-2-2 model; bottom panel) effect of personal self-expansion on romantic passion using MLMED among primarily women. Values in parentheses refer to unstandardized multilevel regression coefficients for the effect of personal self-expansion on passion without controlling for the indirect path. Relational self-expansion and time spent with their partner are controlled for in these analyses. Asterisks indicate statistical significance,  $^{\dagger}p < .10$ ,  $^{\ast}p < .05$ ,  $^{\ast\ast}p < .01$ ,  $^{\ast\ast\ast}p < .001$ .

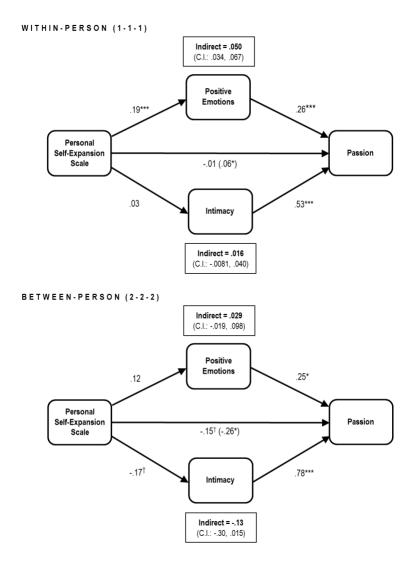


Figure S.B.4. Study 2: Simultaneous multilevel mediation by positive emotions and intimacy of both the within-person (i.e., the 1-1-1 model; top panel) and between-person (i.e., the 2-2-2 model; bottom panel) effect of personal self-expansion on romantic passion using MLMED among primarily men. Values in parentheses refer to unstandardized multilevel regression coefficients for the effect of personal self-expansion on passion without controlling for the indirect path. Relational self-expansion and time spent with their partner are controlled for in these analyses. Asterisks indicate statistical significance,  $^{\dagger}p < .10$ ,  $^{\ast}p < .05$ ,  $^{\ast\ast}p < .01$ ,  $^{\ast\ast\ast}p < .001$ .