SAGE *Article* Journal of Language and Social Psychology 2016, Vol. 35(2) 180–205

What a Difference a Pronoun Makes: *I/We* Versus *You/Me* and Worried Couples' Perceptions of Their Interaction Quality

Judith N. Biesen[1], Deborah E. Schooler[2], and David A. Smith[1]

DOI: 10.1177/0261927X15583114
jls.sagepub.com

Abstract

Purpose: We investigate the role of pronoun use in people's perceptions of relationship interaction quality, especially when partners experience worry. **Method:** Couples (*N* = 115) rated their anxiety and interaction quality and participated in a 15-minute problem-solving discussion. **Results:** *Me*-focus by actors and *You*-focus by actors and partners reliably correlated with perceived interaction quality. As well, a person's own, but not his or her partner's, worry moderated the association between pronoun use and perceived interaction quality. Pronoun use (actor *You*- and partner *Me*-focus) and perceived interaction quality were especially strongly associated for people with relatively lower levels of worry. A principal component analyses uncovered two underlying factors for pronouns: *self*-focus and *other*focus. Actor–partner analyses using underlying factors corroborated the results for individual pronouns. **Discussion:** These results support previous findings that specific pronouns are related

to worse outcomes, and this association may be a function of how worried partners are. Worry may contribute to interpersonal difficulties by overriding otherwise salient interpersonal cues.

Keywords

conflict, conversational analysis, discourse analysis, language choice, LIWC, couple, communication

[1]University of Notre Dame,
Notre Dame, IN, USA
[2]Gallaudet University,
Washington, DC, USA

Corresponding Author:
Judith N. Biesen, Department of Psychology, University of Notre Dame, 118 Haggar Hall, Notre Dame, IN 46615, USA.
Email: jbiesen@nd.edu

Word use has been studied as an indicator of psychological phenomena as diverse as personality (Mehl, Gosling, & Pennebaker, 2006), self-representation in social media (Bazarova, Taft, Choi, & Cosley, 2013), social hierarchy (Kacewicz, Pennebaker, Davis, Jeon, & Graesser, 2014; Sexton & Helmreich, 2000), lying and truth telling (M. L. Newman, Pennebaker, Berry, & Richards, 2003), scholastic performance (Robinson, Navea, & Ickes, 2013), thinking styles and cognitive processes (Hartley, Pennebaker, & Fox, 2003), and emotional problems such as depression (Frost, 2013; Rude, Gortner, & Pennebaker, 2004; for a comprehensive overview, see Tausczik and Pennebaker, 2010). With regard to romantic relationships, word use not only is an indicator of how people think about themselves and their relationships (e.g., Buehlman, Gottman, & Katz, 1992; Simmons, Gordon, & Chambless, 2005) but also predicts how couples perceive their relationship and interactions with each other both while they are involved with their partner (e.g., Slatcher, Vazire, & Pennebaker, 2008; WilliamsBaucom, Atkins, Sevier, Eldridge, & Christensen, 2010) as well as when they reflect on their dissolved relationships (Blackburn, Brody, & LeFebvre, 2014; Boals & Klein, 2005).

Specifically, dyads using more *We*-words in their interactions are perceived by others to be in closer relationships than those using fewer *We*-words (Fitzsimons & Kay, 2004). Family members (including spouses) who use more *We*-words are less critical (Simmons,

Chambless, & Gordon, 2008), and there is some evidence that nondistressed couples who use more *We*-Words are happier when discussing the male partner's topic of concern and are generally less negative in their conversations (Williams-Baucom et al., 2010). Similarly, couples who use more *We*-words are more likely to engage in and maintain positive health behaviors, such as smoking cessation (Rohrbaugh, Shoham, Skoyen, Jensen, & Mehl, 2012).

Couples who use pronouns that are less self-referencing (e.g., *I*) and less otherreferencing (e.g., *You*) report being happier than couples who use more of these pronouns (Sillars, Shellen, McIntosh, & Pomegranate, 1997). Simmons et al. (2005) partially replicated this in an investigation of pronoun use during a problem-solving discussion: Couples who used more *You*-pronouns were more likely to be negative in their conversations. However, in contrast with Sillars et al.'s (1997) findings, couples using more *I*-pronouns were generally happier. Similarly, Slatcher et al.'s (2008) analyses of college students' instant message conversations showed that women's but not men's *I*-focus predicted greater relationship satisfaction for both partners. WilliamsBaucom et al. (2010) used pronoun frequency to distinguish between distressed and nondistressed couples and were able to clarify some of the previous inconsistencies, especially regarding couples' *I*-focus. For distressed couples, greater *I*-use was associated with greater relationship quality, whereas for nondistressed couples *I*-use was associated with lower relationship quality.

Finally, researchers have argued that the use of the active *I* versus the passive *Me* serves different functions: Whereas *I*-statements are indicative of higher levels of selfdisclosure and the willingness to take responsibility (e.g., Hahlweg, Revenstorf, & Schindler, 1984), *Me* is associated with negative interaction behaviors and criticism (e.g., Simmons et al., 2008). *You*/*Me*-ness may even predict more negative long-term relationship outcomes, such as higher divorce rates and reduced relationship satisfaction (Buehlman et al., 1992).

Individuals' Pronoun Use and Personal Distress

Because pronoun use is indicative of interpersonal distress and because interpersonal distress is an important contributor to emotional problems, it is not surprising that pronoun use has also been studied as an indicator of personal distress (e.g., Junghaenel, Smyth, & Santner, 2008; Wolf, Theis, & Kordy, 2013), especially depression (e.g., Stirman & Pennebaker, 2001; Zimmermann, Wolf, Bock, Peham, & Benecke, 2013). For instance, Bucci and Freedman (1981) and Rude et al. (2004)

showed that compared to nondepressed people, depressed people use more first-person singular pronouns. Similarly, poets who later committed suicide used more self-referencing pronouns compared to poets who did not commit suicide (Stirman & Pennebaker, 2001). Zimmermann et al. (2013) showed that depressed people used more first-person singular and fewer *We*-words when discussing interpersonal relationships in an interview context than did nondepressed people.

Pronoun use is related to depression, and depression is highly comorbid with anxiety (e.g., Richards & O'Hara, 2014). Nevertheless, with the exception of some early studies investigating the role that verbal conditioning plays in increased first-person pronoun use among clinically anxious people (e.g., Alban & Groman, 1976), few studies have specifically addressed the connections between pronoun use and worry. In considering this literature, it is important to note that clinical anxiety is characterized by the experience of chronic, excessive worry over multiple life circumstances. While typical nonclinical worriers experience similar symptoms, they do so to a lesser extent and with less functional impairment. As well, while clinical anxiety (e.g., generalized anxiety disorder [GAD]) is diagnosed using in-person interview protocols based on current *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.)) criteria (American Psychiatric Association, 2013), subclinical levels of anxiety (e.g., worry) can be assessed using validated self-report questionnaires, such as the Penn State Worry Questionnaire (Meyer, Miller, Metzger, & Borkovec, 1990). The relative neglect of worry as a research topic is especially surprising considering the fact that researchers have suggested worriers are more likely to be self-focused in their language compared to nonworried people (Mor & Winquist, 2002). Chung and Pennebaker (2007) showed that self-focus is related to greater use of *I*-words and other-focus is related to greater use of *You*-words (Ickes, Reidhead, & Patterson, 1986). Combining the theoretical expectation that worriers are more self-focused with the empirical connection between self-focus and *I*- versus *You*-words, it is reasonable to expect that like depressed people worriers will make greater use of *I*-words and less use of *You*-words than nonworriers.

