

## Research Report

## Pronouns in Marital Interaction

## What Do “You” and “I” Say About Marital Health?

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**ABSTRACT**—Recent studies in social psychology have found that the frequency of certain words in people’s speech and writing is related to psychological aspects of their personal health. We investigated whether counts of “self” and “other” pronouns used by 59 couples engaged in a problem-solving discussion were related to indices of marital health. One spouse in each couple had a diagnosis of obsessive-compulsive disorder or panic disorder with agoraphobia; 50% of the patients and 40% of their spouses reported marital dissatisfaction. Regardless of patients’ diagnostic status, spouses who used more second-person pronouns were more negative during interactions, whereas those who used more first-person plural pronouns produced more positive problem solutions, even when negative behavior was statistically controlled. Moreover, use of first-person singular pronouns was positively associated with marital satisfaction. These findings suggest that pronouns used by spouses during conflict-resolution discussions provide insight into the quality of their interactions and marriages.

How people talk to one another clearly reflects the nature and quality of their relationships. Less obvious is which variables are important to successful communication and relationship health. Recent findings in social psychology suggest that statistical analysis of easily countable features of linguistic corpora may provide some insight. Social psychologists, led by the work of Pennebaker (Campbell & Pennebaker, 2003; Cohn, Mehl, & Pennebaker, 2004; Pennebaker, Mehl, & Niederhoffer, 2003), have shown that the relative frequency of different types of words in individuals’ diaries and Web logs can predict their physical health improvements and important characteristics of their psychological adaptation, such as distancing from tragic

events. Marital researchers have included frequency of couples’ use of *we* in elaborate coding schemes of their oral-history narratives. Although these measures predict longitudinal outcomes, such as marital satisfaction and divorce (Buehlman, Gottman, & Katz, 1992; Gottman & Levenson, 1999), the independent contribution of word counts has not been explored in research on marriage. In the present study, we investigated whether pronoun use during a focused, face-to-face conversation is related to the quality of a dyad’s interaction and the overall health of their marriage.

Recent research on language has yielded at least one finding that appears to have surprised social psychologists. Pennebaker (2002) reported that his work originally focused on content words, such as those conveying emotion, as sources of linguistic insight into individual and social psychological processes. However, his group discovered that more information was present in what he termed *junk words*, such as prepositions, articles, and especially pronouns. Rather than regarding these words as junk, psycholinguists and sociolinguists have long regarded them as critical in shaping a shared world of meaning during linguistic communication. Pronouns provide an important means of establishing and maintaining the entities that are at the center of a discourse (Gordon, Grosz, & Gilliom, 1993; Sanford & Garrod, 1981). When those entities are humans, pronouns provide a powerful way of indicating their centrality to the discussion, as well as their social status (Brown & Levinson, 1987).

Aware of pronouns’ potential for capturing relationship attitudes, marital researchers have included pronouns in measures of marital bond (Buehlman et al., 1992; Buehlman, Siler, Carrière, & Gottman, in press). Buehlman’s *we-ness versus separateness* dimension, which includes judges’ ratings of spouses’ tendency to use *we* over *he*, *she*, and *I* during an oral-history interview, predicted couples’ concurrent interaction behavior and physiological reactivity, their marital satisfaction and likelihood of divorce at 3-year follow-up, and their interaction quality at 4-year follow-up (Buehlman et al., 1992; Gottman & Levenson, 1999). These findings suggest that *we* may capture important ways couples think about their marriages, but because pronoun ratings are only one of several components of the

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we-ness measure, these studies do not indicate whether pronoun frequencies alone predict marital outcomes or interaction quality.

Findings in social psychology have linked pronoun counts to social processes. First-person plural pronouns (e.g., *we*, *us*, *our*) appear to be markers of shared identity and affiliative motivation. Studies have found that people increase their use of first-person plural pronouns after a large-scale trauma (Stone & Pennebaker, 2002) or after a victory of their home football team (Cialdini et al., 1999). Highly committed partners also use *we* pronouns more frequently than less committed partners when writing about their romantic relationships (Agnew, Rusbult, Van Lange, & Langston, 1998). In contrast, first-person singular pronouns (e.g., *I*, *me*, *my*) and second-person pronouns (e.g., *you*, *your*) have been interpreted as indicants of individuated identity and of self-focus and other-focus of attention. Studies have found that high self-monitoring (other-focused) individuals use *you* more frequently than low self-monitoring individuals during unstructured peer interactions (Ickes, Reidhead, & Patterson, 1986) and that individuals high in trait anger use *you* more frequently than individuals low in anger during monologues (Weintraub, 1981). Similarly, numerous studies have linked first-person pronouns to self-focus (for a review, see Pennebaker et al., 2003).

