

**Language Style Matching and Older Adult's Marital Satisfaction**

by

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## Abstract

Poor marital communication is a leading reason that couples seek therapy. Because of its importance in marriage, marital communication is one of the most studied aspects of relational functioning. In fact, recent works have demonstrated that even similarity in function words (e.g., articles, prepositions) is associated with relational functioning in younger couples. Given the unique developmental challenges and opportunities in later adulthood (e.g., health challenges but greater emotional positivity), the current study was conducted to see if language style matching (LSM) had similar associations in a sample of 64 older adult, heterosexual married couples. Utilizing transcripts from two different conversational tasks (reminiscence and problem-solving), we calculated the rate of LSM between spouses during each conversation task and then averaged to capture it globally. Hierarchical linear regressions revealed that overall LSM was related to marital satisfaction, but only for wives. A similar link between context specific LSM and wives' satisfaction was also found, but only during reminiscence. The results ultimately suggest that LSM still plays a role in the communication of older couples, one of particular importance for wives during reminiscence. Therefore, clinicians working with older adults may benefit from utilizing behaviorally focused interventions targeting couples' language use during reminiscence.

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## Introduction

Communication difficulties are common in marital relationships and, if left unresolved, can result in keeping couples mired in negative cycles of rejection and pain (Fincham, 2004). Not surprisingly then, communication issues are cited as among the most common presenting problems for couples coming to therapy (Miller, Yorgason, Sandberg, & White, 2003). Such difficulties merit further attention, as unhappy couples may experience enhanced negative affect and heightened physiological stress (Levenson & Gottman, 1983; Broadwell & Light, 1999), decreased happiness and support (Cutrona, Hessling, & Suhr, 1997; Glenn & Weaver, 1981; Pasch & Bradbury, 1998), and be at an increased risk of couple violence (Jacobson et al., 1994). Given the importance of communication for marital functioning and overall health and well-being, it is not surprising that Fincham's (2004) PsycInfo search produced over 2,000 results using the key words *marital* and *communication*. Despite the breadth of this research, much of this literature – even to date – has focused exclusively on non-verbal or affective communication behaviors, such as vocal tone (Gottman, 1980) or negative affect reciprocity (Levenson & Gottman, 1983). As a result, the basic building blocks of speech – the specific words used – and their influence on relationships remain relatively unexplored.

However, recent research by Ireland, Slatcher, Eastwick, Scissors, Finkel, and Pennebaker (2011) demonstrated that even the automatic words used in everyday conversations (e.g., articles, conjunctions, prepositions) may impact relationship development and stability. Ireland and colleagues found that the degree to which college-age, speed-dating pairs shared similar function word use (e.g., pronouns) significantly predicted an increased attraction and

likelihood to begin romantic relationships. Additionally, for couples who have been together for just over a year ( $M = 1.31$  years,  $SD = 1.06$ ), similarity in function words also predicted short term relationship stability at a three-month follow-up. This phenomenon, which they termed Language Style Matching (LSM), has interesting implications for understanding the link between communication and satisfaction in romantic relationships. Whereas much research has neglected the specific words used in communication in favor of nonverbal or affective behaviors, Ireland et al.'s findings suggest that the basic words we use to construct our speech may be important for at least short-term relationship satisfaction.

However, although a link has been demonstrated between LSM and short-term relationships (Ireland et al., 2011), this burgeoning area of research has yet to be extended to the study of longer-term relationships later in life. Such an exploration into the linguistic similarity of more established couples could be particularly revealing, as it may be that the happiest couples are those that have a high level of verbal similarity even years into their marriage. Conversely, it might be the case that older couples find they do not need as much similarity to achieve and maintain marital satisfaction. Recently, Bowen, Winczewski, and Collins (2016) sought to bridge this gap by examining LSM in relationships ranging from three months to approximately five years ( $M = 14.3$  months,  $SD = 13.7$  months). Although they also found a link between LSM and couple interactions, the nature of this link depended on the conversational context in which it was observed. Higher LSM during conflict was associated with increased negative emotions, whereas higher LSM in supportive interactions was related to increased feelings of support. These results suggest the importance of considering context when examining communicative behaviors and the role of LSM in marital relationships. Bowen and colleagues



found these associations when examining two conversational contexts (conflict and support) in younger couples, but little is known about the nature of LSM in other types of interactions for older couples. This gap in knowledge reveals a need for further testing in an increased scope of interactions, particularly tasks which may be more relevant for older adults. Reminiscence, in particular, appears to serve several important functions for older adults, especially concerning life review (Butler, 2002). Whether LSM offers similar benefits for marriage when older couples are reminiscing as it does in other tasks remains an open question.

Answering this question regarding the links between LSM, marital satisfaction, and communication tasks is imperative as it may provide useful information to inform clinical practice. The current study seeks to understand if there is a relationship between LSM and older adults' current and future marital satisfaction, and whether these associations are context dependent. If such connections exist, it could have meaningful implications for clinicians working with older adult relationships, a growing, yet mostly underserved clinical population. By 2030, 20% of American residents are expected to be 65 and over (U.S. Census Bureau, 2014). Despite this rapid growth, clinicians report feeling largely unprepared to adequately serve this population (Yorgason, Miller, & White, 2009). Those clinicians who reported some success in working with older adults mostly utilized behaviorally-focused therapies. For example, Solution Focused Therapy puts an emphasis on changing specific behaviors (i.e. word usage) over affective or cognitive experiences (Walter & Peller, 1992). A link between verbal similarity and marital satisfaction could help behavioral clinicians maximize treatment effectiveness by including an emphasis on word usage. If higher verbal similarity can reinforce warmth during emotionally positive contexts, clinicians may be able to advise, teach, and train clients to

increase its occurrence. Additionally, if higher similarity during conflict seems to exacerbate the negative emotions experienced in these contexts, clinicians may advise a more complementary style of communication. That being said, it is still unclear whether these are the most effective methodologies to apply to this client base. The results of this study could further refine the methods employed to help older couples navigate relationship difficulties across a number of situations they are likely to encounter (e.g., reminiscence), perhaps by advocating for more similarity or complementarity depending on context. A natural extension of the work performed by Ireland et al. (2011), and Bowen et al. (2016), we believe this study will extend our knowledge of LSM by examining later life, more established relationships across multiple contexts over time.