Couples' Pronoun Use and Relationship Distress

When research is conducted with participants who are recruited individually, relationship effects are constrained to be within-person. That is, one person's pronoun use can be related only to his or her own relationship distress and well-being. When research is conducted with participants who are recruited as couples, however, between-spouse

pronoun use can be studied as an indicator not only of personal well-being but also of spousal well-being. For example, a recent study showed that both psychological and physical health outcomes are related to the ratio of first-person plural to first-person singular (*We*/*I*-ratio) word use during couple interactions (Robbins, Mehl, Smith, & Weihs, 2013). Using *We*-words has also been shown to predict reduced depressive symptoms when writing about one's relationship (Frost, 2013) and marginally during a couple's discussion (Robbins et al., 2013). Boals and Klein (2005) found that people used more first-person singular pronouns when writing about their relationship postbreakup compared to when they wrote about it about prebreakup. Schweinle, Ickes, Rollings, and Jacquot (2010) reported a positive association between both first-person singular and plural pronoun use with men's aggressive behavior toward their wives; they suggested this may be indicative of husbands' attempts to manipulate their wives. Finally, Robbins et al. (2013) found that own and partner *You*-use was related to increased depression.

Couples' Communication and Worry

With an overall prevalence of 14% (Whisman, 2007) and substantial overlap with depressive symptomology (e.g., Mineka, Watson, & Clark, 1998), worry has also been studied as a correlate of couple communication. These studies have primarily focused on couples with more severe mental health issues, such as panic disorder with and without agoraphobia (Halford, Bouma, Kelly, & Young, 1999). Research addressing the association between agoraphobic anxiety and couple communication has shown that higher levels of anxiety are related to more negative communication patterns (Craske, Burton, & Barlow, 1989; Hickey et al., 2005), problematic relationship attributions, as well as a decrease in satisfaction and relationship dissolution (Hope, Rodgers, & Power, 1999). Data on the impact of both men's and women's worry are inconsistent, with different studies suggesting different associations between worry and relationship functioning (see Dehle & Weiss, 2002; McLeod, 1994).

In a more recent study examining daily processes in couples with a female partner who had been diagnosed with GAD, Zaider, Heimberg, and Lida (2010) found that relationship quality was poorer if anxious women rated their spouses lower on measures of support, encouragement, and communication. Interestingly, the association between anxiety and relationship quality disappeared if anxious women rated their partner highly on these behaviors, suggesting that the

presence of negative interaction patterns (as opposed to the presence of positive interaction patterns) in couples with anxiety may affect relationship quality. In an unpublished investigation of marital quality of couples with anxious wives, Dutton (2002) found that anxious women, compared to female controls, were more likely to report mutual avoidance and more likely to evaluate interactions with their partner as negative. Husbands of anxious women did not differ from male controls in their evaluation of relationship interactions.

To date, although several studies have used subjects with clinical levels of anxiety to study relationship quality and pronoun use (Simmons et al., 2005; Zimmermann et al., 2013), no research has assessed the role elevated worry plays in couples' interactions and specifically how it affects the association between pronoun use and the way partners perceive their interactions with each other. Simmons et al. (2005) controlled for factors related to the diagnosis (e.g., the discussion topic was about the partner's anxiety), but they did not further investigate the role that anxiety played in participants' conversations. They did notice, however, that pronoun use of the anxious patient and the other person (in most cases their spouse) were positively related to each other (R. Simmons, personal communication, June 22, 2012), a pattern that appears to be fairly consistent among couples' interactions (e.g., Williams-Baucom et al., 2010).

Current Study

Overall, previous research has established a reliable association between pronoun use and various relationship constructs, including relationship satisfaction and communication quality (e.g., Williams-Baucom et al., 2010). Similarly, research also suggests that couples with worried partners differ from couples with nonworried partners on a variety of relationship constructs, especially communication (e.g., Hickey et al., 2005) and relationship satisfaction (e.g., McLeod, 1994). With the established role of pronoun use in couples' interactions as a point of departure, we wanted to determine the extent to which a person's worry relates to the perceived quality of couple interaction patterns. In doing so, we conceptualized perceived quality of couple interaction patterns as peoples' personal and subjective assessments of their communication. These ratings capture how partners feel and think about how well they interact with their partner, using their own implicit criteria for communication quality. This contrasts with observational ratings of couple communication, which instead capture the content of couple's interactions according to criteria specified a priori by researchers. The

goal of the current study was therefore to examine the degree to which both one's own and one's partner's trait worry moderated the association between pronoun use and global perceived interaction quality. Consistent with previous research, we predicted the following hypotheses:

Hypothesis 1a: There is a negative association between actor worry and perceived interaction quality.
Hypothesis 1b: There is a negative association between *You*-focus and perceived interaction quality.
Hypothesis 1c: There is a negative association between *Me*-focus and perceived interaction quality.
Hypothesis 1d: There is a positive association between *We*-focus and perceived interaction quality.

Given previous inconsistencies in reported associations between *I*-focus and relationship functioning, we did not formulate a hypothesis concerning *I*-focus.

Our hypothesis regarding worry as a moderator is twofold. In light of findings that suggest that worriers tend to perceive social interactions more negatively when others in fact do not perceive them that way (e.g., Erickson & Newman, 2007), we predicted the following:

Hypothesis 2a: Actor but not partner worry moderates the association between pronoun use and perceived interaction quality.

Moreover, Zaider et al.'s (2010) finding that on the majority of high-anxiety days anxious women report that their husbands both made their anxiety worse and appeased it suggested that worriers may be generally more sensitive to their partner's behavior. Therefore, we predicted the following:

Hypothesis 2a: Actor worry moderates the association between pronoun focus and perceived interaction quality, such that the associations between pronoun use and perceived interaction quality are stronger for relatively worried people than for relatively less worried people.

Finally, out of a concern that use of one pronoun precludes use of another pronoun at the same time and that this builds dependency into the findings in this area of research, we explored the factor structure of pronoun use. If different pronouns are indicators of the same underlying

construct, then extracted pronoun factors should produce results comparable to those based on individual pronouns. This structural analysis of pronoun use protects against reporting one finding as multiple findings simply because multiple indicators of the same construct are analyzed separately.

Method

Participants

We recruited 115 heterosexual couples from a liberal arts university and a local community college in California. Mean age for the sample was 25.45 years (*SD* = 9.30). Racial and ethnic representation was consistent with the geographic location as well as the student body at both institutions (37% Caucasian, 28% Hispanic, 15.7% Asian or Pacific Islander, 9% African American, 5% Middle Eastern, 1.6% American Indian, 2.9% other, and 0.8% unknown).

The minimum length of relationship required to participate in the current study was 6 months. We set this minimum requirement as we were concerned that relationships of a shorter duration may be qualitatively different from those of longer duration, perhaps in commitment, accumulated stress, reliability of communication styles, and stability of worry. To obtain a large enough sample size and as much of a diverse sample as possible, we imposed no further restrictions on relationship length or status. The final sample consisted of couples who on average had been together for 3.23 years (*SD* = 3.15, range: 6 months-19.6 years). The majority of couples were in dating relationships (47%), followed by cohabiting (25.4%), married (14.4%), engaged (9.0%), other (3.4%), and unknown (0.8%). Two female same-sex couples who had responded to recruitment also participated in the study; however, because it would have been difficult to estimate any meaningful difference between same- and opposite-sex couples given this small sample, the two same-sex couples were removed prior to data analysis.

Procedure

In addition to completing a battery of questionnaires assessing demographic information, level of worry, and perceived interaction quality, each partner was also asked to identify a problem in their relationship that they were most worried about and that they would be willing to discuss while being audio or video recorded. Participants completed all self-report questionnaires before the discussion task to

obtain a general global assessment of communication quality that was unaffected by the specific discussion being investigated. On completion of all measures, each couple was instructed to discuss each person's problem for 7 minutes and to try to reach a solution for each problem. All conversations were audio- or videotaped and transcribed for subsequent analyses. With the exception of men's *Me*-focus ($p = .029$), couples who elected to be video- versus audiotaped did not differ on any of the variables reported in this article (all ps > .05 for men and women). On finishing the study protocol, participants were compensated with class credit and entry into a raffle to win an MP3 player.

