WORD CHOICE DURING A COOPERATIVE TASK AND
ROMANTIC PARTNERS' RELATIONSHIP QUALITY

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ABSTRACT OF THE THESIS

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Functional word choice in conversation may reveal a speaker's implicit feelings towards his or her interaction partner. In the present study, 89 emerging adult couples (n=178) representing various relationship statuses (dating, cohabitating, and married) were videotaped while completing a cooperative task. The couples were ethnically diverse and in relatively new relationships (mean length of relationship= 3.7 years). Pronoun use during the conversation was analyzed using Linguistic Inventory Word Count (Pennebaker et al, 2001) and correlated with relationship quality at the time of the interview, and correlated with a one year follow-up of relationship success and relationship quality. Findings reveal a few important correlations between pronouns used and relationship quality and success. Additionally, this research successfully extends past research by examining young couples in a cooperative task, rather than conflict, and by examining the predictive power of separateness versus togetherness pronoun use in attempts to understand relationship quality.

Keywords: pronoun use, relationship quality, cooperative task

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Introduction

Word Choice during a Cooperative Task and Romantic Partners' Relationship Quality

Relationship research has indicated predictors of romantic relationship quality and success, including communication patterns between partners. One way to examine communication is to focus explicitly on word choice. In particular, pronoun choice in narration and writing has been correlated with feelings of closeness, even between people who have just met (Fitzsimmons & Kay, 2004). Further, pronoun choice in conversations between romantic partners has been found to be associated with their feelings of relationship satisfaction (Gottman & Levenson, 1999; Levenson & Gottman, 1985; Seider, Hirschberger, Nelson, & Levenson, 2009; Sillars, Shellen, McIntosh, & Pomegranate, 1997; Simmons, Chambless, & Gordon, 2008; Simmons, Gordon, & Chambless, 2005; Slatcher, Vazire, & Pennebaker, 2008). This seems to be because pronoun use in conversations between romantic partners provides insight into the thought processes that differentiate happy couples from unhappy ones, and even those couples who stay together from those who do not (Gottman & Levenson, 1999). A great deal of research has focused on conflict tasks and general conversations to try to understand communication patterns among romantic partners. This study will focus on couples completing a cooperative task with the aim of contributing to our understanding of relationship dynamics. Although people may not consciously select the pronouns they use in conversations with their romantic partners, over time, the pronouns selected inform both parties of implicit feelings about the relationship (Fitzsimmons and Kay, 2004). Therefore, it is important to distinguish which pronouns predict higher romantic relationship quality and success from those pronouns that predict lower romantic

relationship quality and success in conversations between romantic partners. Ultimately, this research may benefit therapeutic interventions aimed at improving couples' relationships.

Background

Romantic couples engage in myriad verbal interactions, ranging from banal to explosive. These interactions have been examined by researchers for many years in an attempt to determine which aspects predict lasting success and happiness in relationships. Recently, Bradac (1999) and Pennebaker (2007; see also Groom & Pennebaker, 2002 and Pennebaker, Mehl & Niederhoffer, 2003) have lauded the merits of studying pronouns used in these conversations.

In a practical sense, pronouns replace noun phrases (NP) in a sentence to make the conversation less repetitive. The referent of the NP that will be replaced by a pronoun is made salient to the listener, and then it is no longer necessary to repeat the full NP; instead a pronoun is used. English speakers prefer that the subjects of their sentences be the topic of the conversation and pronouns tend to be used for the subject most in focus (Taboada & Wiesemann, 2010). Theoretically, pronoun choice reflects the speaker's perspective and how the speaker understands the conversation (Campbell & Pennebaker, 2000; Tausczik & Pennebaker, 2010). A speech littered with "I" may reflect a preoccupation with the self, or may also be an attempt by the speaker to open a line of communication with the interaction partner, inviting the partner, referred to as "you" by the speaker, to respond with his or her own "I" to express his or her point of view (Meissner, 2008). The pronouns chosen in speech, especially the first person plural

pronouns "we" and "us," may also indicate a person's feeling of, or desire for, acceptance by and integration with the interaction partner (Pennebaker et al., 2003). The first person plural subject, "we," can have several meanings, which will be mentioned later. However, "we" typically represents a feeling of togetherness and bonding with the interaction partner. Indeed, research examining married couples has revealed a correlation between first person plural pronoun ("we") use in a conflict task and marital satisfaction among older couples (60 - 70 years old) (Seider et al., 2009). However, in a younger sample (ages 40 to 50 years) this result was not found (Seider et al., 2009). Another study found that when freely writing thoughts about their romantic relationships, individuals who use more togetherness pronouns ("we" and "us") rate their relationship commitment as higher than those who use fewer togetherness pronouns (Agnew, Van Lange, Rusbult, & Langston, 1998). In this study, the participants were asked to write about their thoughts, which would not be viewed or shared with the romantic partner. This context is different from a conversation between partners. Further, participants in the same study who were asked to write about their best friends used more togetherness pronouns, yet reported lower levels of commitment, making the correlation between pronouns and relationship commitment only relevant to romantic couples, perhaps because of the exclusivity of a romantic relationship (Agnew et al., 1998). In many studies, contrary to popular thought, "we" has had no correlation to reports of romantic satisfaction (Slatcher et al., 2008). Although one can have many friends, even close ones, most romantic relationships are limited to two people.