## Literature Review

### **Mimicry and Marriage**

Mimicry is known to occur frequently in social situations. From romantic speed-dating with potential partners (Ireland et al., 2011) to platonic cooperation with total strangers (Chartrand & Bargh, 1999), humans attempt to mimic one another. Mimetic behaviors are believed to help individuals develop rapport with a desired partner or social group, which can help them achieve acceptance or inclusion (Bowen et al., 2016; Cheung, Slotter, & Gardner, 2015). As to the nature of these behaviors, researchers have found that not only can individuals mimic different non-verbal expressions (e.g., motor movement, Bailenson & Yee, 2007), they also can engage in mimicking verbal behaviors, referred to as Language Style Matching (LSM; Ireland et al., 2011).

LSM was first captured and described by Ireland and her colleagues (2011) in college-age, speed-dating pairs. Consistent with prior work on behavioral mimicry (Chartrand & Bargh, 1999; Cheung et al., 2015), greater mimicry in the form of higher LSM among speed dating pairs was related to increased liking and relationship development. Perhaps more surprisingly, this increased affiliation resulting from mimicry was found when focusing on basic function words (e.g., conjunctions). Though function words may initially seem like mere conversational filler, they can be indicative of style or personality. Consider this example from Bowen and colleagues (2016, p. 2):

“...a person can ask another to accompany him or her to dinner by phrasing his or her request as “Would you like to join me for dinner?” He or she could also communicate this request with the phrasing “How about we have dinner later tonight?” The differences in these two requests may seem trivial, but are likely reflective of meaningful

psychological variability. In fact, they are due almost entirely to differences in function words.”

According to the rapport building view of LSM, the individual being asked to dinner may want to achieve closeness with their partner and non-consciously accommodate to create similar speech patterns. Therefore, as function word similarity was perceived and mimicked, relational affiliation was fostered.

It should be noted that the above examples involve people just becoming acquainted (e.g., Ireland et al., 2011) or having been in a relationship for a few years at the most (e.g., Bowen et al., 2016). It has yet to be seen whether a similar link exists in more established relationships. Perhaps longer-term couples still find use for LSM when facing relational challenges. Whether young or old, married couples experience conflict (Bowen et al., 2016; Rauer, Williams, & Jensen, in press), and LSM may enhance reparative efforts between partners. Individuals engage in non-verbal mimetic behaviors at greater frequencies after they have experienced an exclusion event to re-establish rapport (Lakin & Chartrand, 2003). Therefore, couples who have experienced a fight and feel isolated from one another may unconsciously begin to mimic one another in order to re-establish an emotional connection. After repairs, or during times of unity, couples may engage in LSM to reinforce the bond they enjoy. There is some evidence indicating that individuals within a group are more likely to mimic each other than that of someone they consider out of their group (Yabar, Johnston, Miles, & Peace, 2006). Established couples, therefore, may still mimic one another, indicating a dedication to their family or couple group.

Unfortunately, although mimicry is often used in social interactions to establish or re-establish rapport or closeness, it does not always serve a positive function. In fact, in certain scenarios, mimetic behaviors can dramatically increase the unpleasantness of an interaction. One

such example of negative non-verbal mimetic behavior is *negative affect reciprocity* (Gottman, Markman, & Notarius, 1977; Gottman, 1980). Negative affect reciprocity refers to a cycle where one member of a couple expresses some negative affect through a behavior (e.g., blaming, or frowning) and the partner responds with similar negative affect. Couples caught in these kinds of cycles can encounter multiple challenges when trying to solve their problems (e.g., increased criticism, Fichten & Wright, 1983). Although this negativity is usually measured via content (e.g., insults), tone (e.g., shouting), and behaviors (e.g., eye rolling), this increase in negativity can be observed even at the function word level. For example, Bowen and colleagues (2016) found that couples who mimicked each other during conflictual conversations seemed to increase the negative emotions associated with the interaction. Paradoxically, employing the non-conscious mimetic process that may have initially brought couples together can work to drive them apart. How can the same behavioral process produce such different results? It seems that rather than serving as a purely rapport building function, mimicry in the form of LSM indicates a *coordination* effort by members of an interaction that could have different effects based on the context in which the interaction is taking place.

### **Context and Consequence**

As to the role of context in couples' interactions, there is evidence for behavioral consistency across various communication contexts or tasks. For example, couples who have more negativity in conflict are likely to carry that negativity even into emotionally warmer conversation contexts (e.g., reminiscing; Gottman, 1980). In fact, distressed couples have been shown to express negativity even alongside *agreement* with their partner in conflict tasks (Gottman et al., 1977). In therapeutic terms, this is understood to be the repetition of isomorphic

patterns (Fishman, 1993), in which people interact with one another in consistent ways across contexts and environments. Encouraging couples may be supportive even in the midst of conflict. Distressed couples may criticize even during affectionate expressions. Intuitively, we can surmise that LSM occurs to similar degrees across contexts for couples, however, this is relatively unexplored. Additionally, it is not known whether LSM provides uniform benefits across contexts or its associations with relationship outcomes depend on the context in which it is displayed (e.g., conflict vs. reminiscence).

Bowen et al. (2016) began to explore this notion by examining couples who had been together a little over a year on average in both conflict and support interactions. During a supportive discussion, higher similarity in the use of function words contributed to higher warmth, possibly supporting the rapport-building hypothesis for LSM's function. However, for couples with high verbal similarity in conflict, rather than increasing rapport, the similarity seemed to exacerbate the negativity experienced by the couple – consistent with the aforementioned work on negative affect reciprocity (Gottman et al., 1977; Gottman, 1980). Instead of simply rapport building, it may be the case that LSM serves as a goal directed behavior meant to intensify whatever experience the couple is engaging in. If a couple is just meeting and seeking to establish rapport, LSM can serve that function (Ireland et al., 2011). If a couple is fighting, higher similarity can lead to more intense negative emotional experiences. The current study seeks to extend this literature by expanding into more contexts, as non-clinical couples do not seem to engage in conflict more than twice a month on average (Fincham, 2004). Furthermore, given that conflict in older adulthood is a very different experience when compared to conflict in middle adulthood (e.g., more positive; Carstensen, Gottman, & Levenson, 1995), it

is important to expand the scope of study to other communication contexts in addition to conflict, particularly those that older adults are more likely to engage in (e.g., reminiscence).