Measures

Penn State Worry Questionnaire (PSWQ; Meyer et al., 1990). This 16-item measure assesses the extent of pathological worry. It includes items such as "My worries overwhelm me" and "Many situations make me worry." Participants rate how typical each statement is of them on a scale from 1 (*not at all typical*) to 5 (*very typical*). Thus, total scores can range from 16 to 80. Past research has shown the PSWQ to have excellent test–retest reliability ($r = .92$ over 8-10 weeks; Meyer et al., 1990), good convergent validity (Meyer et al., 1990) as well as internal consistency across a variety of different age-groups, including a community sample (Pallesen, Nordhus, Carlstedt, Thayer, & Johnsen, 2006), undergraduate students (Meyer et al., 1990), and older adults (Beck, Stanley, & Zebb, 1995). To aid in the interpretation of worry levels reported in this investigation, it is worth noting that with the exception of one study that reported a cutoff score of 45 to discriminate between treatment-seeking GAD individuals and nonanxious individuals (Behar, Alcaine, Zuellig, & Borkovec, 2003), the majority of studies report that a cutoff score in the lower to mid-60s best differentiates clinical from nonclinical participants (e.g., Behar et al., 2003; Chelminski & Zimmerman, 2003; Fresco, Mennin, Heimberg, & Turk, 2003). Cronbach's alpha estimates of the internal consistency reliability of the PSWQ ranged from .82 for men to .90 for women in the current study.

The Premarital Communication Inventory (PCI; Bienvenu, 1975). The PCI is a 40-item measure of global, perceived premarital communication quality that is an extension of Bienvenu's (1970) Marital Communication Inventory. Partners are asked to indicate on a 3-point scale (*Yes, No, Sometimes*) to what extent questions such as "Do the two of you settle your disagreements to your satisfaction?' or "Do you find it difficult to talk with your partner?" apply to the communication

patterns with their partner. Higher scores indicate better interaction quality. The measure has demonstrated good test– retest reliability over 10 weeks (r = .59; Ginsberg & Vogelsong, 1977), and it evidenced adequate internal consistency in the current study (women: α = .83; men: α = .81). Although clinical cutoff scores for this instrument have not been established, the PCI has been shown to be sensitive to changes resulting from a communicationfocused intervention but not to an intervention that does not address communication (Pino, 1982). Schlein (1971) also demonstrated that the PCI is strongly related to Navran's (1967) Primary Communication Inventory (r = .40, p < .001). The PCI has been used with married couples and unmarried couples who have no plans for marriage (Herzog & Cooney, 2002; Schlein, 1971). Following Herzog and Cooney (2002), we replaced the term *fiancé* with *partner* on the PCI.

Marital Adjustment Test (MAT; Locke & Wallace, 1959). The MAT is a widely used 15-item measure of marital adjustment that assesses domains of disagreements, commitment, cohesion, and overall happiness. This measure has adequate internal consistency and test–retest reliability (Freeston & Pléchaty, 1997; Locke & Wallace, 1959). Scores on the MAT range from 2 to 158 with higher scores indicating better couple adjustment. To test whether the inconsistent *I*-focus literature might be the result of mixing clinical and nonclinical samples, we used the MAT to classify couples as distressed or not, using the traditional cutoff of 100. Couples were considered to be evidencing significant distress if either the partner scored lower than 100 on the MAT.

Linguistic Inquiry and Word Count Computer Program (LIWC; Pennebaker, Chung, Ireland, Gonzales, & Booth, 2007). The LIWC is a computerized text analysis program that categorizes and quantifies word use from written transcripts. The LIWC compares each word of a document to an internal dictionary, assigns each word to a specific linguistic category, and then calculates the percentage representation of each word relative to a predefined or user-determined category of words used. For the current study, we examined the following four pronoun categories: *I*-focus (e.g., I, I'), *You*focus (e.g., you, you', ya, y', your*), We-focus (e.g., let's, our, ours*, us, we, we'), and *Me*-focus (e.g., me, my, mine, myself), where each pronoun count was divided by the total number of words spoken; a procedure that is consistent with other studies (e.g., Robbins et al., 2013, Slatcher et al., 2008). In sum, each

participant's pronoun score indexes the use of that pronoun as a proportion of the total words they spoke.

Data Analysis

Data were fit with an actor–partner independence model (Kashy & Kenny, 2000; Kenny, Kashy, & Cook, 2006). In traditional individual-level data analyses, observations are assumed to be independent of each other. Nonrandomly assigned dyads do not meet these criteria, so it is necessary to treat individual partners as dependent observations nested within dyads. Doing so permits separate estimation of the extent to which unique and interdependent processes determine the behavior of partners in close, ongoing relationships. Specifically, one can estimate both *actor* effects (the within-person effects of participant characteristics on their own outcomes) and *partner* effects (the between-person effects of participant characteristics on their partner's outcomes).

For each pronoun (*I*-, *You*-, *Me*-, and *We*-focus) as well as for worry, actor, partner, and actor × partner interaction associations with perceived communication quality were estimated using hierarchical linear modeling 6.04 (Raudenbush, Bryk, Cheong, & Congdon, 2004). To clarify the nature of significant interactions, follow-up simple slope analyses were conducted using a web utility (Shacham, 2009) designed to probe interaction effects in hierarchical linear modeling (Aiken & West, 1991; Preacher, Curran, & Bauer, 2006). All variables were centered on the grand sample mean prior to model fitting.

Results

Couples' Discussions

To provide a context for understanding the current data, couples' conversations were coded based on what each partner initially indicated as the topic he or she wanted to discuss. Descriptions ranged from a single word to two to three sentences. During an initial review of topics by the lead author, two coders were assigned to code each partner's topic; based on that initial topic coding, revisions were made to the categories as needed. For a second round of coding, another set of two raters coded each topic; in the case of disagreement, raters met with the lead author until an agreement was reached. Interrater agreement was computed by examining agreement between the coders using codes independently generated by each coder before meetings with the lead author. The final interrater agreement was 85.78%. A total of nine

categories emerged (see Table 1) with the majority of partners discussing issues related to how they communicate and handle conflict. Table 2 provides sample excerpts from conversations of two different couples in this study, with identifying information removed to protect participants' privacy. Because our sample was diverse in their relationship lengths, it would be reasonable to assume that couples who had been together for longer may have different relationship concerns than those who only dated for a relatively short period of time. This, however, was not the case, with two exceptions: Couples who had been together longer were more likely to discuss health issues ($p < .05$) as well as household chores ($p < .001$). Although it is tempting to interpret the correlations of these two topics with relationship length, given the many nonsignificant topic correlations with relationship length, it seems prudent to await replication of these effects first. It is also worth noting that the two significant topics were chosen only 3% and 1% of time, respectively. There were no differences for any other topics.

Table 1. Topics Discussed by Couples.

Topic	Example	%
Communication/handling conflict	"Communication on what each of us want in the relationship"	23
Own or partner's specific characteristics or behaviors	"My boyfriend is sometimes too easy going and that makes me uptight, especially since I'm a little self-conscious about things"	13
Distrust, jealousy, infidelity	"Whether or not he would cheat again"	12
External factors (e.g., job, money)	"Financial strains are preventing us to live together and get out of living with our families"	9
Relationship termination, feeling rejected, dissatisfied	"He doesn't care for me as much as I do for him"	8
Extended family/children	"How well our children (and we) will deal with the combining of our families"	6
Mental and physical health	"How my OCD effects her well-being and level of stress"	3
Sex/physical intimacy	"Having sex more often"	2
Household chores	"Cleaning up clutter around the house"	1
Other	For example, participant chose two problems	9

Note. OCD = obsessive–compulsive disorder

Worry

Descriptive analyses of means and standard deviations, as well as inferential group comparisons and zero-order correlations for pronoun

categories are shown in Tables 3 and 4. Dependent samples *t* tests showed the difference between men's (M = 47.07, SD = 10.63) and women's (M = 57.07, SD = 14.44) worry to be statistically significant, $t(114) = 6.98$, $p < 0.001$. Despite the statistically significant difference between men's and women's worry scores, both men and women fell below commonly used cutoffs for GAD "caseness" (e.g., Behar et al., 2003). Men (M = 95.34, SD = 8.68) and women (M = 95.05, SD = 9.50) did not differ in their ratings of interaction quality, $t(113) = 0.36$, *ns*.