The first person singular pronoun ("I") can been seen as indicating self-absorption. Yet, perhaps in some situations, this self-awareness can be helpful in

communicating one's needs and desires clearly to a partner. Simmons, Gordon and Chambless (2005; see also Simmons, Chambless, & Gordon, 2008) studied couples in clinical settings. During a marital interaction task, the couples were asked to discuss topics in their relationship that were stressful. Results indicated that the higher percentage use of "I" was correlated with higher romantic relationship satisfaction. This finding was supported in a study of instant messages between young heterosexual couples where the women's use of "I" was positively correlated to both the men's and women's ratings of satisfaction (Slatcher et al., 2008). Yet, other studies have found that high usage of "I" is negatively correlated to satisfaction (Sillars et al., 1997, i.e., in a discussion of issues that stress the marriage).

The first person singular object pronoun, "me" does not follow the same correlational patterns as "I" does; for example, "me" has been found to correlate with negative emotions although "I" does not (Slatcher et al., 2008). As an object pronoun, "me" represents the passive self. One uses "me" as the receiver of an action, so perhaps "me" indicates a less active role in the relationship. Simmons and colleagues (2008) examined an interaction between a clinical patient and the patient's primary contact (most were married partners, but some were parents or other family members) where the support members of the couple were rated on their hostility and criticism toward the clinical partner. Increased use of "me" correlated with higher scores of hostility and criticism.

The second person pronoun "you" in a sentence can represent either a subject or an object and in most studies these two uses are combined. Thus, the subject and object uses of the pronoun are combined in the analyses in past research. As a subject, "you" is

the actor of the verb, but as an object, the interaction partner is the passive one. In conflict tasks, the use of "you" has been negatively correlated to romantic relationship satisfaction (Slatcher et al., 2008; Simmons et al., 2005; and Sillars et al., 1997). "You" is also correlated to interaction criticism (Simmons et al., 2008) and negative interaction behaviors (Simmons et al., 2005) in conflict tasks. As part of the separateness pronoun group ("I", "me", and "you"), "you" indicates less satisfaction in the relationship (Seider et al., 2009).

There seems to be a gender difference in pronoun use and romantic satisfaction correlations. Women tend to use more "I" words (Pennebaker et al., 2003) in general than men do, so their use, or non-use, may be more telling in a conversation than in men's speech. In one study, higher usage of "I" by the woman in the couple was correlated with her higher satisfaction and even with relationship success at a six month follow-up (Slatcher et al., 2008). Further, the woman's use of "I" was also correlated with the man's satisfaction; though, the male use of "I" seemed to have no correlation with relationship satisfaction or relationship success at the six month follow-up (Slatcher et al., 2008). Women's use of "we," or togetherness pronouns, in an oral history of the relationship has been shown to be positively correlated with positive emotional expression at a follow-up, though not the men's use of the togetherness pronouns (Gottman & Levenson, 1999). The theory that females seem to be more sensitive to separateness versus togetherness pronouns ("I", "me" and "you") was supported by Seider and colleagues' study (2009); women's satisfaction was negatively correlated to the use of separateness pronouns. Few of the men's pronoun uses related to the men's relationship satisfaction; however, men's use of "you" was negatively correlated to men's satisfaction and their use of "me"

negatively correlated to female's satisfaction in a naturalistic setting (Slatcher et al., 2008).

Use of pronouns can have an effect on the relationship. Over time, the use of certain words over others may inform the listener of the speaker's feelings about the relationship. In fact, Slatcher, Vazire and Pennebaker (2008) found a positive correlation between female "I" use in instant messages and relationship success at a six month follow-up. In this naturalistic setting, the participants were able to direct their own conversations. Togetherness pronouns ("we" and "us") correlate with commitment levels both at the initial interview where participants were asked to write about a relationship and at a follow-up six weeks later (Agnew et al., 1998).

Function words, such as pronouns, can lead to a better understanding of relationships and may suggest means of improving conversations between romantic partners. Although many of the conversations in laboratory research are contrived, there are few other ways to record these valuable conversations. Romantic couples have a history of interactions together that lead to expectations in future interactions, making each interaction a continuation of previous interactions (Levenson & Gottman, 1985). It has been found that the style of interactions between romantic couples, such as effective or useless, uplifting or aggravating, will remain generally the same in both conflict and cooperation tasks (Levenson & Gottman, 1985), but it has yet to be determined if the words, particularly the pronouns, chosen by the partners will remain static through both of these types of interactions.