To expand the scope of study, it is important to consider a marital narrative as an additional context to conflictual interactions. Although the marital narrative task has been primarily utilized to predict marital stability for newlywed couples (Buehlman, Gottman, & Katz, 1992), it is likely that marital narratives told in later life after a couple has had decades together can be important indicators of marital satisfaction (McCoy, Rauer, & Sabey, 2016). Additionally, older adults are likely to engage in a marital narrative exercise in a vastly different manner than a younger couple, particularly concerning life review and satisfaction. According to Erikson's (1950) theory of psychosocial development, older adults are faced with the challenge of achieving satisfaction with their lives in the light of their mortality. The manner in which a person engages in life review can have significant impacts on their mental and physical health. For example, the more frequently that older adults engage in positive reminiscence activities (e.g., identity or death preparation), the greater their overall well-being (Cappeliez & O'Rourke, 2006). As a result, many adults engage in life review processes (e.g., reminiscence or storytelling; Butler, 2002), seeking to maximize the quality of the rest of their lives through the resolution of past conflicts and reinforcement of positive emotions. It is possible that couples high in LSM during reminiscence experience an improved sense of togetherness shared over the story of their relationship.

However, it should be noted that neither of these tasks need be inherently considered emotionally "positive" or "negative." Couples experiencing criticism *during* what is meant to be a supportive interaction may fare worse than those who experience criticism during conflict

(Graber, Laurenceau, Miga, Chango, & Coan, 2011). Other couples may even view conflict positively as long as it serves as a means to greater intimacy (Buehlman et al., 1992; Jacobson & Christensen, 1996). Because of the emotional weight of these conversational tasks, they can have profound influence on marital satisfaction (Johnson et al., 2005). Furthermore, although studies have found that LSM has differing effects based on rapport building, conflict, and supportive interactions (Bowen et al., 2016; Ireland et al., 2011), the effects of verbal similarity on reminiscence are unknown. Additionally, while a link between LSM and certain conversational contexts has been demonstrated in younger couples, it is unknown if LSM continues to serve similar functions as couples age. Evidence suggests that similarity in some characteristics that are beneficial to couples earlier in the lifespan prove to be detrimental for couples in later life (e.g., personality; Shiota & Levenson, 2007). It is possible that LSM follows a similar trajectory, in that the same behavior could have very different meaning and links to marital functioning later in the lifespan.

### **The Developmental Context of Older Adulthood**

According to Erikson's (1950) theory of psychosocial development, individuals have different goals to achieve depending on the stage of development they are experiencing. Older adults engage in a struggle between integrity and despair, where life review and appropriate action are theorized to lead to enhanced life satisfaction and developmental success (Butler, 2002). The desire to achieve a state of contentment when reflecting on the relationships of the past and the present may lead older adults to maximize emotionally satisfying relational interactions (Carstensen, 1992). As a result, it appears that older adults engage in conversational contexts in a different manner than younger adults. For example, whereas young couples may



frequently engage in conflict to solve problems in their relationships (Gottman & Krokoff, 1989) older couples appear to take a more passive approach to disagreements (Birditt & Fingerman, 2005), and show more affection during conflictual interactions (Carstensen et al., 1995). This shift in attitude and behavior indicates a desire to remain emotionally close to their partner and promote positivity regardless of conversation content.

However, it is not clear if the changes in developmental context and emotional behaviors apply to verbal similarity as well. As couples age together, they may find that similarity is less necessary to maintain a strong rapport. Conversely, they may employ verbal similarity to enhance their relational bond (Yabar et al., 2006). There is evidence to support similarity as being useful for couples in early life. For example, similarity between partners' individual characteristics (e.g., intelligence, educational background) is highly predictive of mate selection (for review, see Buss, 1985). It is possible that individuals with greater similarity may be better able to coordinate behaviors with one another. Indeed, higher LSM may be a foundational communicative behavior that allows similar individuals to discover rapport (Ireland et al., 2011).

Despite initially attracting people to one another, there is some evidence that similarity is related to negative trends in marital satisfaction in later life. For example, Shiota and Levenson, (2007) found that as couples moved from mid-life to older age, high similarity in personality traits (e.g., extraversion, conscientiousness) was actually predictive of declines in marital satisfaction. This change in how similarity affected marital satisfaction is likely due to the shifting demands associated with progressive aging (Erikson, 1950). Couples high on similarity in middle age may experience too much overlap where complementarity may be more suitable to tackle life's demands (e.g., childrearing; Anderson, Russell, & Schumm, 1983). After children

have moved on and individuals retire in older age, spending excessive amounts of time with an overly similar partner may simply be boring and unrewarding (Amato & Previti, 2003). It has yet to be determined if verbal behaviors follow the same trend. Rather than increasing rapport or enhancing felt experience, LSM may prove unnecessary or even harmful to relationship satisfaction as the relationship continues into the later years. Although LSM may have served a valuable role in coordinating behaviors in a couple's beginnings (Bowen et al., 2016), as time progresses, couples may prefer to coordinate in harmony rather than in unison.

### **The Current Study**

Given the importance of marriage and the incredible strain that individuals go through when marriages dissolve (Holmes & Rahe, 1967), it is logical to assume that most people want their romantic relationships to last for a lifetime. Furthering knowledge about what contributes to marital satisfaction and longevity is also important for clinicians to understand as they work with distressed couples. Perhaps, the most important factor regarding marital satisfaction is communication, as it is cited as the most common presenting problem for couples attending therapy (Miller et al., 2003). Although this has led to a large body of research on marital communicative behaviors, most of these have focused on non-verbal indicators (e.g., negative affect reciprocity; Levenson & Gottman, 1983). However, recent works by Ireland et al. (2011) and Bowen et al. (2016) have shown that the specific words used by couples can have an impact on coordinated relational functioning, with different effects based on the conversational context. However, these associations have only been evaluated in two contexts (e.g., conflict and support) with younger couples. In light of the aging U.S. population (U.S. Census Bureau, 2014), it is

important to expand the scope of study to include older couples in differing conversational contexts.

Accordingly, the current study is going to examine LSM across two different conversational contexts with older couples. Consistent with the pioneering work of Ireland and colleagues (2011), we will focus on nine different groups of function words: 1) personal pronouns (e.g., I, his), 2) impersonal pronouns (e.g., it, that), 3) articles (e.g., a, an), 4) conjunctions (e.g., and, because), 5) prepositions (e.g., in, about), 6) auxiliary verbs (e.g. shall, be), 7) high frequency adverbs (e.g., very, just), 8) negations (e.g., no, never), and 9) quantifiers (e.g., much, lots). Similarity across the entirety of the interaction and within each of the two interaction tasks will be calculated for couples and used to answer three research questions: 1) How is LSM related to both current and future marital satisfaction amongst older couples?; 2) Does the association between LSM and marital satisfaction depend on interactional context?; and 3) Does the association between LSM and satisfaction differ for husbands and wives?