Role of Relationship Satisfaction

Because our sample consisted of couples with varying relationship lengths, we tested whether pronoun use was related to relationship length. With one exception, pronoun use was not related to relationship length: Couples who had been together longer were more likely to use *We*-words in their conversations (r = .23, $p < .01$), but no other significant associations emerged.

Structure of Pronoun Use

Apart from their status as possible markers of relationship satisfaction and mental health, pronoun use is also of interest in its own right. Not only might the covariance

Table 2. Examples of Conversations.

Couple 1	Couple 2
Her: What the hell, why don't you tell me the truth?	*Him*: Yeah, I'm quite confident in interviews. It's just a matter of getting to that point I suppose.
Him: Like what?	*Her*: I guess . . .
Her: You're such a douche. You tell me one thing and then the next time you're telling me another. So make up your mind and tell one thing.	*Him*: But I'm also worried that, you know, a minimum wage job won't cut it. I feel like I'm wasting my time half the time getting a job, you know, when I could be focusing on other areas or entertaining myself so I don't go crazy. You know, I feel like I don't have a certain level of entertainment sometimes so I'll, you know, I'll procrastinate.

Him: I don't know, sometimes I just don't want to be in a relationship and I tell you that all the time and then you start doing . . .

Her: You don't tell me that all the time!

Him: Yeah I've told you that and then you start doing your little crying thing and then . . .

Her: Okay, so!

Him: It makes me feel bad.

Her: Why do . . . Okay, why does it make you feel bad? I told you if you don't want to be in a relationship then don't be in a relationship, because you're just hurting me even more. You're just leading me on. Duh. That's why I said that we weren't in a relationship the other day because I knew you were just saying this to make me feel better. And I don't want to hear that. And that's why I don't trust you. I didn't make you do something you don't want to do. And I told you that from the beginning.

Him: Yeah, and whenever I started telling you that I don't want to be in a relationship then you start telling me well I . . . why, why don't we just blah blah blah . . .

Her: Entertainment outside of us or part of us as well?

Him: Outside of us.

Her: I guess like just to kind of get back to that topic, like yeah it's going to be hard as hell to wait until we're able to do that but, I don't know. I guess, I guess still living separately kind of gives us a chance for both of us to develop ourselves before we make it to that point where we can still live together. I want to live with you and like I know you want to live with me. But I do think like, although the outside situations are kind of forcing us to wait, I think it's also good that we wait anyway.

***p<.001.** p<.01.* p<.05. ^{+}p<.10.

Table4. MeansandStandardDeviationsforPronounCategoriesandWorryforMenandWomen.

	I focus		*We* focus		*You* focus		*Me* focus		Worry
Statistic	Women	Men	Women	Men	Women	Men	Women	Men	
M	0.074	0.077	0.018	0.017	0.059	0.052	0.017	0.017	0.0547.09
SD	0.019	0.020	0.010	0.011	0.022	0.018	0.007	0.007	0.0714.4410.63
t	−1.37		0.58		2.51*		0.64		6.98***
d	−0.18		0.08		0.33		0.08		0.79

*Note.*Numbersforpronounsreflectratiosofpronounsusedrelativetoallwordsspoken.
***p<0.001.** *p*<.01.* *p*<.05.

 among pronouns indicate multicollinearity that could complicate multivariate analyses, but structural analyses of couples' pronoun use might also indicate more general constructs underlying their use. For instance, a predisposition to focus on one's self versus one's partner might give rise to positive correlations between *I* and *Me*, which then in turn would correlate negatively with *We* and *You*. Or a self-focus factor that connects *I* and *Me* might be orthogonal to a factor that connects *We* and *You.* Or the four pronouns might capture four separate constructs, meaningfully distinguishing important aspects of the four perspectives they represent.

A consistent pattern emerged for the within-person zero-order correlations for both men's and women's pronoun use. *We*-words were inversely related to *I*-words (women: $r = -.25$, $p < .01$; men: $r = -.31$, $p < .001$), *You*-words (women: $r = -.34$, $p < .01$; men: $r = -.25$, $p < .001$), and *Me*-words (women: $r = -.28$, $p < .01$; men: $r = -.46$, $p < .001$). For both men ($r = .31$, $p < .001$) and women ($r = .25$, $p < .01$), *I*-words and *Me*-words were positively correlated with each other. For women ($r = -.20$, $p < .05$) but not for men, there was a significant, negative association between *I*-words and *You*-words. For between-partner associations, if women used more *You*-words, men also used more *You*-words ($r = .21$, $p < .05$), and similarly, if women used more *We*-words, so did men ($r = .61$, $p < .001$).

Of the between-partner/between-pronoun associations, it is notable that there was a positive association between *You*-words and *I*-words (men's *You*-words/women's *I*-words: $r = .35$, $p < .001$, women's *You*-words/men's *I*-words: $r = .35$, $p < .001$), and a negative association between *You*-words and *We*-words (men's *You*-words/women's *We*-words: $r = -.29$, $p < .001$, women's *You*-words/men's *We*-words: $r = -.26$, $p < .001$). In addition, if men used more *Me*-words, women were less likely to use *We*words ($r = -.32$, $p < .001$) but more likely to use *You*-words ($r = .29$, $p < .001$).

Finally, we also conducted an exploratory principal components analysis with both varimax (orthogonal) and promax (oblique) rotation to help identify any structure underlying pronoun use. Using either rotation method, two meaningful factors emerged. The component correlations with the promax method were .02 for women and .16 for men, both of which are below the recommended criterion of .32 for adopting an oblique rotation method (Tabachnick & Fidell, 2007). Consequently, we report results only of the varimax (orthogonal) rotation. The first two factors that emerged explained a total of 70.30% of the variance for women and 70.24% of the variance for men. Three of the four pronouns loaded on the first factor (tentatively labeled as Selffocus): *I*-words, *Me*-words, and *We*-words (with the latter loading in the opposite direction of the first two). This factor explained 37.39% of the variance for women and 44.63% of the variance for men. *You*-words loaded on the second factor (tentatively labeled Other-focus), which explained an additional 30.57% of the variance for women and an additional 26.61% of the variance for men.

Worry, Pronoun Use, and Perceived Communication Quality

Because pronoun use may be related to one's own and to one's partner's perceived communication quality, we conducted five separate actor–partner independence model

analyses with worry, *We*-focus, *You*-focus, *Me*-focus, and *I*-focus as predictors (Hypotheses 1a-1d). Four significant effects emerged. Actor worry (b = −0.12, $p <$ .01), actor *Me*-focus (b = −2.594, $p < .001$), as well as both actor (b = −0.56, $p < .05$) and partner *You*-focus (b = −0.78, $p < .05$) were predictive of perceived interaction quality, indicating one perceives the interactions with one's partner more negatively to the extent that one is relatively more worried, if one uses more *Me*- and *You*-words, and if one's partner makes relatively greater use of *You*-words. None of the other perceived communication quality effects were significant. Because previous research on *I*-words has been inconsistent and because Williams-Baucom et al. (2010) reported effects in different directions for distressed and nondistressed couples, we also tested whether distress was a significant moderator of the association between *I*-focus and perceived interaction quality. Distress level did not moderate the association of perceived interaction quality with either actor *I*-focus (b = −0.38, *ns*) or partner *I*-focus (b = −0.05, *ns*).