Theoretical Background

The theoretical basis of this study starts with Bradac's (1983) assertion that words influence and build relationships. Bradac (1983) describes conversations as information gathering exchanges about the state of the relationship, and the intimacy and the formality that each interaction partner wants and expects. Related to this, the communication accommodation theory (Giles & Coupland, 1991) suggests that people use several tactics, such as speech style and facial expressions, to create or reduce the social distance in a relationship. After studying the effects of verbs on the interpretation of actors, Semin and Fieldler (1988, pg. 567) suggest the importance of considering "language as a mediator between social reality and social cognition." Specific to the present study, Pennebaker (2003) has found that an important, though often ignored, aspect of speech are "style words", such as pronouns and prepositions. These style words reflect the tone and attitude of the speaker towards the topic, whereas content words (nouns and verb) are specific to and constrained by the topic of the conversation (Tausczik & Pennebaker, 2010). In the present study, the analysis of pronoun use in a conversation within a romantic couple may show a pattern of how the couple negotiates the social distance between them. As we examine participants' self-reported relationship satisfaction, a pattern of pronoun use may emerge that predicts a greater success of reducing the uncertainty of the intimacy in the relationship.

Limitations of past studies

Past studies examining associations between pronoun use and relationship experiences have relied on clinical populations engaged in conflict tasks (Simmons et al,

2005; Simmons et al., 2008), such as discussing topics that are causing stress in the relationship. In these cases, people who can express themselves would be more likely to experience successful relationships. It is hoped, though, that more of the conversations between romantic partners are positive in nature rather than negative or conflict-ridden. Therefore, it is important to study how couples converse when planning goals and engaging in helping behaviors. Couples tend to show positive and negative behaviors in both conflict and support tasks (Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005). Yet in a cooperative task, people may need to use a different linguistic strategy to elicit support from their interaction partner. Cooperation and support encourage a togetherness mentality and should therefore inspire conversation partners to cultivate this mentality by using pronouns that stress the couple as a team.

Past studies that have examined middle age and older married couples have found that "we" usage correlated with age and length of marriage (Seider et al., 2009). However, the present study will examine a young adult sample. Late adolescence and early adulthood are times of identity development and also of initiating lasting romantic relationships (Arnett, 2000). This young sample was chosen to represent a population that does not yet have children or necessarily a serious commitment, therefore, a higher representation of self-focus could be expected.

Linguistic Concerns

Past studies that have examined pronoun use in romantic couples suggest some areas for improvement, particularly in terms of the examination of "we" and "you." A deceptively short word, "we" can convey a number of distinct meanings, not all of which

even include the speaker. The uses of "we" are: (a) inclusive, referring to at least the speaker and the listener; (b) exclusive, referring to the speaker, but not the listener; (c) a large group of people, including the speaker and listener; (d) the "royal we", indicating just the speaker; (e) the indefinite "one"; and (f) indicating "you," such as a parent to a child, as in "We don't hit others" (Fortanet, 2004). All these uses of "we" change the meaning and implication of the conversation. It is difficult for the researcher to be sure that the referents in every instance of "we" are correctly identified, but during coding of the conversations in the present study the context of the conversation, including the verb that is used with "we," will be used to clarify the intended referents. For example, in one of the transcribed conversations from this study, the woman said "We walked around the lake last week." The researcher was able to use the previous sentence in the conversation to understand that the woman was talking about herself and her mother and sister, not her and her boyfriend. The "we" in this case is counted as an exclusive "we" rather than a togetherness pronoun. The present study will focus on only the inclusive and exclusive forms of "we," which will create two categories instead of the one category used in most studies. This will make the results clearer because it will be measuring the true focus in the conversation. The exclusive "we" will be considered separately from the inclusive "we" because they refer to different sets of people.

"You" presents an interesting issue in the English language because the same word, "you," is used for both the subject and object pronouns. For example, in the sentence "You cooked dinner last night," "you" is the subject of the sentence, or doer of the action. However, in the sentence "I cooked dinner for you," "you" is the object of the preposition, and the receiver of the action. Most studies compare "I" and "me" as

separate words (Pennebaker et al, 2003); therefore, it is also important to separate the uses of "you." To complicate "you" further, "you" also has another use - similar to that of a third person pronoun, synonymous with "one." For example, in the sentence "If you are going to drink, you shouldn't drive," "you" could refer to the person who is being spoken to or it could be a general statement about all people. Usually, the context of the conversation indicates which meaning of "you" the speaker intends. These three uses will need to be systematically edited in the transcriptions in this study so they can be analyzed properly. Although some significant associations have been found between the use of the word "you" and relationship quality (Seider et al., 2009; Sillars et al., 1997; Simmons et al., 2008; Simmons et al., 2005), the studies have looked at both subject and object forms of "you" combined. This study will extend past research by considering these two forms separately. It is plausible that as an "I" focus in conflict tasks enables speakers to admit their feelings; the subjective "you" may be accusatory, telling listeners what they feel or do. This accusation may be presumptive, since frequently we misinterpret another's action. This lack of consideration of the other person's side of the story may be indicative of lower romantic quality. For example, a person saying "You often are late getting home from work" may not take into account the traffic the listener experiences daily. "You" has been correlated with criticism (Simmons et al., 2008) and negative interaction behaviors (Simmons et al., 2005), but these data combined both the subject and object forms of "you." It has yet to be determined if this correlation is maintained under the separation of the meanings, such as in the present study.