Marital theorists have argued that, with respect to marital interaction, *I* statements facilitate adaptive communication processes, such as verbal immediacy and self-disclosure, whereas excessive *you* statements signal blaming or distancing attitudes (e.g., Hahlweg et al., 1984). However, in the only study of language use during marital interaction, Sillars, Shellen, McIntosh, and Pomegranate (1997) found that happier couples used both fewer second-person pronouns and fewer first-person pronouns, compared with less happy couples. No studies to date have evaluated the relationship between spouses' pronoun use and their actual behavior during interactions.

Past studies have lumped together all first-person pronouns, including the nominative case *I* and the accusative case *me*. However, factor analyses have yielded different factor loadings for *I* and *me* (Campbell & Pennebaker, 2003). Inductive analyses also have found that *me* occurs during narrative episodes and vivid, clear speech associated with therapeutic change, whereas *I* is more common during vague, abstract, and ruminative speech associated with lack of improvement (Mergenthaler & Bucci, 1999). The roles of *me* and *I* in marital interaction have not been explored; however, within the context of a problem-solving discussion, they are likely to be distinct. High levels of *me* may reflect passive strivings or victimization narratives characteristic of poor-quality interactions and decreased satisfaction. In contrast, *I* may reflect positive self-disclosure and perspective taking.

In the present study, we explored whether pronouns used by spouses during problem-solving interactions are correlated with the quality and outcome of their interactions and their overall relationship satisfaction. We hypothesized that pronouns rep-

resent markers of shared identity (e.g., *we*, *us*), "other" focus (*you*), active self (*I*), and passive self (*me*) associated with marital health. Transcripts were analyzed using Linguistic Inquiry Word Count (LIWC; Pennebaker, Francis, & Booth, 2001). Pronoun proportions were correlated with measures of spouses' negativity, generation of positive problem solutions, and self-reported marital satisfaction.

## METHOD

### Participants

Archived transcripts of problem-solving interactions between married ( $n = 54$ ) or cohabitating ( $n = 5$ ) partners (hereafter referred to as spouses) provided our data. Participants were outpatients who had obsessive-compulsive disorder or panic disorder with agoraphobia and were beginning treatment at American University in Washington, DC, or McLean Hospital in Belmont, MA (see Chambless & Steketee, 1999, for details), along with their spouses.

Participants averaged 37 years in age ( $SD = 9$ ). Ninety percent of the sample was Caucasian and 7% African American. Fifty-seven (97%) of the couples were heterosexual. Socioeconomic status of the couples spanned the range of Hollingshead's (1975) Four Factor Index of Social Position, from 16 to 66, with a median of 48 (e.g., minor professionals, small-business owners). According to Dyadic Adjustment Scale (DAS; Spanier, 1976) scores, 50% of the patients and 40% of the spouses were maritally distressed (scores less than 100); 57% of the couples included at least one spouse who reported distress.

### Measures

#### Interaction Coding

The Kategoriensystem für Partnerschaftliche Interaktion (KPI; Hahlweg & Conrad, 1983; Hahlweg et al., 1984) was used to code dyadic interactions. One of four raters assigned each utterance 1 of 10 verbal codes designed to measure behaviors considered by marital theorists and researchers to be functionally important in communication. In addition, each utterance was assigned a positive, negative, or neutral nonverbal code. Tapes of 40 couples were randomly selected for independent coding to determine interrater reliability. Reliability as calculated with intraclass correlation coefficients was satisfactory to excellent (.58 to .89) for all codes except "negative problem solution" (.37), which was rarely used. A composite measure of negative interaction behavior was based on Hahlweg and Conrad's (1983) categories. Total negative interaction behavior was computed as the average of the percentage of negative nonverbal codes and the percentage of negative verbal codes (including criticism, disagreement, justification, and negative-solution codes). The number of positive problem solutions (defined as constructive solutions and compromises) generated by each couple was used to index interaction success.