Parallel analyses using the factor analytic results showed that self-focus (viz., Factor 1, consisting of *I*-focus, *Me*-focus, and *We*-focus) was not significantly related to perceived communication quality. However, both actor (b = −1.50, $p < .01$) and partner (b = −1.86, $p < .01$) Other-focus (viz., Factor II, consisting of *You*-focus) were significantly associated with perceived communication quality. See Table 5 for a complete list of these results.

Worry as a Moderator

Finally, we were interested in the impact of both own and partner worry as moderators of the association between pronoun use and perceived interaction quality. Consistent with our Hypothesis 2a no significant results emerged for partner worry, but actor worry moderated several of the associations between pronoun use and ratings of interaction quality (see Table 5). Specifically, actor worry moderated the association between actor *You*-focus and perceived communication quality (b = 0.05, $p < .01$). As an aid for interpretation, the bivariate association was tested at one standard deviation above and below the worry mean. For those who were relatively high in worry (i.e., 1 standard deviation above the mean), there was no association between one's own *You*focus and perceived communication quality (b = 0.01, *ns*), while for those who were relatively low in worry (i.e., 1 standard deviation below the mean) a negative association between own *You*-focus and perceived communication quality emerged (b = −1.24, $p < .01$), which was inconsistent with our Hypothesis 2b. Additionally, actor worry (Hypothesis 2a) was a moderator of the association between partner pronoun focus and communication quality in two additional instances. Actor worry moderated the association between partner *Me*-focus and perceived communication quality (b = 0.18, $p < .01$), such that there was no association between these variables for people who were relatively high in worry (b = 1.94, *ns*), but a significant negative association emerged for people relatively low in worry (b = −3.06, $p < .01$), which, again, was inconsistent with our Hypothesis 2a.

Even though worry was not a significant moderator of the associations between perceived communication quality and either *We*-focus or *I*-focus, given previous

Table 5. Results of Actor–Partner Independence Models of Perceived Interaction Quality Predicted by Pronoun Use and Worry, and the Interaction of Pronoun and Worry.

	Main effects			Actor worry × pronoun			Partner worry × pronoun		
Variable	B	*SE*	*T*	B	*SE*	*T*	B	*SE*	*T*
I-focus									
Actor	0.37	0.25	1.46	−0.02	0.02	−1.23	−0.00	0.02	−0.06
Partner	0.30	0.30	0.99	0.04	0.02	1.75†	−0.01	0.02	−0.44
Me-focus									
Actor	−2.59	0.91	−2.85**	−0.05	0.06	−0.91	−0.12	0.08	−1.51
Partner	−0.69	0.85	−0.81	0.18	0.06	3.02**	0.01	0.06	0.20
We-focus									
Actor	0.15	0.67	0.22	−0.03	0.06	0.45	−0.03	0.06	−0.57
Partner	0.62	0.65	0.95	0.01	0.06	0.26	0.07	0.06	1.22
You-focus									
Actor	−0.57	0.29	−1.98*	0.05	0.02	3.08**	−0.02	0.02	−0.07
Partner	−0.78	0.1	−2.52*	−0.01	0.02	−0.26	0.00	0.02	0.20
Factor 1									
Actor	−0.69	0.54	−1.26	−0.04	0.03	−1.10	0.02	0.05	0.41
Partner	−0.15	0.63	−0.24	−0.10	0.05	2.11*	0.03	0.04	−0.76
Factor 2									
Actor	−1.50	0.56	−2.68**	0.08	0.03	3.03**	−0.01	0.04	−0.25
Partner	−1.86	0.54	−3.42**	0.03	0.03	−0.75	−0.00	0.03	0.08
Worry									
Actor	−0.12	0.04	−3.27**	—	—	—	—	—	—
Partner	−0.01	0.05	0.18	—	—	—	—	—	—

Note. Factor 1 = *I*-focus + *We*-focus + *Me*-focus; Factor 2 = *You*-focus.
**$p < 0.01$. **$p < 0.05$. $^{\dagger}p < 0.10$.

inconsistencies in the literature, as well as Williams-Baucom et al.'s (2010) moderation effects of marital distress for *I*-focus, we also examined whether *I*-focus associations differed for distressed and nondistressed couples. Treating distress level as a moderator, however, did not alter the *I*-focus and perceived interaction quality associations in the present data, either for actor anxiety (Actor *I*-focus: b = 0.03, *ns*; partner *I*-focus: b = −0.03, *ns*) or for partner anxiety (Actor *I*-focus: b = 0.03, *ns*; partner *I*-focus: b = 0.01, *ns*).

Tests of Self- (Factor I) and Other-focus (Factor 2) factors showed actor worry to be a significant moderator (b = −0.10, $p < .05$) of the association between partner

selffocus and perceived communication quality. While significant moderation indicates regression slopes change in a linear fashion across levels of the moderator, neither of the simple slopes at 1 standard deviation above or below the worry mean differed significantly from zero. Actor worry also moderated the relationship between actor Other-focus and communication quality (b = 0.08, $p < .01$). In this case, there was no association between Other-focus and communication for highly worried people (b = −0.53, *ns*) and a negative association for less worried people (b = −2.68, $p < 0.001$).

Discussion

This study unites several segments of the couples research literature. Previous research has shown that heightened levels of worry are related to more negative couple outcomes, including poorer relationship satisfaction and communication quality (e.g., Dehle & Weiss, 2002). Similarly, the use of specific pronouns has been shown to predict how couples feel and think about their relationship and how they behave (e.g., Williams-Baucom et al., 2010). Our goal was to integrate these findings by empirically testing the role of worry in the context of an established pronoun use and perceived communication quality effect. Last, we explored the underlying structure of pronoun use and tested whether analyses based on each pronoun might replicate at the level of general factors underlying pronoun use.

Worry and Pronoun Use as Predictors of Perceived Communication Quality

Consistent with Hypothesis 1a, worry predicted perceived communication quality; however, this was only the case for actor worry and not partner worry. There are several potential explanations for this. One's own worry may produce more negative interactions, which one then accurately perceives as more negative. However, if this were the case, it would be reasonable to expect that partners would also view the interaction more negatively.

Alternatively, worried people may perceive interactions differently than nonworried people. Mennin, Heimberg, Turk, and Fresco (2005) suggest that anxious people have difficulties with emotional experiences and consequently engage in less adaptive emotion regulation strategies, such as excessive worry. As a result, they misread cues in their environment, which then leads to interpersonal difficulties (Borkovec, Newman, Pincus, & Lytle, 2002). Erickson and Newman (2007) finding that worried people often misjudge their impact on other people supports this view, suggesting that the present moderator effects are more consistent with perceptual than actual differences in communication quality. Observational studies of couple interactions would clarify the contributions of perceptual and actual communication differences such as these.

We also found that if one's self and one's partner used more *You*-words, one was more likely to rate the interaction more negatively (Hypothesis 1b). This likely comes

as no surprise to marital therapists, and it is also consistent with a great deal of previous research (e.g., Simmons et al., 2005; Simmons et al., 2008; Williams-Baucom et al., 2010), which has repeatedly shown the use of *You*-words to be associated with more negative outcomes across different populations (community couples, clinic couples, students, etc.), age-groups (young adults, middle-aged, older, etc.), and contexts (face-to-face problem-solving interactions, instant message conversations).

Similarly, if a person used more *Me*-words during their interaction (Hypothesis 1c), they perceived the interaction more negatively. This is consistent with previous findings that greater use of *Me*-words is related to negative interaction behavior (Simmons et al., 2005) and decreased positive interaction behavior (Williams-Baucom et al., 2010). Given that couples' problem-solving discussions typically center on one partner, the person likely uses *You*-words to blame and passive *Me*-words to deflect responsibility for the problem.