Aims of this Research

There are four main hypotheses in the study. First, it is expected that there will be a difference in the pronoun use percentages between couples who rate their relationship of a higher quality than those who rate their relationship as relatively lower quality at the initial interview (percentages will be calculated by dividing the number of times each pronoun is used by the total number of words used by each person in the conversation). As seen in the studies that involve interactions between young adult participants, the inclusive "we" and "us" are not expected to be correlated to relationship satisfaction. In fact, it is expected that "I" and the exclusive "we" will be correlated to romantic relationship satisfaction. As previous research has shown, it is expected that "me" will be negatively correlated to romantic relationship satisfaction. As the subject and object pronouns will be separated, it is not expected that object "you" will be correlated to romantic relationship satisfaction; however, the subject "you" will be negatively correlated to romantic relationship satisfaction.

Second, there will be a difference in the pronoun use percentages between couples who rate their relationship of a higher quality than those who rate their relationship quality lower at the follow-up. Again, the inclusive "we" and "us" in the initial interview will not correlate to romantic relationship satisfaction at the follow-up. The exclusive "we" and "I" will positively correlate to romantic relationship satisfaction at the follow-up. "Me" will negatively correlate with romantic relationship satisfaction at the follow-up. The object "you" will not correlate to romantic relationship satisfaction, but the subject "you" will negatively correlate to romantic relationship satisfaction at the follow-up.

Third, there will be a difference in the pronoun use percentages between those couples whose relationship is still intact at the follow-up and those couples who have broken up in the year following the initial survey. The inclusive "we," "us," and the object "you" will not correlate to relationship success, but the exclusive "we" and "I" will positively correlate to relationship success. "Me" and the subject "you" will negatively correlate to relationship success.

Last, there will be a gender difference in the correlation between pronoun use and romantic quality and relationship success. Based on the previous findings (Sillars et al., 1997; Slatcher et al., 2008; Seider et al., 2009), the women's pronoun use will have a stronger correlation to romantic satisfaction and relationship success than the men's use of these pronouns. Specifically, women's use of inclusive "we," exclusive "we," and "I" will correlate more with both romantic satisfaction and relationship success than men's use of these pronouns. Additionally, based on trends in previous research (Slatcher et al., 2008), men's use of "me" and subject "you" will negatively correlate more with romantic satisfaction than women's use of "me." Thus, although the same correlation patterns are expected for men and women, the strength of these correlations will differ.

Method

Participants

Participants were 89 heterosexual couples (n= 178 participants) recruited from the community surrounding a northeastern university to complete a study of couples' health in 2003 through 2005. This was a sample of relatively young couples; the mean age for males was 25.7 years (SD= 7.8) and for females was 23.7 years (SD= 7.4). The participants were recruited to represent a variety of relationship statuses (exclusively dating (41.6%, or 37 couples), cohabitating (34.8% or 31 couples), and married (23.6%, or 21 couples) so that it would be possible to determine if past research focusing on married couples would generalize to nonmarried dyads. In order to be eligible to participate in the study, couples were required to be in monogamous relationships for at least 6 months so the data would represent a well-established relationship. The average relationship length of all participants was 3.7 years. The ethnic backgrounds of the participants were diverse. Seventy-five (76.4%) percent of the men reported that they were European-American, 9.0% African-American, 7.9% Asian and 5.6% Hispanic. Seventy-three (73.0%) percent of the women were European-American, 6.7% African-American, 7.9% Asian, 6.7% Hispanic and 5.6% reported other. The participants were compensated $25 per person ($50 per couple) or received college class credit (14% of the participants chose this compensation) for their participation.

The follow-up data was collected approximately one year after the initial interviews. All participants were sent a follow-up questionnaire via mail. Seventy-seven couples provided at least partial information during the follow-up (i.e., revealed whether

or not their relationship was intact or had dissolved). Sixty-six women and 58 men returned their surveys via mail with additional information provided. Of the 66 women, 25 were dating, 25 were cohabitating and 16 were married. Twenty-two men in dating relationships, 22 men cohabitating with their partners, and 14 married men responded to the follow up survey. Thirty-five dating couples, 26 cohabitating couples and 16 married couples were represented. Of these couples, 10 dating couples, 2 cohabitating couples, and no married couples had broken up in the year following the initial interview.

Measures

Pronoun use was measured by calculating the percentages of the pronouns used during a cooperative task. The transcripts of this cooperative task were run through the Linguistic Inquiry and Word Count (LIWC) (Pennebaker, Francis, & Booth, 2001) program to find the percent usage of "I", "me", "you" (subject), "you" (object), "we," and "us" by each member of the couple.

Romantic relationship quality will be measured by two variables – love and conflict. Fifteen questions from the Marital Interaction Scale (Braiker & Kelley, 1979) were included in the questionnaire portion of the original study in order to assess love and conflict. Love was appraised with 10 questions on a Likert scale of 1 to 9, with 1 representing low agreement and 9 representing high agreement with the statement. This love scale included questions such as "To what extent do you have a sense of 'belonging' with your partner?" and is used to determine a person's feelings of love, belonging and closeness to their partner. Conflict was assessed with 5 questions and used the same 1 to 9 Likert scale. The conflict scale measures a person's perception of negative affect and

conflict in the relationship. A sample question is "When you and your partner argue, how serious are the problems or arguments?" The love scale had a Cronbach's alphas of .85 for females and .79 for males; the conflict scale had alphas of .80 for females and .65 for males.

