

# LANGUAGE STYLE MATCHING AND RELATIONSHIP QUALITY

## Supplemental File: Methodology

1. Participants
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## 1. Participants

### Study 1

Data for this study was collected from 2006-2007 at the University of Texas at Austin (Fellows, 2009; Slatcher, Robles, Repetti, & Fellows, 2010). Participants identified themselves as 70.2% White, 21.2% Latino(a)/Hispanic, 3.8% African American/Black, 1.0% Asian American/Pacific Islander, and 3.9% other ethnicity. The annual household income ranged from \$16,000 to \$500,000, with a median of \$75,000. Fifty-two couples were recruited, but due to technical difficulties/recording errors, complete video interaction data was missing for eleven couples and support video interaction data was missing for one additional couple, leaving 41 couples ( $N = 82$ ) for conflict LSM analyses and 40 couples ( $N = 80$ ) for support LSM analyses.

### Study 2

Data for this study was collected at a large public university (Gable, Gonzaga, & Strachman, 2006). Participants reported being 40.6% White, 35.6% Asian/Pacific Islander, 7.5% Hispanic, 5.0% African American, and 10.0% other/preferred not to answer. Additionally, 37.5% were full-time students, 13.8% were full-time employees, 3.1% were unemployed, and 44.9% were part-time student, part-time employee. Four couples were engaged, and 43.8% of the couples were cohabitating. Eighty couples were recruited, but due to language barriers or technical difficulties videotaping the interactions, LSM scores could not be computed for 3 couples and the final sample included 77 ( $N = 154$ ) couples.

### Study 3

Ninety-nine adolescent couples (93 males) were recruited for the study (Ha, Kim, & McGill, 2019). Due to missing data, the final sample included 92 couples ( $N = 184$ ) for analyses including the PRQC measure, 99 couples ( $N = 198$ ) for analyses including the DAS measure, and 91 couples ( $N = 182$ ) for analyses including the EMA commitment measure. Participants reported being 41.9% White, 4.0% Asian/Pacific Islander, 40.9% Hispanic/Latino, 4.0% African American, 3.5% Native American and 4.0% mixed.

### Study 4

A total of 96 heterosexual married couples agreed to participate and were scheduled for a laboratory session, but one couple declined to release their videotaped interaction for coding, so they were compensated and their data was deleted (Simpson, Orina, & Ickes, 2003). Due to missing data, 90 couples ( $N = 180$ ) were included in the analyses. Participants identified themselves as 70% Caucasian, 22% Hispanic, and 8% African American.

### Study 5

Sixty-nine heterosexual pregnant couples were recruited; most couples (83.2%) were married, and the rest were cohabitating. Participants reported being 52.9% White, 15.2% Asian/Pacific Islander, 18.8% Hispanic or Latino/a, 4.3% Black or African American, and 7.9% other or preferred not to answer. Due to missing data, 63 couples ( $N = 126$ ) were included in analyses.

## 2. Procedure

### Study 1

Between participants' completion of the initial online surveys and the second lab visit in which couples engaged in conflict and support interactions, participants attended an initial lab visit and an at-home component of the study in which they completed other tasks (i.e., collection of salivary cortisol samples) that are unrelated to the focus of the current study.

### Study 2

Before each discussion, couples were told that positive/negative events involving the relationship or one's partner (e.g., going on a vacation together/an argument they had) were not to be discussed; the experimenters were interested in how couples discussed positive/negative events experienced by one partner in their life. Participants were asked to choose a positive event/problem, concern, or stressor in their life that either happened recently, happened in the past but continued to make them happy/bother them, something currently happening, or something that they anticipated would happen in the future. The participants were asked to pick a positive/negative personal event that had been on their mind recently regardless of how big or small of an event it was, and they were instructed to talk about anything related to the personal positive/negative event, such as the circumstances surrounding the event, how they felt, what they thought about the event/concern, and any other details or issues they thought were important. Partners took turns discussing their personal positive and negative events, and the order of the discussions was randomly assigned and counterbalanced.