We hypothesize that couples with high overall LSM scores across conversational contexts will report greater marital satisfaction as compared to couples with lower overall LSM scores, both in current and future marital satisfaction scores. However, we also hypothesize that LSM's links with marital satisfaction will depend on interactional context. Bowen and colleagues (2016) found a difference in the link between LSM and perceived affect depending on context. Specifically, couples with higher LSM in conflict experienced more negative emotions, and couples with higher LSM during support experienced more positive emotions. Although affect and satisfaction are not the same concept, there is evidence that the two are related and affected by one another (Johnson et al., 2005). In keeping with this evidence, we hypothesize

that couple's higher in LSM during the problem-solving task will have lower marital satisfaction as compared to couple's with higher LSM during the marital narrative. Finally, according to Bowen et al.'s (2016) investigation, there was evidence for differing effects based on the role in conversation, but conversational roles are not necessarily tied to gender. Therefore, we hypothesize that there will be no differences in the links between LSM and marital satisfaction for husbands versus wives.

The results of the current study will further elucidate the behavioral processes that may shape marital satisfaction and help refine the methods employed to assist older couples with communication issues. For example, if greater similarity is connected to greater marital satisfaction, clinicians can advise clients to adopt a more mimetic approach to conversations. Conversely, if verbal similarity seems to exacerbate problems in already stressful contexts, perhaps a more complementary approach would be advisable. As a result of the current study, clinicians will have more information regarding practices that are linked with marital satisfaction and hopefully be more effective in assisting distressed couples in need.

## Method

### Participants

Sixty-four married heterosexual couples were recruited to participate in a study investigating links between health and marriage in older adulthood. Couples were recruited through newspaper advertisements, churches, and various other community organizations in the Southeast United States. To participate in the study, the couples had to be married, at least partially retired (working less than 40 hours a week), and be able to drive to an on-campus research center as an indicator of reasonably good health.

On average, husbands and wives were approximately 71.42 years old ( $SD = 7.41$ ) and 69.45 years old ( $SD = 7.00$ ) respectively, and were predominantly White ( $n = 61$  and  $60$  out of  $64$ , respectively). The couples had been married for approximately 42.40 years on average ( $SD = 14.97$ ) and the vast majority (81.30% for husbands, 79.70% for wives) were in their first marriage. The majority of the pairs (89.10% of husbands and 67.20% of wives) had college or post-graduate degrees. The mean household income was \$85,875.00 ( $SD = \$64,074.49$ ) and average total wealth (including IRA's, pensions, income, and property) for the couples was \$1,082,547.62 ( $SD = \$1,277,611.95$ ). Of the original sixty-four couples, fifty-one husbands and fifty-four wives were retired. On average, husbands had 2.6 ( $SD = 1.39$ ) children and wives had 2.52 ( $SD = 1.29$ ) children.

### Procedure

Couples participated in two waves of data collection. During the first wave (Time 1), the couples engaged in a 2-3 hour marital interview consisting of relationship interaction tasks,

which constitute the focus of the current study. At the end of the Time 1 interview, each spouse was given a take-home questionnaire assessing individual health and marital quality. The couples were compensated with \$75 after completing and returning the questionnaires. Approximately one year later ( $M = 16.4$  months), fifty-five of the original sixty-four couples (86%) were re-contacted and agreed to participate in the study at Time 2. Upon agreeing to participate, couples were sent questionnaires via mail. After completing and mailing back the questionnaires, the couples were paid \$50. Attrition analysis revealed no significant differences (at  $p = .05$ ) between husbands or wives on any of the outcome variables.

## **Measures**

Couples participated in several relational tasks during a videotaped interview, two of which are the focus of the current study: 1) a marriage narrative task, and 2) a problem-solving task. The narrative task was performed with the interviewer present in the room. While the interviewer helped facilitate aspects of the conversation, the narrative was to be told in the couples' idiom with as little involvement as possible. In contrast, couples were left alone to complete the conflict task after receiving initial instructions from the interviewer. After giving instructions, the interviewer signaled to begin and finish by tapping on the glass of a one-way mirror in an observation booth.

## **Relationship Tasks**

**Marital narrative task.** The marital narrative was adapted from a similar task used in Holmberg, Orbuch, and Veroff's (2004) Early Years of Marriage (EYM) project. Couples were instructed to recount the story of their relationship from the past to the present and even speculate about the future. The story included the formation of the relationship, to the middle

years, to current experiences, and future expectations. As long as both members of the couple participated, they were instructed to share the story conversationally and in their own language and idiom, with minimal involvement from the instructor. The task was open-ended but couples, on average, completed the task in 31.84 minutes ( $SD = 13.19$ ). For more information on this task, see McCoy, Rauer, and Sabey (2016).

**Conflict task.** In the conflict task, couples were videotaped during a fifteen-minute problem-solving discussion. Before the task, the spouses were given a list of common marital problems (e.g., wanting to go out on more dates, needing to be more organized) and were instructed to individually rate each issue on its severity. Problem severity was rated on a 6-point Likert scale from 0 (*not an issue*) to 5 (*major problem*). After rating each issue, the couple was given 15 minutes to solve an issue of importance to them. The couple was instructed to first identify an issue to work on. If the couple was uncomfortable discussing a certain topic in the research setting, they were told to move on to the next top area of discussion until both were willing to discuss in the laboratory setting. The couple was instructed to allow each member time to express their viewpoint of the problem and determine a mutually agreed upon solution or compromise. Although fifteen-minutes were allotted to complete this task, couples, on average completed the task in 8.98 minutes ( $SD = 4.31$ ). For more information on this task, see Rauer, Williams, and Jensen (2015).

**Marital satisfaction.** Marital satisfaction was measured at both waves using the Marital Satisfaction Questionnaire for Older Persons (Haynes et al., 1992). This measure consists of 24-items and assesses both general and specific dimensions of marital satisfaction (e.g., communication/companionship, spouse's overall personality). Additionally, the measure

assessed satisfaction with developmental aspects of older adult relationships (e.g., spouse's physical health). The participants' responses were summed with higher scores indicating greater satisfaction. Reliability was excellent at both Time 1 (husbands:  $\alpha = .93$ ; wives:  $\alpha = .93$ ) and Time 2 (husbands:  $\alpha = .95$ ; wives:  $\alpha = .90$ ).