*Text Analysis*

Text analyses were carried out using the LIWC computer program (Pennebaker et al., 2001). Because we were interested in how spouses speak about themselves in relation to their partners, we created four variables to capture trade-offs between self and partner references. These were you-focus (*you*, excluding generic *you*, as in the expression “you know”), we-focus (*we*, *us*, *our*), I-focus (*I*), and me-focus (*me*). Each pronoun count was divided by the total number of first- and second-person pronouns.

*Dyadic Adjustment Scale*

The DAS (Spanier, 1976) is a self-report measure of marital satisfaction. The psychometric properties of this instrument are well established.

**Procedure**

Dyads were brought into a room with a video camera, given standardized instructions to consider the top issues facing their relationship, and asked to choose one to discuss for 10 min. Nearly a third (29%) of the couples selected problems related to the patient’s anxiety disorder, whereas the other two thirds discussed more general sources of conflict, such as communication and division of labor. Couples were instructed to work toward a mutually satisfactory resolution and then left alone to discuss the selected problems. Videotapes were subsequently coded for interaction behavior and transcribed for text analysis.

**RESULTS**

Descriptive statistics are presented in Table 1. With the exception of positive problem solutions, me-focus, and we-focus, measures were normally distributed. The positive-problem-solution distributions for patients and their spouses were positively skewed and not improved by any transformations; however, arcsine transformations (arcsine of the square root of *p*) improved the normality of the skewed pronoun distributions and

were used for all pronouns in the analyses. As predicted, I-focus and me-focus were not positively correlated for patients,  $r_s = -.1$  ( $p = .4$ ), or their spouses,  $r_s = .08$  ( $p = .6$ ).

Simple correlations between individuals’ pronoun use, interaction behavior, and marital satisfaction are presented in Table 2. Spearman rank correlations are reported for analyses involving positive problem solutions, because of its skewed distribution. Multiple regression analyses were also conducted to rule out interactions of diagnosis, gender, or conversation topic (anxiety related or not) with pronoun use. Predictors were centered to reduce collinearity with interaction terms (Aiken & West, 1991). Diagnosis, gender, and conversation topic did not interact with pronoun use and indices of marital health; thus, we interpret the simple correlations. With our sample size, power to detect a medium effect size ( $r$ ) of .30 was only .61 for the interaction measures and .54 for marital satisfaction. Thus, alpha was retained at .05 despite the number of tests conducted. To reduce the likelihood of Type I error, we limit our interpretation to those findings that were replicated across patients and their spouses.

**Marital Satisfaction and Interaction Quality**

As shown in Table 2, use of second-person pronouns was positively correlated with negative interactions. Also, marital satisfaction was marginally positively correlated with I-focus during the interactions. Effect sizes were small to medium-large. Correlations between pronoun use and marital satisfaction did not achieve full statistical significance, perhaps because the power of those tests was reduced by missing data.

**Problem Solving**

We-focus was associated with more positive problem solutions. The effect size was medium for both patients and their spouses. To rule out the possibility that these relationships were due to the fact that positive problem solutions and we-focus were both correlated with negative interaction behavior (positive problem

**TABLE 1**  
*Means, Standard Deviations, and Ranges of Variables Included in the Analyses*

Variable	Patients				Patients’ spouses			
	Mean	SD	Minimum	Maximum	Mean	SD	Minimum	Maximum
Negative interaction behavior	.32	.20	.02	.84	.28	.20	0	.87
Positive problem solutions	2	3	0	15	3	3	0	16
Marital satisfaction	102	22	47	141	101	22	52	135
Word count	765	381	140	1,896	799	341	211	1,582
You-focus	.30	.12	.05	.54	.34	.15	.05	.78
We-focus	.12	.13	0	.78	.14	.12	0	.51
I-focus	.45	.13	.08	.72	.40	.14	.13	.68
Me-focus	.07	.04	0	.20	.06	.03	0	.13

**Note.** Negative interaction behavior is an average of the proportions of negative verbal behavior and negative nonverbal behavior. Positive problem solutions is a raw count of constructive solutions and compromises suggested. Pronoun (focus) variables are the proportions of each word type over the total number of first- and second-person pronouns. The number of patients and of spouses was 59 for all variables except for marital satisfaction, for which 54 patients and 47 patients’ spouses provided data.