For positive event discussions, participants rated their positive event importance to be relatively high ( $M = 5.65$  on a 1 (Not important) to 7 (Very important) scale,  $SD = 1.42$ ). The most common categories discussed were academic accomplishments (37.1%) and work or financial success (29.8%). Participants also rated their negative event importance to be relatively high ( $M = 5.84$ ,  $SD = 1.37$ ). The most common topics were work or financial issues (41.4%), academic difficulties (27.6%), or issues with family/friends (21.7%).

Of the 70 participants who did not respond to the follow-up questionnaires, 8 participants (4 couples) had broken up, and the remaining participants (40% women) did not respond to the follow-up survey. A series of t-tests were conducted for independent groups on T1 measures to determine whether participants who responded to the follow-up survey differed from those who did not respond (the 4 couples who had broken up were excluded). The two groups did not differ significantly on commitment, satisfaction, or overall/positive event/negative event LSM. The final sample for analyses predicting the commitment/satisfaction residualized change scores included 53 couples ( $N = 106$ ) for analyses including commitment and 52 ( $N = 104$ ) couples for analyses including satisfaction.

### Study 3

Upon obtaining parental consent and adolescent assent, couples were invited to a three-hour laboratory session in which they completed questionnaires and engaged in a videotaped conflict interaction with their romantic partner. Couples also engaged in a jealousy and a party planning discussion, provided saliva samples throughout the laboratory visit, and

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completed a revised Chatroom Interact Task (Silk et al., 2014) while electroencephalography (EEG) was recorded, all of which were not the focus of the current research.

Couples engaged in three different videotaped discussions that lasted 5 minutes each. During the second discussion, couples discussed one partner's relationship conflict topic. On a 10-point scale, participants independently rated the extent to which 18 different problems were a source of conflict in their relationships in the past 30 days (e.g., not liking a partner's attitudes or behaviors). A coin toss determined which partner's topic would be discussed, and the highest rated topic on that individual's list was selected. Following the videotaped interactions, participants independently completed surveys that included ratings of their relationship commitment and satisfaction.

### **Study 4**

Couples who were eligible to participate scheduled a laboratory visit, gave their consent, and individually completed a packet of questionnaires. Next, couples participated in one videotaped conflict interaction that followed the Gottman paradigm described in the study 1 procedure. In this study, rather than choosing any topic and severity level to focus their conflict interaction on, however, couples were randomly assigned to a 2x2 experimental design in which they were instructed to focus their conflict interactions on either a minor or major and either a closeness or jealousy problem in the marriage.

### **Study 5**

The prenatal visit took place in the laboratory with both members of the couple present and lasted 3-4 hours on average; visits began between 1:30-4pm. Couples first engaged in three discussion tasks lasting 10-15 minutes that were designed to assess the couples' functioning and readiness for the transition to parenthood. The first two discussions focused on couples' hopes and expectations for the transition to parenthood and plans for division of childcare duties and were not relevant for the current study. The final discussion was a relationship conflict interaction following the Gottman paradigm that was based on topics of disagreement within the relationship that were selected by the couple. Following the discussion tasks, participants were led to separate rooms in the lab where they completed online questionnaires on desktop computers using the Qualtrics platform. The questionnaire took approximately one hour to complete, and upon completion, couples participated in a final task unassociated with the current study (i.e., a blood draw by a licensed phlebotomist).

The procedure was repeated approximately 9 months later (6 months postpartum). A total of 42 couples completed the Time 2 postpartum measures of the original 69 couples who completed the prenatal laboratory visit. Of the 27 couples who did not participate in the follow-up visit, 10 couples chose not to participate for various reasons, 2 couples were in the process of scheduling the visit, and 15 couples had not yet reached the 6-month postpartum mark to be eligible for the second visit. A series of t-tests were conducted for independent groups on Time 1 key variables to determine whether participants who participated in the follow-up visit differed from those who did not. The two groups did not differ significantly on Time 1 relationship commitment and satisfaction or LSM.