**Marital duration.** We used marital duration as a control in the analyses, as it has been demonstrated to have a significant, albeit negative, association with marital satisfaction (Van Laningham, Johnson, & Amato, 2001) Additionally, previous work by Spanier, Sauer, and Larzelere (1979) suggests that age and marital duration are highly related to one another. However, we chose marital duration instead of age as a control because some of the couples studied were on their second or third marriage. It may be the case that these couples have been married for a considerably shorter time than their counterparts, and if so, LSM may be impacting their relationship in a similar way to those studied by Bowen et al. (2016).

### **Linguistic Analysis**

These tasks were transcribed verbatim and double-checked for accuracy by a separate research assistant. Upon completing the transcription process, the transcripts were analyzed through the Linguistic Inquiry and Word Count (LIWC) software program to assess for Language Style Matching. Utilizing input from each partner in a dyad, LSM is a composite score measuring similarity in function word usage. These function words are broken up into nine categories: personal pronouns, impersonal pronouns, articles, conjunctions, prepositions, auxiliary verbs, high-frequency adverbs, negations, and quantifiers (Pennebaker, Booth, & Francis, 2007). To prepare for analysis, the conversations were transcribed and split into two separate text files, one for each partner, and cleaned to prepare for analysis by removing non-



verbal transcription notes (e.g., laughter) and non-word audible pauses (e.g., “Uh” or “Um”).

Rates of function word usage were then computed using the Linguistic Inquiry and Word Count software. The results were entered into the following formula:

$$LSM_{preps} = 1 - [ ( |preps_1 - preps_2| ) / (preps_1 + preps_2 + 0.0001) ]$$

This formula represents how the score for prepositions were calculated. The percentage of prepositions used by the first person is represented by *preps*<sub>1</sub>, the percentage of prepositions used by the second person is represented by *preps*<sub>2</sub>, and 0.0001 is added to the denominator to prevent empty sets. After scores were obtained for all nine categories, the sums are averaged for a total. This total ranged from 0 to 1 and higher scores represented greater similarity. One LSM score was calculated per couple, per relationship task, and a global LSM score was then additionally calculated for the couple across the two tasks.

### **Plan of Analysis**

Descriptive statistics, such as means, standard deviations, and skewness were first conducted to assess for normality of distribution. Next, paired t-tests were used to assess for gender differences in husbands’ and wives’ marital satisfaction at Time 1 and Time 2. Then, correlation analyses were examined for interrelationships between the study variables. Finally, a series of hierarchical linear regressions were conducted. To answer the first research question, two regression analyses were performed for each spouse to examine how marital satisfaction is predicted by similarity in language across the tasks. For the first set of regressions examining the links between global LSM and current marital satisfaction, Step One included marital duration as a control. In Step Two, the couple’s global LSM score was included as a predictor. To examine how global LSM was linked to changes in marital satisfaction across a year, the second set of

hierarchical regressions were conducted for each spouse. In these regressions, Step One introduced marital duration as a control. Step Two utilized husbands' current marital satisfaction as a baseline to account for changes in future satisfaction due to LSM. Finally, Step Three added the global LSM score.

To address whether the association between LSM and marital satisfaction depended on interactional context, a third set of hierarchical regressions were conducted for each spouse. To examine the links between LSM in the two interaction tasks (conflict, reminiscence) and current marital satisfaction, Step One again included marital duration as a control. Step Two included the two different LSM scores, one for each conversation task. In the second set of regressions designed to explore how LSM across both of the contexts was linked to changes in marital satisfaction across a year, Step One once again included marital duration as a control. Step Two utilized husband's current marital satisfaction as a baseline to account for changes in future satisfaction due to LSM. Finally, Step Three added the two different LSM scores, one for each conversation task.

## Results

### Preliminary Analysis

Descriptive statistics and bivariate correlations are presented in Table 1. Our couples displayed high levels of matching during problem solving ( $M = .91, SD = .04$ ) and reminiscence ( $M = .90, SD = .06$ ). There were no significant differences between the mean levels of LSM on either task suggesting that our couples showed stability in verbal matching across conversational contexts.

Paired sample t-tests revealed no significant differences between husbands' and wives' marital satisfaction at Time 1 and Time 2. When comparing within spouses over time, there were no significant differences in husbands' marital satisfaction between the two waves, indicating that husbands appear to have stable rates of satisfaction between Time 1 and Time 2. In comparison, wives' satisfaction appears to significantly decline over a year,  $t(54) = 5.02, p < .01$ .

Contrary to expectation, marital duration was not found to be significantly related to either LSM scores or marital satisfaction. There appeared to be a weak correlation between the two conversational tasks in that couples with higher verbal similarity in the marital narrative were also more likely to have higher similarity during the problem solving task,  $r = .23, p < .10$ . Greater overall similarity in language did not appear to be significantly related to husbands' marital satisfaction at either Time 1 or Time 2. However, for wives', a higher average LSM score was related to higher marital satisfaction at Time 1,  $r = 0.29, p < .05$ . These initial results suggest that verbal similarity was more related to wives' marital satisfaction than to husbands'. When examining the associations between LSM in the individual tasks and marital satisfaction, LSM

while problem solving was not significantly associated with marital satisfaction for husbands or wives at either Time 1 or Time 2. For husbands, there appeared to be no significant relationship between LSM during reminiscence and marital satisfaction at either time. However, wives of couples with high LSM during reminiscence were more likely to have higher marital satisfaction at both Time 1,  $r = .29, p < .05$ , and Time 2,  $r = .32, p < .05$ . The correlations between LSM and marital satisfaction again show that verbal similarity is more related to wives' marital satisfaction than to husbands'.

### **Global LSM and Current and Future Marital Satisfaction**

The first set of hierarchical linear regressions examined the unique contributions of Global LSM to Time 1 marital satisfaction, controlling for marital duration (see Table 2). The full model was not significant for husbands' Time 1 marital satisfaction, suggesting that overall verbal similarity is not predictive of husbands' current marital satisfaction. However, for wives' Time 1 marital satisfaction, the full model explained a significant amount of variance ( $R^2 = .05, p < .05$ ). Global LSM emerged as a unique predictor for wives' marital satisfaction at Time 1 ( $\beta = .30, p < .05$ ), suggesting that wives' in couples with higher overall verbal similarity were more satisfied than wives' in couples with less overall verbal similarity.