**TABLE 2**  
**Correlations Between Individuals' Pronoun Use and Their Interaction Behavior and Marital Satisfaction**

Pronoun variable	Negative interaction behavior	Positive problem solutions	Marital satisfaction
Patients			
You-focus	.41**	-.16	-.27*
We-focus	-.20	.32*	-.06
I-focus	-.16	-.06	.25+
Me-focus	.02	-.02	-.16
Patients' spouses			
You-focus	.49***	-.14	-.22
We-focus	-.33*	.38**	.09
I-focus	-.20	-.12	.27+
Me-focus	.27*	-.16	-.13

**Note.** Pronoun ratios were transformed using the arcsine of the square root of  $p$ . Spearman rank correlations are presented for positive problem solutions. Marital satisfaction was measured with the Dyadic Adjustment Scale. + $p < .1$ . \* $p \leq .05$ . \*\* $p \leq .01$ . \*\*\* $p \leq .001$ .

solutions:  $r_s = -.25$  for patients and  $-.11$  for their spouses; we-focus:  $r_s = -.13$  for patients and  $-.31$  for their spouses), we conducted multiple regression analyses. The number of positive problem solutions was the criterion, and negative interaction behavior and we-focus were predictors. The results of the multiple regression should be interpreted with caution because transformations were unsuccessful in eliminating heteroscedasticity. Controlling for negative interaction behavior, the semipartial correlation of we-focus and positive problem solutions continued to be significant for the spouses,  $sr = .39$  ( $p = .002$ ) and tended to be significant for the patients,  $sr = .22$ , ( $p = .08$ ).

## DISCUSSION

This study extends recent findings linking individuals' pronoun use and psychological adjustment by examining spouses' pronoun use during marital interaction. Our findings support the hypothesis that pronouns used by spouses during a focused problem-solving discussion are related to important aspects of their marital health.

Past relationship research has suggested a paramount role for first-person plural pronouns (e.g., *we*, *us*), which are hypothesized to reflect a couple's cognitive commitment. Although measures of we-ness attitudes in marriage have included these pronouns, the unique contribution of word frequency to these constructs has not been tested. In the present study, partners (i.e., both patients and their spouses) who used first-person plural pronouns more often than other partners during conflict-resolution discussions did not report greater marital satisfaction. However, they were more effective at generating mutually satisfactory problem solutions. Perhaps they had a greater sense of shared responsibility or stake in the problem discussed, which may have helped them collaborate more effectively. Enhanced

problem-solving skills may partially explain why couples who score high on we-ness (Buehlman et al., in press) have lower rates of long-term marital distress and dissolution than other couples.

Pronouns other than *we* were related to marital satisfaction and interaction negativity. As predicted by marital theory, use of *you* was positively correlated with negativity during problem discussions. Some support for the positive role of *I* was also found; spouses reporting greater marital satisfaction tended to use higher proportions of *I* than other participants did. *Me* was not linked to negative relationship variables as hypothesized; however, the lack of correlation between *me* and *I* in the present sample is consistent with past findings linking these pronouns to distinct psychological processes.

A question that arises from this work is how much couples' pronoun use reflects their automatic thought processes versus their strategic efforts to manage their interactions. Brown and Levinson (1987) argued that people adjust their verbal styles, with varying levels of consciousness, to manage their social interactions. Examination of specific transcripts suggested that spouses sometimes reframed a statement using *we* following their partners' complaint of being under attack. A related question is to what extent individuals perceive and respond to their partners' pronoun use independently of speech content.

Although the results suggest a positive role for *I* and *we* and a negative role for *you* in marital interaction, possible situational and sample influences on pronoun use should not be overlooked. For example, use of *you* in an interaction designed to elicit social support may be associated with different behaviors than use of *you* in a conflict interaction. Similarly, use of first-person singular pronouns may be adaptive in some contexts and not in others. Sillars et al. (1997) found that couples' marital satisfaction was negatively correlated with their use of first-person singular pronouns (e.g., *I*, *me*, *my*). Whereas in that study non-distressed couples were directed to avoid overly upsetting topics in their discussion of 8 to 10 daily problems, couples in the present study (about half of whom were maritally dissatisfied) were asked to focus on a single top issue facing their relationship. It is possible that the task of the present study pulled for more negativity, and that in this context, increased self-reference was beneficial. Finally, in all the couples in our sample, one partner was seeking treatment for an anxiety disorder. Although our interpretations have focused on patterns that generalized across patients and their spouses, characteristics of the couples and the communicative situation might have influenced their use of language. Using the methods developed here to examine language use in a broader range of couples and diverse situations will allow development of a richer understanding of how language use reveals the nature of marital interaction and potentially shapes the relationships of married couples.

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