## 3. Additional Analyses and Results

### Analysis Plan: Studies 1-5

Additional analyses were run to address our exploratory questions on gender moderation and on the predictive abilities of commitment and satisfaction on LSM. Gender was tested as a moderator with LSM predicting commitment and satisfaction in the linear mixed models described in the manuscript. Additionally, structural equation models were constructed with the male partner's commitment/satisfaction and the female partner's commitment/satisfaction predicting LSM in SPSS AMOS. These models were run testing the predictive strength of commitment and satisfaction with LSM as the dependent variable. In the structural equation models, the paths from male and female perceptions to LSM were constrained to be equal. The chi-squared value from comparing the constrained vs. non-constrained model signified whether there was gender moderation: A significant chi-squared value indicates a decrease in model fit due to the constraint, and thus supports the presence of gender differences. The structural equation models were run with relationship commitment/satisfaction predicting conflict LSM in Studies 1 and 3-5, predicting support LSM in Study 1, and predicting positive/negative event LSM in Study 2.

### Study 1

Among the linear mixed models, the model testing support LSM as a predictor of stay likelihood revealed a significant LSM by gender interaction,  $b = -.23$ ,  $SE = .09$ ,  $p = .02$ , indicating that females reported greater stay likelihood when LSM was greater during support interactions but that LSM was unassociated with stay likelihood among males. In the remaining mixed models, there were no significant LSM by gender interactions (all  $b$ 's  $< .26$ ,  $p$ 's  $> .15$ ), suggesting that there are no consistent gender differences in the associations between relationship commitment and satisfaction with LSM. Next, a series of structural equation models were run to test components of relationship quality as predictors of LSM. First, overall LSM was assessed; results showed that both moral commitment ( $b = .01$ ,  $SE = .003$ ,  $p = .01$ ) and stay likelihood ( $b = .01$ ,  $SE = .002$ ,  $p = .02$ ) were significant predictors of overall LSM, but satisfaction ( $b = .001$ ,  $SE = .002$ ,  $p = .66$ ) did not predict overall LSM. Conflict LSM was then assessed; results showed that moral commitment ( $b = .26$ ,  $SE = .08$ ,  $p = .002$ ) and stay likelihood ( $b = .26$ ,  $SE = .10$ ,  $p = .01$ ) predicted conflict LSM such that greater commitment (by both measures) was associated with greater conflict LSM. However, satisfaction was not a significant predictor of conflict LSM ( $b = .11$ ,  $SE = .09$ ,  $p = .25$ ). These findings suggest that greater LSM during conflict interactions and across conflict and support interactions is reflective of greater relationship commitment, but not satisfaction. Last, support LSM was assessed; neither moral commitment ( $b = .004$ ,  $SE = .003$ ,  $p = .19$ ), stay likelihood ( $b = .003$ ,  $SE = .002$ ,  $p = .10$ ), or satisfaction ( $b = -.002$ ,  $SE = .002$ ,  $p = .27$ ) were significant predictors of support LSM suggesting that LSM during support discussions specifically was unrelated to components of relationship quality. All chi-squared values comparing the constrained vs. non-constrained commitment/satisfaction models were non-significant (all  $p$ 's  $> .16$ ), suggesting that there were not gender differences in the strength of the associations between commitment/satisfaction and LSM.

## Study 2

Among the linear mixed models, there were no significant LSM by gender interactions (all  $b$ 's < .13,  $p$ 's > .34). Next, a series of structural equation models were run. First, overall LSM was assessed; results showed that commitment ( $b = .01$ ,  $SE = .01$ ,  $p = .06$ ) was marginally predictive of overall LSM, and satisfaction ( $b = .02$ ,  $SE = .01$ ,  $p = .03$ ) was a significant predictor of overall LSM. Negative event LSM was then assessed; results showed that commitment ( $b = .14$ ,  $SE = .06$ ,  $p = .04$ ) and satisfaction ( $b = .14$ ,  $SE = .06$ ,  $p = .02$ ) predicted negative event LSM such that greater commitment/satisfaction was associated with greater LSM during the negative event discussion. These findings suggest that LSM during negative event discussions and across positive and negative event discussions may be influenced by and reflective of both relationship commitment and satisfaction. Last, positive event LSM was assessed; results did not show strong support for links between relationship quality and positive event LSM; commitment ( $b = .01$ ,  $SE = .01$ ,  $p = .13$ ) did not predict positive event LSM, and satisfaction ( $b = .02$ ,  $SE = .01$ ,  $p = .07$ ) was marginally predictive of positive event LSM. All chi-squared values comparing the constrained vs. non-constrained commitment/satisfaction models were non-significant (all  $p$ 's > .20), suggesting that there were not gender differences in the associations between commitment/satisfaction and LSM.