We-words (Hypothesis 1d) did not predict perceived communication quality. This was not expected as previous research had shown that individuals using more *We*words are perceived as having close emotional ties to others (Chung & Pennebaker, 2007), making it reasonable to assume that they themselves and others perceive their interactions more positively. Moreover, Simmons et al. (2005) had shown that couples' use of *We*-words was strongly related to both fewer negative interaction behaviors and more problem-solving behaviors.

I-focus was not a significant predictor of perceived communication quality, even if couples were distressed (Williams-Baucom et al., 2010). Therefore, our findings follow a perplexing pattern of inconsistent associations between these two constructs, leaving our understanding of the association between couples' use of *I*-words and various relationship variables unclear.

Worry as a Moderator

Although not all prior findings were replicated in our data, several significant associations emerged once we added worry as a moderator between pronoun use and perceived communication quality. Specifically, we found that the relation between perceived communication quality and either one's own *You*-focus or one's partner's *Me*-focus depended on one's own worry (Hypothesis 2a). Partner's worry, on the other hand, did not play a role. It is especially notable that after assessing the simple slopes for the significant two-way interactions, the simple slopes between pronoun use and perceived communication quality were significant only for people who had low levels of worry, which is inconsistent with our predictions (Hypothesis 2b).

You-focus has been consistently related to couples' interaction behavior as well as lower relationship happiness (e.g., Sillars et al., 1997; Simmons et al., 2005; WilliamsBaucom et al., 2010). Contrary to our hypothesis, this effect is significant only for people experiencing low levels of worry, whereas it is nonsignificant for worried people. M. G. Newman and Erickson (2010) argued that extreme worry affects people in a variety of ways, leading to inconsistent interaction patterns; while

some worriers engaged in increased reassurance-seeking behaviors, others cut themselves off emotionally from other people to alleviate discomfort. These two opposing behaviors may explain the absence of significant associations between pronoun use and perceived communication quality for worried people in the current study. Nonworried people are more emotionally and cognitively stable and thus more consistent in their reactions to, and interpretation of, interactions. Because previous findings show that higher *You*focus is generally indicative of worse communication, this may help explain the presence of the significant, negative association between the two variables for nonworried people. Their reactions are tied to the actual interactions and are not overridden by the emotional and cognitive biases associated with worry.

The same logic applies to the negative association between partner *Me*-focus and communication ratings. Previous studies showed different functions for the passive *Me* versus active *I*. Whereas *I* is commonly associated with a more adaptive communication process (Hahlweg et al., 1984) and may be reflective of positive self-disclosure (Simmons et al., 2008), *Me* is associated with increased criticism (Simmons et al., 2008) and to some extent with negative interaction behavior (Simmons et al., 2005; Simmons et al., 2008). Nonworriers may react more to their partner's actual use of *Me*, and any criticism carried by passive voice, while worriers might be more prone to rely on biased perceptions and heurstic reasoning in their evaluation of the communication. A closer examination of the actual communication behaviors, perhaps using observational coding, would help elucidate these phenomena.

Worry was not a significant moderator of the association between *We*-words and perceived communication quality. Given previous research that shows a positive association between couples' *We*-focus and health behaviors such as smoking cessation (Rohrbaugh et al., 2012) and satisfaction for couples with anxiety-disordered partners (Simmons et al., 2005), our nonsignificant findings are somewhat surprising. One would expect that partners of worried persons would use supportive language, including the use of *We*-words, to foster a sense of collaborativeness (e.g., Rohrbaugh et al., 2012).

Replication of Findings With Underlying Pronoun Constructs

We also tested whether there was an underlying structure to pronoun use and whether analyses based on any underlying factors would perform the way the individual pronouns performed. The first factor (Self-focus) consisted of *I, We*, and *Me*-Focus, with *You*-focus loading on the second factor (Other-focus). Consistent with the results of the pronoun variables, we found a main effect of Other-focus (both actor and partner) but did not find a main effect for Self-focus, which confirms the importance of *You*words relative to other pronoun categories. The factor score results in the moderation analyses were also consistent with our analyses of the individual pronoun categories. Own worry moderated the relation between partner's self-focus and one's perception of communication quality. In accord with our findings with the individual pronouns, people who used language consistent with an Other-person focus were only less satisfied with the communication quality if they were less worried.

Limitations and Future Research

Several limitations to the study should be noted. First, given that all participants were recruited from higher education institutions, the generalizability to the general population remains to be established. Students, for example, are more likely to experience higher levels of worry (Eng & Heimberg, 2006); therefore, it is possible that heightened worry in the current sample was primarily the result of dealing with issues related to education.

Second, although we used a self-report measure that can distinguish between different levels of worry, appropriate generalization to clinical levels of worry (e.g., GAD) are not assured. It would be safer to restrict interpretation of these findings to excessive concern and worry and not to clinical anxiety until appropriate studies are conducted.

Third, in the current investigation, we asked participants to rate the overall quality of the communication before they engaged in the discussion task with their partner. This was done intentionally to obtain a global and stable as opposed to a laboratorybased, specific discussion, situational assessment of people's perception of their communication. However, because the communication measure was administered before participants engaged in the interaction task, we did not examine how couples perceived the quality of the specific interaction they had during their lab visit. Future research might test for discrepancies between the association of pronoun use with global and specific lab-based ratings of communication qualities.

Fourth, while the LIWC accurately counts words, it does not take into consideration the context in which these words are spoken. It is possible that the experimental situation in which couples completed their discussions affected their interaction style and word use, yielding nonrepresentative samples of communication.

Fifth, given that participants in the current study were generally young and had been together for a relatively short amount of time, their pronoun usage may not have been representative of established couples' communication style. Previous research has shown that the word use of both individuals and couples is related to age (e.g., Pennebaker & Stone, 2003) and relationship length (e.g., Seider, Hirschberger, Nelson, & Levenson, 2009). Younger couples may not have the same collaborative orientation; instead of viewing themselves as a "*We*," they may be more likely to view themselves as "*You*" and "*I*." Therefore, additional research is needed to test whether the current findings replicate and whether associations between *We*-words and relationship constructs are more likely to be significant in more established couples.

Finally, the current data are correlational and, thus, do not allow for causal inferences. It appears reasonable that as a result of both partners making more or less use of specific pronoun categories, a person perceives the interactions with his or her partner in a certain way. However, it is equally possible that as a consequence of previous interactions, partners are more or less likely to use certain pronouns in future conversations. Experimental data are needed to understand whether teaching couples more positive interaction patterns (specifically to express themselves through more

I/*We* statements and fewer *Me*/*You* statements) would result in a more positive perception of their interactions.

Future research might also extend the current findings by examining emotion words (e.g., Slatcher et al., 2008). Observer-based ratings of couples' interaction may add important information to further understand the role of worry and couples' pronoun use during their interactions (e.g., Simmons et al., 2005). Finally, measures of relationship satisfaction (e.g., Williams-Baucom et al., 2010) and relationship dissolution (Frost, 2013) could add to our understanding of this phenomenon.

Conclusion

Overall, this work supports the conclusion that own worry plays an important role in couples' relationships and how couples perceive their interactions with each other. Specifically, own worry but not one's partner's worry seems not only to relate to perceived communication quality but also to moderate the association between pronoun use and how a person views interactions with his or her partner. This suggests that it is a person's worry that is associated with a negative *subjective appraisal* of a situation; it is not worry *causing objectively* negative interactions (which partners in turn evaluate more negatively). Moreover, when worry emerged as a moderator, the association between pronoun use and interaction quality was significant among nonworried but not worried people. This underscores the importance of studying pronoun and word use during couples' interactions across a range of individual differences, including subclinical emotional variation and possibly even clinical disorders.