The second set of hierarchical linear regressions examined the unique contributions of Global LSM to Time 2 marital satisfaction, controlling for marital duration and Time 1 marital satisfaction (see Table 3). For husbands' Time 2 marital satisfaction, the full model did explain a significant amount of variance ( $R^2 = .34, p < .01$ ). However, Global LSM did not emerge as a unique predictor, as Time 1 marital satisfaction explained the vast majority of the variance observed ( $\beta = .62, p < .01$ ). For wives' Time 2 marital satisfaction, we found similar results. The

full model did explain a significant amount of variance ( $R^2 = .74, p < .01$ ). However, Global LSM did not emerge a unique predictor, because Time 1 marital satisfaction explained the vast majority of the variance observed ( $\beta = .89, p < .01$ ). These results suggest that current rates of both spouses' marital satisfaction are better predictors of future satisfaction than are rates of overall verbal similarity.

### **Context-Specific LSM and Current and Future Marital Satisfaction**

The third set of hierarchical linear regressions examined the unique contributions of LSM during problem solving and reminiscence to Time 1 marital satisfaction, controlling for marital duration (see Table 4). For husbands' Time 1 marital satisfaction, the overall model was not significant, suggesting that verbal similarity during both conflict and reminiscence tasks are not significant predictors of current marital satisfaction. However, for wives' Time 1 marital satisfaction, the full model did explain a marginal amount of variance ( $R^2 = .04, p < .10$ ). Between the two tasks, only LSM during reminiscence emerged as a unique predictor ( $\beta = .26, p < .05$ ), suggesting that wives' in couples with higher verbal similarity during the reminiscence task were more likely to have higher marital satisfaction than wives in couples' with less similarity.

The fourth and final set of hierarchical linear regressions examined the unique contributions of LSM during problem solving and reminiscence to Time 2 marital satisfaction, controlling for marital duration and Time 1 marital satisfaction (see Table 5). For husbands' Time 2 marital satisfaction, the full model explained a significant amount of variance ( $R^2 = .34, p < .01$ ). However, LSM for both problem solving and reminiscence did not emerge as unique predictors of Time 2 marital satisfaction, as Time 1 marital satisfaction ( $\beta = .61, p < .01$ )

accounted for the vast majority of the variance observed. For wives' Time 2 marital satisfaction, the full model explained a significant amount of variance ( $R^2 = .75, p < .01$ ). However, as with husbands, LSM for both problem solving and reminiscence did not emerge as unique predictors of Time 2 marital satisfaction, as Time 1 marital satisfaction ( $\beta = .88, p < .01$ ) accounted for the vast majority of variance observed. Similarly to the second set of regressions examining the links between changes in marital satisfaction and global LSM, it appears that current reports of husbands' and wives' marital satisfaction are better predictors of future marital satisfaction than LSM in either the problem solving or reminiscence tasks.

## Discussion

Despite the fact that older adults are one of the fastest growing populations in America (U.S. Census Bureau, 2014), many clinicians feel they are not prepared to meet the individual and relational needs of this community (Yorgason et al., 2009). Therefore, it is important to better understand relational processes in older adults, particularly those that can contribute to better marital satisfaction. Of the many factors contributing to marital satisfaction, communication has been demonstrated to be a particularly robust predictor of how spouses feel about their marriages (Levenson & Gottman, 1985). In recent work on younger couples, Ireland and colleagues (2011) have shown that even the level at which a couple match each others' language (LSM) is associated with relational functioning. To extend this literature to more established couples, the current study examined if LSM was related to older adults current and future marital satisfaction, whether the relationship was context specific, and whether the association differed for husbands and wives. The results suggested that greater global and reminiscence-based LSM were both predictive of greater current marital satisfaction, but only for wives. In contrast, LSM during conflict was not predictive of current marital satisfaction for either spouse. Finally, neither global nor context specific LSM were predictive of future marital satisfaction for either spouse. The results ultimately suggest that LSM plays a role in the communication of older couples, one of particular importance for wives during reminiscence.

### **Why Wives and Why Reminiscence? Exploring Specificity in LSM**

LSM is inherently a dyadic phenomenon, as it is created in communication between two people. Couples and groups are theorized to jointly produce LSM in a coordinated effort towards

a common purpose (Bowen et al., 2016; Tausczik & Pennebaker, 2013). Therefore, it is unclear why the relationship between LSM and marital satisfaction was only evident for wives, rather than the couple as a whole. Perhaps LSM serves to enhance communication experiences that are of particular importance to wives, such as emotion. Bowen and colleagues' (2016) demonstrated that higher LSM was associated with increases in felt emotion during communication. For example, couples in conflict were more likely to report increases in negative emotions if they had higher rates of LSM. It is possible that wives are simply more "in tune" to those enhanced emotional experiences than their husbands are. For example, Levenson and Gottman (1985) observed that, compared to their husbands', wives' satisfaction was more likely to be altered based on the emotional atmosphere of the relationship. Therefore, if LSM is magnifying the emotions felt during conversation, wives may be more adept at noticing this magnification and adjusting accordingly. In the case of our study, higher global LSM was linked with greater marital satisfaction for wives. However, it should be noted that this study does not clarify causal mechanisms, and higher levels of satisfaction could motivate the couple to match more closely. Highly satisfied older spouses may be more likely to mimic one another in their overall communication, but closer examination of context revealed a more nuanced association. In contrast to conflict, LSM during reminiscence appeared to be predictive of satisfaction, but for wives only. These findings suggest that the recall of relational memories is of particular importance for women.

Reminiscence has been demonstrated to be an important exercise for couples in general. Buehlman and colleagues (1992) demonstrated that even for young couples, the manner in which husbands and wives reminisced about their relationship was predictive of their future marital



stability. For example, couples that used more “we” language during reminiscence were more likely to stay married three years later than those who did not. Though important for young couples, it is likely that reminiscence takes on greater significance for older couples given their developmental stage (Erikson, 1950). Older adults are theorized to be in a struggle between integrity and despair, seeking to achieve satisfaction with their lives in the face of mortality. Therefore, reminiscence and life review (Butler, 2002) are especially salient aspects of older adult functioning, not only for the individual’s well-being (Cappeliez & O’Rourke, 2006), but also for couples’ marital satisfaction (McCoy et al., 2016). Therefore, it is not surprising that reminiscence emerged as a unique predictor of marital satisfaction.

What is still unclear is why this association with LSM during reminiscence was only found for wives’ marital satisfaction, and not husbands’. It is possible that reminiscence is an especially important exercise for older women in relationships. Ross and Holmberg (1992) found that wives had more vivid recollections of relational memories than their husbands and were more likely to attribute personal importance to these recalled events. Additionally, wives were more likely to reminisce and use emotional language during their recall than their spouses. This suggests that relational memories hold particular personal and emotional importance for wives. If so, LSM could be increasing the emotional experience of reminiscence, and wives’ marital satisfaction may shift accordingly. Why do we not see a similar poignancy for conflict-based conversations? The answer may lie in the altered nature of conflict in the later stages of life.