## Study 3

Among the linear mixed models, there were no significant LSM by gender interactions (all  $b$ 's < .14,  $p$ 's > .24). Next, a series of structural equation models were run. Results showed that none of the commitment measures were significant predictors of conflict LSM (PRQC:  $b = .08$ ,  $SE = .07$ ,  $p = .25$ ; DAS:  $b = .02$ ,  $SE = .07$ ,  $p = .77$ ; EMA:  $b = .04$ ,  $SE = .06$ ,  $p = .53$ ). However, both satisfaction measures were marginally predictive of conflict LSM (DAS:  $b = .11$ ,  $SE = .07$ ,  $p = .09$ ; PRQC:  $b = .12$ ,  $SE = .07$ ,  $p = .08$ ), implying that relationship satisfaction could influence LSM during conflict interactions. All chi-squared values comparing the constrained vs. non-constrained commitment/satisfaction models were non-significant (all  $p$ 's > .14), suggesting again that there were not gender differences in the strength of the associations between commitment/satisfaction and LSM.

## Study 4

Among the linear mixed models, the model testing conflict LSM as a predictor of PRQC commitment revealed a significant LSM by gender interaction,  $b = .18$ ,  $SE = .09$ ,  $p = .049$ , indicating that males reported lower commitment when LSM was greater during conflict interactions but that LSM was unassociated with commitment among females. In the remaining mixed models, there were no significant LSM by gender interactions (all  $b$ 's < .14,  $p$ 's > .13), suggesting that there are no consistent gender differences in the associations between relationship commitment and satisfaction with LSM. Next, a series of structural equation models were run. Results showed that neither commitment measure was a significant predictor of conflict LSM (PRQC:  $b = -.07$ ,  $SE = .08$ ,  $p = .36$ ; Lund:  $b = -.08$ ,  $SE = .07$ ,  $p = .23$ ). Likewise, neither satisfaction measure significantly predicted conflict LSM (RAS:  $b = -.01$ ,  $SE = .06$ ,  $p = .85$ ; PRQC:  $b = .01$ ,  $SE = .06$ ,  $p = .84$ ). In contrast to some of the previous findings, these results imply that relationship commitment and satisfaction do not influence LSM. All chi-squared values comparing the constrained vs. non-constrained commitment/satisfaction models were non-

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significant (all  $p$ 's > .14), suggesting that there were not gender differences in the strength of the associations between commitment/satisfaction and LSM.

### **Study 5**

Among the linear mixed models, there were no significant LSM by gender interactions (all  $b$ 's < .27,  $p$ 's > .08). Next, a series of structural equation models were run. Results showed that commitment did not predict conflict LSM at T1 ( $b = -.004$ ,  $SE = .003$ ,  $p = .19$ ) or T2 ( $b = .001$ ,  $SE = .004$ ,  $p = .77$ ). Likewise, satisfaction did not predict conflict LSM at T1 ( $b = .001$ ,  $SE = .002$ ,  $p = .66$ ) or T2 ( $b = .001$ ,  $SE = .003$ ,  $p = .62$ ). All chi-squared values comparing the constrained vs. non-constrained commitment/satisfaction models were non-significant (all  $p$ 's = 1.0), suggesting that there were not gender differences in the strength of the associations between commitment/satisfaction and LSM.

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