Acknowledgments

Many thanks to the research assistants Nina Shenker, Megan Rangel, Marissa Obispo, Carina Oropeza, Mengtian Zhao, and Katherine McManus for their help with the data collection and coding. Furthermore, we would like to thank our two anonymous reviewers for their valuable comments on our article, and Howard Giles for his courtesy and direction.

Declaration of Conflicting Interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship and/or publication of this article.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Alban, L., & Groman, W. (1976). Neurotic anxiety, pronoun usage and stress. *Journal of Clinical Psychology*, *32*, 393-399.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Bazarova, N. N., Taft, J. G., Choi, Y. H., & Cosley, D. (2013). Managing impressions and relationships on Facebook: Self-presentational and relational concerns revealed through the analysis of language style. *Journal of Language and Social Psychology*, *32*, 121-141.

Beck, J., Stanley, M., & Zebb, B. (1995). Psychometric properties of the Penn State Worry Questionnaire in older adults. *Journal of Clinical Geropsychology*, *1*, 33-42.

Behar, E., Alcaine, O., Zuellig, A. R., & Borkovec, T. D. (2003). Screening for generalized anxiety disorder using the Penn State Worry Questionnaire: A receiver operating characteristic analysis. *Journal of Behavior Therapy and Experimental Psychiatry*, *34*, 25-43.

Bienvenu, M. J. (1970). Measurement of marital communication. *The Family Coordinator*, *19*, 26-31.

Bienvenu, M. J. (1975). A measurement of premarital communication. *The Family Coordinator*, *24*, 65-68.

Blackburn, K., Brody, N., & LeFebvre, L. (2014). The I's, we's, and she/he's of breakups: Public and private pronoun usage in relationship dissolution accounts. *Journal of Language and Social Psychology*, *33*, 202-213.

Boals, A., & Klein, K. (2005). Word use in emotional narratives about failed romantic relationships and subsequent mental health. *Journal of Language and Social Psychology*, *24*, 252-268.

Borkovec, T., Newman, M., Pincus, A., & Lytle, R. (2002). A component analysis of cognitivebehavioral therapy for generalized anxiety disorder and the role of interpersonal problems. *Journal of Consulting and Clinical Psychology*, *70*, 288-298.

Bucci, W., & Freedman, N. (1981). The language of depression. *Bulletin of the Menninger Clinic*, *45*, 334-358.

Buehlman, K. T., Gottman, J. M., & Katz, L. F. (1992). How a couple views their past predicts their future: Predicting divorce from an oral history interview. *Journal of Family Psychology*, *5*, 295-318.

Chelminski, I., & Zimmerman, M. (2003). Pathological worry in depressed and anxious patients. *Journal of Anxiety Disorders*, *17*, 533-546.

Chung, C., & Pennebaker, J. (2007). The psychological functions of function words. In A. E. Kruglanski & J. P. Forgas (Series Eds.) & K. Fiedler (Vol. Ed.), *Social communication* (pp. 343-359). New York, NY: Psychology Press.

Craske, M., Burton, T., & Barlow, D. (1989). Relationships among measures of communication, marital satisfaction and exposure during couples treatment of agoraphobia. *Behaviour Research and Therapy*, *27*, 131-140.

Dehle, C., & Weiss, R. (2002). Associations between anxiety and marital adjustment. *Journal of Psychology*, *136*, 328-38.

Dutton, S. S. (2002). Marital relationship functioning in a clinical sample of generalized anxiety disorder clients. *Dissertation Abstracts International*, *62*, 4216B.

Eng, W., & Heimberg, R. G. (2006). Interpersonal correlates of generalized anxiety disorder: Self versus other perception. *Journal of Anxiety Disorders*, *20*, 380-387.

Erickson, T. M., & Newman, M. G. (2007). Interpersonal and emotional processes in generalized anxiety disorder analogues during social interaction tasks. *Behavior Therapy*, *38*, 364-377.

Fitzsimons, G. M., & Kay, A. C. (2004). Language and interpersonal cognition: Causal effects of variations in pronoun usage on perceptions of closeness. *Personality and Social Psychology Bulletin*, *30*, 547-57.

Freeston, M. H., & Pléchaty, M. (1997). Reconsideration of the Locke-Wallace marital adjustment test: Is it still relevant for the 1990s? *Psychological Reports*, *81*, 419-434.

Fresco, D. M., Mennin, D. S., Heimberg, R. G., & Turk, C. L. (2003). Using the Penn State Worry Questionnaire to identify individuals with generalized anxiety disorder: A receiver operating characteristic analysis. *Journal of Behavior Therapy and Experimental Psychiatry*, *34*, 283-291.

Frost, D. M. (2013). The narrative construction of intimacy and affect in relationship stories: Implications for relationship quality, stability, and mental health. *Journal of Social and Personal Relationships*, *30*, 247-269.

Ginsberg, B., & Vogelsong, E. L. (1977). Premarital relationship improvement by maximizing empathy and self-disclosure: The PRIMES Program. In B. G. Guerney Jr. (Ed.), *Relationship enhancement: Skill-training programs for therapy, problem prevention, and enrichment* (pp. 268-288). San Francisco, CA: Jossey-Bass.

Hahlweg, K., Revenstorf, D., & Schindler, L. (1984). Effects of behavioral marital therapy on couples' communication and problem-solving skills. *Journal of Consulting and Clinical Psychology*, *52*, 553-566.

Halford, W. K., Bouma, R., Kelly, A., & Young, R. M. (1999). Individual psychopathology and marital distress: Analyzing the association and implications for therapy. *Behavior Modification*, *23*, 179-216.

Hartley, J., Pennebaker, J., & Fox, C. (2003). Using new technology to assess the academic writing styles of male and female pairs and individuals. *Journal of Technical Writing & Communication*, *33*, 243-261.

Herzog, M. J., & Cooney, T. M. (2002). Parental divorce and perceptions of past interparental conflict: Influences on the communication of young adults. *Journal of Divorce & Remarriage*, *36*, 89-109.

Hickey, D., Carr, A., Dooley, B., Guerin, S., Butler, E., & Fitzpatrick, L. (2005). Family and marital profiles of couples in which one partner has depression or anxiety. *Journal of Marital and Family Therapy*, *31*, 171-182.

Hope, S., Rodgers, B., & Power, C. (1999). Marital status transitions and psychological distress: Longitudinal evidence from a national population sample. *Psychological Medicine*, *29*, 381-389.

Ickes, W., Reidhead, S., & Patterson, M. (1986). Machiavellianism and self-monitoring: As different as "me" and "you." *Social Cognition*, *4*, 58-74.

Junghaenel, D., Smyth, J., & Santner, L. (2008). Linguistic dimensions of psychopathology: A quantitative analysis. *Journal of Social and Clinical Psychology*, *27*, 36-55.

Kacewicz, E., Pennebaker, J. W., Davis, M., Jeon, M., & Graesser, A. C. (2014). Pronoun use reflects standings in social hierarchies. *Journal of Language and Social Psychology*, *33*, 125-143.

Kashy, D., & Kenny, D. (2000). The analysis of data from dyads and groups. In H. Reis & C. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 451-477). New York, NY: Cambridge University Press.

Kenny, D., Kashy, D., & Cook, W. (2006). *Dyadic data analysis*. New York, NY: Guilford Press.

Locke, H. J., & Wallace, K. M. (1959). Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, *2*, 251-255.

McLeod, J. (1994). Anxiety disorders and marital quality. *Journal of Abnormal Psychology*, *103*, 767-776.

Mehl, M. R., Gosling, S. D., & Pennebaker, J. W. (2006). Personality in its natural habitat: Manifestations and implicit folk theories of personality in daily life. *Journal of Personality and Social Psychology*, *90*, 862-77.