A follow-up study was conducted a year after the initial interviews. Couples were asked to report the current state of the relationship by indicating if they were still in a relationship with their partner and, if they were, assessing the participants' feelings of love and conflict using the same Marital Interaction Scale (Braiker & Kelley, 1979) used during the initial interview. For this study, relationship success will be operationalized as those couples who are still together at the one year follow up. The Time 2 love and conflict scores were rated the same way as at Time 1. The love scale for Time 2 had a Cronbach's alpha of .69 for women and .80 for men. The conflict scale at Time 2 had a Cronbach's alpha of .39 for women and .70 for men. The alpha for the women's conflict scale was unacceptably low, and this unreliability was unlikely to allow significant results to emerge. Further analyses found that by omitting one conflict item ("When you and your partner argue, how serious are the problems or arguments?") the Cronbach's alpha rose to .68 for women and .81 for men. Therefore, the conflict score for Time 1 consists of only four questions.

Procedures

Participants were scheduled as a couple to come to Rutgers University-Camden to complete a couples' health study during Time 1 of the survey. The couple was brought into a lab of an academic building and offered seats at a table. The researchers explained

the procedure of the study and the participants signed a consent form, both for the study in general and for the videotaped interaction task specifically.

In order to encourage honesty and openness in the questionnaire portion of the study, the members of the couple were separated in the lab; one person stayed in the general lab area while the other sat in a conjoined room with the door partially closed ensuring that neither partner could see the others' answers. The questionnaires were divided into two packets and included general health questions, relationship quality measures and personality scales. It took approximately one hour to complete the survey portion of the interview.

After both parties completed the questionnaires, the couple sat in the conjoined room to the lab and the door was closed. This was the first time they were able to communicate since the questionnaires were distributed. The couple was recorded while talking for five minutes to allow them to acclimate themselves to being videotaped before the researcher explained the interaction task. A researcher used a script to explain the interaction task so that all participants received the same instructions, which were to consider their current health goals. Together, the couples were asked to choose three health goals for each partner that they would commit to work toward achieving. The couples were asked to plan how they could help each other work towards the goals and also rank the goals according to their importance to the couple. The goals were ranked from 1 to 6, with 1 being the most important and 6 being the least important. The researchers stressed that this task was intended to be a cooperative task and therefore should be approached together and that there should be discussion throughout the task.

The researcher left the room, again closing the door. The couple then discussed their individual health goals and created plans to help each other accomplish these goals.

After the couple was finished with the interaction task, they alerted the research assistant. They were debriefed, given a phone number to contact the lab with any questions they may have, and were paid for their time.

Approximately one year after their interview, participants were sent a follow-up questionnaire and a stamped envelope addressed to the lab. The questionnaire was sent to each participant privately encouraging them to complete the follow-up separately, to encourage honesty. The questionnaire asked if the couple was still together and, if so, assessed relationship quality again using the same version of the Marital Interaction Scale (Braiker & Kelley, 1979) as in the initial interview. If the participants did not return the follow-up questionnaire, researchers contacted them by telephone to ask for their current relationship status.

The videotaped portion of the initial interview was used to collect the pronoun usage data. To ensure that the length of the conversation does not disrupt the analysis of pronoun use, the percentage use of each pronoun as compared to the total number of words spoken was calculated.

The videotaped interactions of the couples were transcribed into separate text files by gender. LIWC (Pennebaker et al., 2001) cannot distinguish context of words (Tausczik & Pennebaker, 2010); therefore, the transcripts were coded by hand for the ambiguous pronouns of "you" and "we". The second person subject form of "you" was edited to "syou". The second person object form of "you" was changed to "oyou" and the third person use of "you" was changed to "one" to eliminate it from the percentages. The

inclusive "we" was changed to "iwe" and the exclusive "we" was changed to "ewe".

Through coding it was found that only two of the 178 participants used "ewe." It was not

a significant enough number to continue with analysis, so this study only focuses on

inclusive "we." All other forms of "we" were changed to "otherwe" and not included in

the percentage counts. During coding, several couples were found to use "you know" and

"I mean" frequently as discourse markers. Although these discourse markers have

specific meanings and uses, such as ensuring the listener is still following the

conversation (Schiffrin, 1987), those uses were not what we were considering in this

study. Therefore, these phrases were eliminated from the analyses. The words were

coded by removing the space between the words and counting those items separately. The

transcriptions were then analyzed by LIWC (Pennebaker et al., 2001), a word inventory

computer program that analyzes a variety of aspects of a text file, such as positive and

negative affect or word frequency. A dictionary was created for LIWC (Pennebaker, et

al., 2001) for this study to count the coded first and second pronouns as separate

categories.