#### **Why Not Conflict and Why Not Husbands? The Significance of Non-Significant Findings**

Although LSM during conflict has previously been associated with increases in negative emotions in younger couples (Bowen et al., 2016), we did not find that it was linked to marital

satisfaction for older couples. Our lack of findings may be due to the fact that older couples tend to engage in conflict in a different, more positive manner than their younger counterparts (Carstensen et al., 1995). For example, older couples often utilize a passive approach to disagreements (Birditt & Fingerman, 2005), and they focus on warm, supportive emotions during problem-solving discussions (Rauer et al., in press). Therefore, it is reasonable to infer that older adults, in general, experience less negative affect during conflict and better marital satisfaction as a result. However, if that is the case, why did LSM in conflict not predict better marital satisfaction?

The answer could be methodological. On average, couples in our sample spent a third of the time in conflict ( $M = 8.98$ ,  $SD = 4.31$ ) that they spent in reminiscence ( $M = 31.84$ ,  $SD = 13.19$ ). Perhaps the reminiscence-based task held more emotional or cognitive weight for the couples because they spent more time recalling their memories than they spent problem solving. It is possible that if the time spent between the tasks was more comparable, then we would have found similar results between the tasks. In spite of these methodological concerns, there may also be a theoretical explanation related to the concept of “perpetual problems.”

Gottman and Levenson (1999) found that couples in conflict often discuss perpetual problems (e.g., longstanding issues for which the couple has not found solutions; Scuka, 2010) rather than solvable problems. They also found that some couples treat “perpetual issues” with an increased amount of negativity, whereas others look at them with a sense of humor and warmth. Therefore, any costs to marital satisfaction associated with discussing relational problems may be mitigated by the potential benefits of humor and warmth. If this is the case, it would help to explain why LSM during conflicts would be unrelated to their sense of

satisfaction. It is also possible that other conversational contexts (e.g., marital support; Acitelli & Antonucci, 1994) may carry more emotional weight, and therefore, be more closely related to LSM and marital satisfaction.

However, if LSM is magnifying emotional experiences in communication, then we may find that LSM in other communication contexts is still only related to wives' marital satisfaction. As previously mentioned, if wives are more attuned to the emotional facets of discussion than are their husbands (Levenson & Gottman, 1985), this could partially explain why LSM was not related to husbands' marital satisfaction. Even if LSM is magnifying the emotional experience of a conversation (Bowen et al., 2016), husbands may simply be paying more attention to other aspects of the conversation. Rauer and colleagues (in press) found that when older adults engage in problem solving, they are more likely to discuss instrumental issues (e.g., organization) than relational issues (e.g., sex). Furthermore, Acitelli (1992) observed that even when husbands talk more than their wives, they are less likely to be doing "relational" talk. In other words, husbands' appear to focus more on instrumental, rather than emotional, aspects of their marriage (Gove, Hughes, & Style, 1983). This suggests that even when husbands are talking with their wives, the focus of the conversation may be markedly different for each spouse. As a result, though LSM may be enhancing emotional experiences in conversation, the magnification may naturally be more related to wives' satisfaction than to husbands'.

### **Strengths and Limitations**

A natural extension of previous work by Ireland et al. (2011), and Bowen et al., (2016), this study is the first to examine the links between LSM and marital satisfaction in older couples. Another strength of the current study was the consideration of both partners' outcomes. Although

Bowen et al. (2016), showed that there were different effects on partners based on the roles they had in conversation, this study is the first to show differing associations between LSM and husbands' and wives' marital satisfaction. Additionally, this is one of the first studies to examine the links between LSM and marital satisfaction across time, and the first to examine longitudinal links at a follow-up of a year or more. Finally, this is the first study to examine LSM in a reminiscence-based task, which may serve a significant purpose for older adults engaging in life review processes (Butler, 2002). Furthermore, as reminiscence may be significantly related to marital satisfaction (McCoy, et al., 2016) and overall well-being (Cappeliez & O'Rourke, 2006), it was important to examine the links between LSM in a reminiscence-based task and older couples' marital satisfaction.

Despite further elucidating the role of LSM in romantic relationships, the study has some notable limitations. The couples in the sample were in disproportionately happy and stable marriages. Although the couples in the sample still displayed LSM, it may not have the same association with relational functioning as it does in less established couples. For example, Bowen and colleagues (2016) observed that younger couples with high LSM during conflict experienced greater negative emotions. This increase in negative emotions may be directly associated with declines in marital satisfaction (Levenson & Gottman, 1985). However, it appears that, in general, older couples engage in conflict in a more emotionally positive manner than do younger couples (Carstensen et al., 1995; Rauer et al., in press). Coupled with the fact that the couples studied were disproportionately happy, it is likely that our results are not applicable to the general population of older adults. Further study examining a more balanced sample of couples

may provide a more apt description of the links between LSM and marital satisfaction in older adult marriages.

Next, the current study does not clarify the causal mechanisms between LSM and marital satisfaction. It is possible that these husbands and wives displayed high LSM because they were highly satisfied, or that they were highly satisfied because they displayed high LSM. If it were possible to augment the levels of LSM in a conversation, the manipulation could help us understand if LSM predicts satisfaction or vice versa. Despite LSM being a non-conscious process (Ireland et al., 2011), research conducted by Tausczik and Pennebaker (2013) demonstrated that groups can improve their teamwork by increasing their LSM through the use of real-time feedback during text conversations. If couples could be given similar feedback during conversation, they may alter their levels of LSM and their marital satisfaction may shift as a result.

Finally, though the first to examine LSM during reminiscence, the couple's typical method of communication may have been altered because another person was witnessing and interacting (albeit at a minimal level) with the discussion. As discussed previously, Tausczik and Pennebaker (2013) demonstrated that LSM can be affected by input from an outside party. Given the design of our study, it is unclear whether the minimal input given by our experimenter inspired or discouraged LSM between the couple. Therefore, it is important that future studies demonstrate more awareness about the impact a third party can have on couples' verbal similarity and adjust their input accordingly.

