Supplementary Material

Methods

Participants

Because these conditions can affect cardiovascular responding, participants were pre-screened to ensure that they had a body mass index lower than 30, were not taking cardiac medications, were not pregnant, did not have a pacemaker, a doctor's diagnosis of a heart arrhythmia, or hypertension (Blascovich, Vanman, Mendes, Dickerson, 2011). Because we did not wish to put already vulnerable populations through the stress of the experimental manipulation used in Thorson et al., 2018 (and not used on any of the participants reported in this paper), we also screened participants to ensure they did not have a history or diagnosis of a psychiatric illness. Participants completed the research in exchange for partial course credit, $15, or $20 (depending on semester).

Because we were interested in how the experimental manipulation reported in Thorson et al., 2018, affected math-identified women susceptible to stereotype threat, all participants were pre-screened to ensure they were highly identified with math and had knowledge of the stereotype that men are better at math than women. Therefore, all participants scored 5 or higher on a 9-question measure assessing identification with math ($\alpha = 0.69$; $M = 5.85$, $SD = 0.55$). All questions were answered on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale, and an example item is as follows: "It is important for me to be good at tasks that require the use of math." All participants also responded 3 or lower to the following question: "Regardless of what you think, what is the stereotype that people have about women and men's math ability, in general?" where 1 = *men are much better than women*, 4 = *men and women are the same*, and 7 = *women are much better than men*; $M = 1.84$, $SD = 0.68$).

Procedure

These data are part of a larger project designed to look at stress during math tasks; as part of this project, participants completed a low-arousal control manipulation (reported in Thorson et al., 2018; mean PEP reactivity = -4.16 ms, *SD* = 7.69) before the dyadic math task.

The math problems that participants solved together were presented on a computer screen and framed as a standardized problem solving exercise. Participants were given 30 seconds to answer each question while working alone, 30 seconds to discuss the problem with their partner, and 5 seconds to provide a final answer. They were informed of these time limits before the task began; however, there was no timer on the computer screen. Participants rotated between easy, medium, and hard questions. If participants did not respond within the allotted time, the computer automatically moved on to the next question, and the item was marked as unanswered (treated as incorrect). Participants had to solve the problems mentally; they were not allowed pencil, paper, or calculators to help solve the problems. The questions involved the addition of fractions, multiplication, and division and are listed on this paper's OSF page.

Analytic Strategy

The final model we conducted included the random effects outlined in Table S1.

Table S1

Twelve Random Effects Modeled.

Effect	Interpretation
Variances	
1. Intercept	Do people vary in their levels of reactivity?
2. Stability effect	Do people vary in how stable they are?
3. Linkage effect	Do people vary in how much they are influenced by their partners?
Between-person covariances	
4. Intercept with intercept	Do the two dyad members have similar reactivity levels?
5. Stability effect with stability effect	If one dyad member is stable, is the other more/less stable?
6. Linkage effect with linkage effect	If one dyad member is influenced by his/her partner, is the other dyad member more/less influenced by his/her partner?
7. Intercept with stability effect	If one dyad member has a higher reactivity level, is the other dyad member more/less stable?
Within-person covariances	
8. Intercept with stability effect	If one dyad member has a high reactivity level, is this dyad member more/less stable?
9. Intercept with linkage effect	If one dyad member has a high reactivity level, is this dyad member more/less influenced by his/her partner?
10. Stability effect with linkage effect	If one dyad member is stable, is this dyad member more/less influenced by his/her partner?
Other variances	
11. Common covariance	Are the two dyad members' reactivity scores similar within a given time point? Similar to an intra-class correlation.
12. Residual variance	Is there additional variance left to be accounted for?

Results

All of the fixed effects estimates are included in Table S2, and the random effects estimates are included in Table S3.

Table S2

Fixed Effects Estimates.

Fixed effects	Estimate	*SE*	*t*	*df*	*P*
Intercept	-2.43	0.29	-8.32	38.3	< .001
Stability effect	0.36	0.03	13.19	43.9	< .001
Linkage effect	0.03	0.02	1.21	41.8	.23

Table S3

Random Effects Estimates.

Random effects ([co-]variances)	Estimate	*SE*	*Z*	*P*
Variance of intercept	10.78	1.99	5.41	< .001
Variance of stability effect	0.04	0.01	4.12	< .001
Variance of linkage effect	0.01	0.005	2.37	.018
Between-person covariance of intercept with intercept	-4.88	1.99	-2.45	.014
Between-person covariance of stability effect with stability effect	-0.0001	0.01	-0.01	.99
Between-person covariance of linkage effect with linkage effect	0.01	0.004	1.71	.09
Between-person covariance of intercept and stability effect	-0.12	0.08	-1.46	.14
Within-person covariance of intercept and stability effect	-0.02	0.09	-0.18	.86
Within-person covariance of intercept and linkage effect	-0.01	0.06	-0.19	.85
Within-person covariance of stability effect and linkage effect	-0.01	0.01	-2.99	.003
Common covariance	0.82	0.28	2.90	.004
Residual variance	10.59	0.37	28.61	< .001

We tested for gender differences in the fixed effects of stability and linkage. Physiological linkage did not vary as a function of participant gender, $F(1, 53.6) = 0.80$, $p = .38$, but stability did, $F(1, 66.2) = 6.86$, $p = .011$. Follow-up analyses indicated that stability was significant and positive for both females and males (ps < .001) but was stronger for males.

References in the SM

Blascovich, J., Vanman, E., Mendes, W. B., & Dickerson, S. (2011). *Social psychophysiology for social and personality psychology*. Sage Publications.