   The LIWC (Pennebaker, et al., 2001) program was able to calculate word counts

and general pronoun percentages. The average number of words spoken by each person

was 578; there was no statistical difference between men (560 words) and women (596

words). Function words (articles, pronouns and prepositions) made up 52.9 % of the

words used, which is consistent with previous findings of general language use (Tausczik

& Pennebaker, 2010). Pronouns in general made up 16 % of words spoken. When

analyzed by each pronoun, 4.95 % of the words used were "I," 0.90 % "me," 3.27 %

subject "you," 0.79 % object "you," 1.58 % inclusive "we," and 0.27 % "us." Again,

there was no significant difference between men's use of these pronouns and women's use (see Table 1). Pennebaker, Mehl, & Niederhoffer (2003) suggest that pronouns may indicate both the level of closeness that people feel toward their conversation partner and the level of self-focus. In this study, one can see that participants used "I" more than three times as often as inclusive "we" and they used subject "you" more than twice as often as inclusive "we." This may indicate that the couples had a greater focus on themselves as singular people than as a couple in this task.

Results

Pearson correlations were used to determine whether or not there was an association between the percentage of each pronoun used (I, me, you (subject), you (object), we (inclusive), and us) and relationship quality at the initial interview. The correlations were done in several ways. First, each speaker's pronoun use was calculated and correlated to both participants' reported feelings of love and conflict separately. Additionally, the pronoun usages of the couple were combined and correlated to the love and conflict scores independently. Also, the couples were separated into the various relationship statuses: dating, cohabitating and married. The pronouns were collapsed into first and second person pronouns and also separate and plural pronouns and then correlated to love and conflict scores. Due to the relatively small sample size, all results significant at the $p < .10$ are considered potentially important.

Hypothesis 1

For female speakers, the use of "I" negatively correlated with women's reported feelings of conflict ($r = -.188$, $p < .10$) and "me" negatively correlated with men's reported feelings of conflict ($r = -.355$, $p < .01$) at Time 1 (see Table 2). Although dating women's language use did not reveal any significant correlations, cohabitating and married women had several significant correlations (see Table 15). Cohabitating women's use of "I" was negatively correlated to their own ($r = -.411$, $p < .05$) and their partners' ($r = -.81$, $p < .05$) reported feelings of love. Cohabitating women's use of "me" was moderately negatively correlated to men's conflict ($r = -.325$, $p < .1$) (see Table 16). Married women's use of "me" was negatively correlated to men's conflict ($r = -.643$, $p <$

.01). Women's use of subject "you" was also negatively correlated to men's conflict ($r =$ -.429, $p < .1$) (see Table 17). Accordingly, when "I" and "me" were collapsed into one variable, women's use of the first person singular is negatively correlated to their own feelings of conflict ($r = -.201, p < .1$) (see Table 5).

Male speakers' use of "I" was negatively correlated with their own reported feelings of love ($r = -.213, p < .05$) (see Table 3). As in the women's data, there were no significant correlations in dating men's pronoun use (see Table 12). In cohabitating men, subject "you" was negatively correlated to their partner's love ($r = -.443, p < .05$) and positively correlated to their partners' conflict ($r = .390, p < .05$). Cohabitating men's use of inclusive "we" is negatively correlated to their own conflict ($r = -.333, p < .1$) (see Table 13). Married men's use of "me" is negatively correlated to their own conflict ($r = -.457, p < .05$). Married men's use of inclusive "we" is negatively correlated to their partner's conflict ($r = -.381, p < .1$) (see Table 14). Once collapsed into first and second person pronouns, there are no significant correlations.

When the couples' pronoun use is combined there are two significant correlations: "I" is negatively correlated with men's reported love ($r = -.193, p < .10$) and "me" is negatively correlated with men's reported conflict ($r = -.264, p < .05$) (see Table 4).

Hypothesis 2

Pearson correlations were also used to determine the associations between the percentage of each pronoun (I, me, you (subject), you (object), we (inclusive), and us) used and the romantic satisfaction at the one year follow-up. Again the women's and men's use of the pronouns were analyzed separately. Then the combined usage was

correlated with love and conflict at Time 2. All analyses were done as with the Time 1 data.

Women's use of "I" was negatively correlated with their own reported feelings of conflict ($r = -.239, p < .05$) (see Table 2). Women's first person singular and separateness pronouns (first and second person singular pronouns) are negatively correlated with their own conflict ($r = -.330, p < .01; r = -.241, p < .1$, respectively) (see Table 3). Dating women's use of subject "you" is correlated with their own reported feelings of conflict at Time 2 ($r = .501, p < .05$) (see Table 4). Cohabitating women's use of "us" is negatively correlated with their own love and conflict at Time 2 ($r = -.399, p < .1; r = -.515, p < .05$, respectively) (see Table 5). Married women's use of "me," subject "you," and "us" are all negatively correlated to men's love at Time 2 ($r = -.578, p < .05; r = -.486, p < .1; r = -.535, p < .1$, respectively). Also, married women's use of "me" and subject "you" were negatively correlated to men's conflict at Time 2 ($r = -.546, p < .10; r = -.541, p < .10$) (see Table 6).