Mennin, D. S., Heimberg, R. G., Turk, C. L., & Fresco, D. M. (2005). Preliminary evidence for an emotion dysregulation model of generalized anxiety disorder. *Behaviour Research and Therapy*, *43*, 1281-1310.

Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the Penn State Worry Questionnaire. *Behaviour Research and Therapy*, *28*, 487-495.

Mineka, S., Watson, D., & Clark, L. A. (1998). Comorbidity of anxiety and unipolar mood disorders. *Annual Review of Psychology*, *49*, 377-412.

Mor, N., & Winquist, J. (2002). Self-focused attention and negative affect: A meta-analysis. *Psychological Bulletin*, *128*, 638-662.

Navran, L. (1967). Communication and adjustment in marriage. *Family Process*, *6*, 173-184.

Newman, M. G., & Erickson, T. M. (2010). Generalized anxiety disorder. In J. G. Beck (Ed.), *Interpersonal process in the anxiety disorders: Implications for understanding psychopathology and treatment* (pp. 235-259). Washington, DC: American Psychological Association.

Newman, M. L., Pennebaker, J. W., Berry, D. S., & Richards, J. M. (2003). Lying words: Predicting deception from linguistic styles. *Personality and Social Psychology Bulletin*, *29*, 665-675.

Pallesen, S., Nordhus, I., Carlstedt, B., Thayer, J., & Johnsen, T. (2006). A Norwegian adaptation of the Penn State Worry Questionnaire: Factor structure, reliability, validity and norms. *Scandinavian Journal of Psychology*, *47*, 281-291.

Pennebaker, J. W., Chung, C. K., Ireland, M., Gonzales, A. L., & Booth, R. J. (2007). *The development and psychometric properties of LIWC2007*. Retrieved from http://www.liwc.net

Pennebaker, J. W., & Stone, L. D. (2003). Words of wisdom: Language use over the life span. *Journal of Personality and Social Psychology*, *85*, 291-301.

Pino, C. (1982). Development and assessment of personalized programs for marriage preparation and enrichment. *Family Perspective*, *16*, 33-39.

Preacher, K., Curran, P., & Bauer, D. (2006). Computational tools for probing interaction effects in multiple linear regression, multilevel modeling, and latent curve analysis. *Journal of Educational and Behavioral Statistics*, *31*, 437-448.

Raudenbush, S. W., Bryk, A. S., Cheong, Y. F., & Congdon, R. T. (2004). *HLM 6: Hierarchical linear and nonlinear modeling*. Lincolnwood, IL: Scientific Software International.

Richards, C. S., & O'Hara, M. W. (2014). *The Oxford handbook of depression and comorbidity*. New York, NY: Oxford University Press.

Robbins, M. L., Mehl, M. R., Smith, H. L., & Weihs, K. L. (2013). Linguistic indicators of patient, couple, and family adjustment following breast cancer. *Psycho-Oncology*, *22*, 1501-1508.

Robinson, R. L., Navea, R., & Ickes, W. (2013). Predicting final course performance from students' written self-introductions: A LIWC analysis. *Journal of Language and Social Psychology*, *32*, 469-479.

Rohrbaugh, M. J., Shoham, V., Skoyen, J. A., Jensen, M., & Mehl, M. R. (2012). We-talk, communal coping, and cessation success in a couple-focused intervention for health-compromised smokers. *Family Process*, *51*, 107-121.

Rude, S. S., Gortner, E., & Pennebaker, J. W. (2004). Language use of depressed and depression-vulnerable college students. *Cognition and Emotion*, *18*, 1121-1133.

Schlein, S. (1971). *Training dating couples in empathic and open communication: An experimental evaluation of a potential preventive mental health program* (Unpublished doctoral dissertation). The Pennsylvania State University, University Park.

Schweinle, W., Ickes, W., Rollings, K., & Jacquot, C. (2010). Maritally aggressive men: Angry, egocentric, impulsive, and/or biased. *Journal of Language and Social Psychology*, *29*, 399-424.

Seider, B. H., Hirschberger, G., Nelson, K. L., & Levenson, R. W. (2009). We can work it out: Age differences in relational pronouns, physiology, and behavior in marital conflict. *Psychology and Aging*, *24*, 604-613

Sexton, J., & Helmreich, R. L. (2000). Analyzing cockpit communications: The links between language, performance, error, and workload. *Human Performance in Extreme Environments*, *5*, 63-68.

Shacham, R. (2009). *A utility for exploring HLM 2 and 3 way interactions* [Computer software]. Retrieved from http://www.people.ku.edu/~preacher/interact/shacham/index.htm

Sillars, A., Shellen, W., McIntosh, A., & Pomegranate, M. (1997). Relational characteristics of language: Elaboration and differentiation in marital conversations. *Western Journal of Communication*, *61*, 403-422.

Simmons, R. A., Chambless, D. L., & Gordon, P. C. (2008). How do hostile and emotionally overinvolved relatives view relationships? What relatives' pronoun use tells us. *Family Process*, *47*, 405-419.

Simmons, R. A., Gordon, P. C., & Chambless, D. L. (2005). Pronouns in marital interaction: What do "you" and "I" say about marital health? *Psychological Science*, *16*, 932-936.

Slatcher, R. B., Vazire, S., & Pennebaker, J. W. (2008). Am "I" more important than "We"? Couples' word use in instant messages. *Personal Relationships*, *15*, 407-424.

Stirman, S., & Pennebaker, J. W. (2001). Word use in the poetry of suicidal and nonsuicidal poets. *Psychosomatic Medicine*, *63*, 517-522.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Upper Saddle River, NJ: Allyn & Bacon.

Tausczik, Y. R., & Pennebaker, J. W. (2010). The psychological meaning of words: LIWC and computerized text analysis methods. *Journal of Language and Social Psychology*, *29*, 24-54.

Whisman, M. A. (2007). Marital distress and DSM-IV psychiatric disorders in a populationbased national survey. *Journal of Abnormal Psychology*, *116*, 638-643.

Williams-Baucom, K. J., Atkins, D. C., Sevier, M., Eldridge, K. A., & Christensen, A. (2010). "You" and "I" need to talk about "us": Linguistic patterns in marital interactions. *Personal Relationships*, *17*, 41-56.

Wolf, M., Theis, F., & Kordy, H. (2013). Language use in eating disorder blogs: Psychological implications of social online activity. *Journal of Language and Social Psychology*, *32*, 212-226.

Zaider, T. I., Heimberg, R. G., & Iida, M. (2010). Anxiety disorders and intimate relationships: A study of daily processes in couples. *Journal of Abnormal Psychology*, *119*, 163-73.

Zimmermann, J., Wolf, M., Bock, A., Peham, D., & Benecke, C. (2013). The way we refer to ourselves reflects how we relate to others: Associations between first-person pronoun use and interpersonal problems. *Journal of Research in Personality*, *47*, 218-225.

Author Biographies

Judith N. Biesen is a doctoral student in the Department of Psychology at the University of Notre Dame. Her research focuses on the improvement of couples' interaction patterns, particularly when one or both partners experience mental health issues. She has had work published in *Journal of Family Psychology* and *Journal of Consulting and Clinical Psychology*.

Deborah E. Schooler (PhD, Gallaudet University) is an assistant professor of psychology. Her research examines adolescent and adult development in social and cultural contexts, focusing specifically on health behaviors related to body image and sexual health. She has had work published in *Psychology of Women Quarterly*, *Journal of Adolescent Research*, and *Body Image*.

David A. Smith (PhD, SUNY Stony Brook) is a professor of psychology at the University of Notre Dame. His research interests are in the area of psychopathology and interpersonal relationships. His work is published in *Journal of Abnormal Psychology*, *Journal of Consulting and Clinical Psychology*, *Journal of Family Psychology*, *Psychological Methods*, *Psychometrika*, *Behavior Therapy*, *Behaviour Research and Therapy*, and others.