## **Conclusion**

The current study is the first to demonstrate a link between LSM and older adult marriages, and as a result, provides greater understanding of the role that verbal matching has in relationships in later life. Matching appears to be of more significance to wives than husbands, particularly during reminiscence. It is possible that wives are paying more attention to emotions in conversation, which may be increased through the use of LSM (Bowen et al., 2016). However, future studies are needed to clarify the relationship between LSM and affect in older couples to explore if this helps explain the relationship between verbal matching and wives' satisfaction. Additionally, future studies should incorporate a greater variety of tasks to provide a more complete picture of the role that LSM can play in the marital satisfaction of older adults. For example, marital support not only been significantly linked to older adults well-being and marital satisfaction (Acitelli & Antonucci, 1994), but studies with younger couples find that LSM during supportive conversations predicts increased feelings of support (Bowen et al., 2016). It is possible that LSM during support is related to older adult marital functioning as well.

In light of the links between LSM and wives' marital satisfaction, the current study provides some possible implications for clinicians working with older couples, particularly regarding communication during reminiscence. Though many clinicians feel largely underprepared to work with older adults (Yorgason et al., 2009), those who have found success utilize theories that focus on behavioral change, such as Solution Focused Therapy (Walter & Peller, 1992). Behaviorally-focused therapies targeting verbal similarity may prove especially beneficial for enhancing older adult marital communication. However, LSM is a non-conscious process (Ireland et al., 2011), and clinicians may wonder how they can help improve a communicative process that couples are unaware they are participating in. In support of this

approach, Tausczik and Pennebaker (2013) demonstrated that groups can increase their LSM when given real time communication feedback, (e.g., asking group to pay more attention to what others are saying). This feedback translated into greater LSM, which was associated with higher levels of teamwork. This suggests that when their groups were asked to focus on conscious aspects of cooperation, they also increased their non-conscious verbal matching. Regarding marital communication, clinicians could provide feedback to couples, and direct them to focus on certain aspects of their discussion (e.g., “we” vs. “I” language; Buehlman et al., 1992). Couples may then increase their verbal matching and experience improved coordination as a result.

However, the link between matching and satisfaction appears to depend on the context. The current study found that LSM during reminiscence was predictive of wives’ satisfaction, but that LSM during conflict was not predictive for either spouse’s satisfaction. Therefore, perhaps the most helpful form of therapy combines behavioral changes in language specifically during reminiscence. One such therapeutic approach is Narrative Therapy, which focuses on reframing how couples tell their story. Narrative therapists are especially careful to notice the language used to recall past events and assist couples in re-structuring their story using revised language meant to promote cooperation between the couple (e.g., asking the couple to jointly discuss how their common problem affects their relationship, rather than blaming each other; Rosen & Lang, 2005). This kind of therapeutic intervention could have similar effects to the types of feedback that Tausczik and Pennebaker (2013) used to improve rates of group LSM. If so, couples may display greater LSM during their revised stories, and their increased matching may be related to improved marital satisfaction. Therefore, we suggest that clinicians working with older adults

consider Narrative Therapy as a possible tool to assist older couples with their relational needs. If Narrative Therapy does prove useful for older couples, then clinicians can feel more prepared to help this growing, yet underserved population (Yorgason et al., 2009).



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Table 1

*Bivariate Correlations, Means, and Standard Deviations*

	1	2	3	4	5	6	7	8
1. Marital Duration	1.00							
2. LSM Global	0.04	1.00						
3. LSM Problem Solving	0.08	0.73**	1.00					
4. LSM Story of Us	-0.01	0.83**	0.23†	1.00				
5. H Marital Satisfaction T1	-0.11	0.08	0.01	0.11	1.00			
6. H Marital Satisfaction T2	0.01	0.12	-0.03	0.18	0.61**	1.00		
7. W Marital Satisfaction T1	-0.02	0.29*	0.16	0.29*	0.57**	0.57**	1.00	
8. W Marital Satisfaction T2	-0.04	0.24	0.03	0.32*	0.45**	0.59**	0.87**	1.00
<i>M</i>	42.4	0.90	0.91	0.90	116.36	113.85	117.55	113.52
<i>SD</i>	14.97	0.04	0.04	0.06	18.07	17.57	14.57	15.28

Note: † $p < .10$ , \* $p < .05$ , \*\* $p < .01$



Table 2

*Hierarchical Regression Analysis for Global LSM Predicting Time 1 Marital Satisfaction*

	Husbands' Marital Satisfaction		Wives' Marital Satisfaction	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	-.01		-.02	
Marital Duration		-.11		-.02
Step 2	-.01		.07*	
Marital Duration		-.11		-.03
LSM Global		.09		.30*
Total R <sup>2</sup>	-.02		.05*	

Note: † $p < .10$ , \* $p < .05$ , \*\* $p < .01$

Table 3

*Hierarchical Regression Analysis for Global LSM Predicting Time 2 Marital Satisfaction*

	Husbands' Marital Satisfaction		Wives' Marital Satisfaction	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	-.02		-.02	
Marital Duration		.01		-.04
Step 2	.37**		.76**	
Marital Duration		.09		.05
Marital Satisfaction T1		.62**		.87**
Step 3	-.01		-.00	
Marital Duration		.09		.06
Marital Satisfaction T1		.62**		.89**
LSM Global		.06		-.06
Total R <sup>2</sup>	.34**		.74**	

Note: † $p < .10$ , \* $p < .05$ , \*\* $p < .01$

Table 4

*Hierarchical Regression Analysis for LSM Tasks Predicting Time 1 Marital Satisfaction*

	Husbands' Marital Satisfaction		Wives' Marital Satisfaction	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	-.01		-.02	
Marital Duration		-.11		-.02
Step 2	-.02		.06†	
Marital Duration		-.10		-.02
LSM Story of Us		.11		.26*
LSM Problem Solving		-.01		.11
Total R <sup>2</sup>	-.03		.04†	

Note: † $p < .10$ , \* $p < .05$ , \*\* $p < .01$

Table 5

*Hierarchical Regression Analysis for LSM Tasks Predicting Time 2 Marital Satisfaction*

	Husband's Marital Satisfaction		Wives Marital Satisfaction	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
Step 1	-.02		-.02	
Marital Duration		.01		-.04
Step 2	.37**		.76**	
Marital Duration		.09		.05
Marital Satisfaction T1		.62**		.87**
Step 3	-.01		.01	
Marital Duration		.09		.06
Marital Satisfaction T1		.61**		.88**
LSM Story of Us		.14		.01
LSM Problem Solving		-.08		-.08
Total R <sup>2</sup>	.34**		.75**	

Note: † $p < .10$ , \* $p < .05$ , \*\* $p < .01$