Men's use of the pronouns "I," "me," subject "you," object "you," inclusive "we," and "us" was not correlated to love or conflict at Time 2 (see Table 7). When the pronouns were combined, men's use of the second person (subject "you" and object "you") was positively correlated to love at Time 2 ($r = .230, p < .1$) (see Table 8). Dating men's use of "me" is negatively correlated with women's conflict at Time 2 ($r = -.520, p < .05$). Dating men's use of subject "you" is correlated to women's love ($r = .413, p < .1$) (see Table 9). Cohabitating men's use of object "you" was correlated to women's love at Time 2 ($r = .425, p < .1$). "Me" was negatively correlated to their own love at Time 2 ($r = -.524, p < .05$) (see Table 10). Married men's use of "I" was negatively correlated to their

own love and conflict at Time 2 ($r = -.484$, $p < .1$; $r = .526$, $p < .10$, respectively).

Married men's use of subject "you" was correlated with their own love ($r = .629$, $p < .05$)

(see Table 11).

Hypothesis 3

Pearson correlations were used to determine whether or not the pronouns (I, me,

you (subject), you (object), we (inclusive), and us) were correlated to relationship

success, measured by the couple still being romantically involved one year after the

initial interview.

Women's use of object "you" and inclusive "we" were positively correlated with

relationship success ($r = .191$, $p < .1$; $r = .209$, $p < .1$, respectively) (see Table 2). Men's

use of object "you" was negatively correlated with relationship success ($r = -.212$, $p < .1$)

(see Table 7). Combined pronoun use was not correlated with relationship success (see

Table 12). Women's use of the first person plural ("we" and "us") was positively

correlated with relationship success ($r = .197$, $p < .1$) (see Table 3). Dating men's use of

"me" is positively correlated with relationship success ($r = .400$, $p < .05$) (see Table 9).

Cohabitating men's use of object "you" was negatively correlated with relationship

success ($r = -.423$, $p < .05$) (see Table 10).

Hypothesis 4

Using the Fisher r-z transformation, the correlations of pronoun use to love,

conflict and relationship success were compared by gender. It was found that there was a

significant difference between men's and women's pronoun use correlations with

women's correlations being more significant than men's correlations. The women's use of "me" when correlated with men's reported conflict at Time 1 ($r = -.355$) as compared to the men's use of "me" when correlated with men's reported conflict at Time 1 ($r = -.049$) was significantly different ($z = -2.11$, $p < .05$). Additionally, women's use of "I" when correlated with their own conflict at Time 2 ($r = -.239$) was significantly different from men's use of "I" when correlated to women's reports of conflict at Time 2 ($r = .170$) ($z = -2.33$, $p < .02$).

Additional analyses

Additional analyses were conducted to examine other possible relations in the data. The length of the relationship tends to impact the words that are used in conversation. Women's use of "us" is positively correlated to the length of the relationship ($r = .251$, $p < .05$). Her use of subject "you" is negatively correlated to the length of the relationship ($r = -.242$, $p < .05$), as is her use of the inclusive "we" ($r = -.225$, $p < .05$) (see Table 13). Interestingly, women's use of "I" is positively correlated to an increase in love ($r = .271$, $p < .05$) (see Table 14). Men's use of subject "you" is negatively correlated to the length of the relationship ($r = -.342$, $p < .05$) (see Table 15). Additionally, men's use of "I" is correlated with an increase from Time 1 to Time 2 in female's reports of love ($r = .243$, $p < .1$) as is subject "you" ($r = .268$, $p < .05$) (see Table 16).

General Discussion

In this study, couples were given a cooperative task to complete while being videotaped. Transcripts of the videos were coded and analyzed for pronoun percentages through a computer program, LIWC (Pennebaker, et al., 2001). The pronoun percentages were correlated with love and conflict variables. The pronoun percentages were calculated for each person separately and combined to create a couple pronoun percentage. All the pronoun percentages were correlated with men's and women's love and conflict scores. Although there were many significant results, few clear patterns emerged.

Additionally, because dating, cohabitating and married couples may have different linguistic patterns in the relationship, these categories were analyzed separately. Some significant correlations emerged in these analyses indicating that cohabitating women are most sensitive to linguistic patterns. This could be because they are in a middle ground in the relationship as they have not yet gotten married, typically seen as a lifetime commitment, yet they are invested enough in the relationship to share living expenses, and possibly legal commitments (such as rent and utilities). Perhaps this middle ground of commitment makes women more sensitive to their partner's intention of fully committing or abandoning the relationship. Women looking for hints to their partner's plans for the future may be more sensitive to linguistic cues than married women, who have a full commitment from their partners, or dating women, who are less materially invested in the relationship. Another pattern that arose was that married women's focus on the partner predicted higher relationship quality. Taylor (2007, page 156) has shown that men benefit most from marriage and that women are the primary caregivers in most

societies. The data in this study shows that married women who focus on their spouses report better relationship quality than those who do not focus on their partner. This pattern supports Taylor's assertion that women offer support to their partners.

"I" has been shown to be correlated with both negative (Sillars, et al., 1997) and positive (Simmons, et al., 2008; Slatcher, et al., 2008) romantic outcomes. In this study, in general, the woman's use of "I" is negatively correlated with her own sense of conflict in the relationship, both at the initial interview and at the one year follow up. When the couples are separated into relationship categories, cohabitating women's use of "I" is correlated with lower rating for love for both her and her partner. No other relationship status has correlations between these two variables, making cohabitating women different from women in other types of relationships. This use of "I" may indicate a reluctance to consider the relationship as a partnership and may indicate that the cohabitating women are focused on themselves and their own needs, rather than their partners. However, the lower levels of love are not found in the Time 2 results.

For men, "I" correlates with a lower level of love at Time 1, yet when the men are separated into relationship categories, this correlation is insignificant. For married men, "I" correlates with a decreased love score at Time 2. All of these outcomes are detrimental to the relationship, so it is plausible to suggest that higher "I" use by men predicts lower relationship quality.

The negative correlation between women's use of "me" and men's reported conflict may be due to the women using a direct statement of what they want the men to do, such as "it would help me if you . . ." or "not snacking would help me lose weight." From these statements, men can choose to cooperate or not, but they at least know what

they can do for their partner. This is supported in married women's data: subject "you" and "me" are both negatively correlated to conflict, both at Time 1 and Time 2. This pattern would support the former example sentence where the partner is the actor and the speaker is the patient of the sentence. However, these two pronouns are also negatively correlated to love at Time 2, so the effect of lower conflict at Time 1 does not predict more love at Time 2.

In conflict tasks it seems that "me" correlates to negative emotion (Simmons et al., 2008; Slatcher et al., 2009). The difference between conflict and cooperative may be a sense of victimization and sacrifice. In a conflict task, each partner is trying to fix a perceived problem, but is defensive about the problem. In this cooperative task, the focus of the task was on setting and achieving a goal, but in conflict tasks, the focus is on fixing a problem in the relationship.

Subject "you" has the potential to sound critical or accusatory (Simmons, et al., 2008) or it could indicate that the speaker is putting the partner's needs before his/her own. This study looks at love and conflict separately and so can examine how the pronouns impact both positive and negative emotions. In general, there are no significant correlations between subject "you" and love or conflict. However, when the relationship categories are separated, some patterns emerge. Women's use of subject "you" correlates with a lower love score at Time 2. This is the only correlation between women's use of subject "you" and love. As this correlation is moderately significant, it could be a Type 1 error. Married men report levels of conflict that negatively correlate with their partners' use of subject "you," suggesting that the speaker is focused on the partner and that this focus helps the relationship.

In line with earlier studies (Slatcher, et al., 2008; Simmons, et al., 2005; Simmons, et al., 2008; Sillars, et al., 1997; Seider, et al., 2009) it seems that cohabitating women are sensitive to men's use of subject "you." Men's subject "you" correlates with higher women's conflict at Time 1, and lower levels of love at Time 1. Combined with the results of cohabitating women's "I," it seems that cohabitating women's focus on the self correlates with poor relationship outcomes.

Contrary to several previous studies (Seider et al., 2009; Agnew at al., 1998), this study found little relation between the use of inclusive "we" and romantic quality or success. This indicates that happy couples do not need to focus on togetherness in conversation, but can find ways to collaborate by being both individuals and a couple.

Unlike some earlier studies (Slatcher, et al., 2008; Agnew et al., 1998), few of the pronouns had any correlation with the couple being together at the follow up interview. Women's use of inclusive "we" and object "you" are mildly correlated with relationship success, but when relationship categories are considered separately, this disappears. Men's use of object "you" is negatively correlated with relationship success and is more strongly negatively correlated in the cohabitating men's use, but insignificant in dating and married men's use. Interestingly, another object pronoun, "me" is correlated with relationship success for dating men.

Family therapists can use the results of this study in couples' therapy in several ways. First, the therapist should be aware that people with different relationship statuses interpret word choice differently; therefore, the therapist should take the couples' relationship status into consideration when analyzing the pronoun use in their conversations. As such, therapists should be aware that cohabitating women are most

sensitive to language cues from their partners. A therapist may intervene in the

relationship by asking a cohabitating couple to be more explicit about the future of the

relationship in order to dispel fear and uncertainty and clarify the relationship for both

members of the couple. Third, men and cohabitating women who are more focused on

themselves, as signified by a higher percentage of "I" use, seem to report less love in the

relationship. Perhaps a therapist would want to ask the person to consider the other

person's point of view and frame sentences with "you" or "we" as the subject. This may

help in two ways: to give the speaker an opportunity to consider another's point of view

and for the listener to feel that they are valued in the relationship. Fourth, married women

who focus on their husbands have husband who report less conflict. A therapist may

notice that a married woman does not use subject "you" and ask her to use it more often

to see if the change in perspective helps to improve the relationship. Lastly, therapists can

help couples realize that when working together, word choice is not the only predictor of

relationship success. Individuals undoubtedly convey their feelings towards their partners

nonverbally and via their daily behaviors.

Limitations of the Present Study

There are some issues that deserve consideration in interpreting these results.

First, although this task was intended to be one in which the couple works together and is

therefore labeled a cooperative task, it may be that some couples did not feel that this

kind of task was cooperative. For example, several couples consisted of one person who

smoked while the other did not. Additionally, there were several couples in which one

person had a significantly higher BMI than the other, and couples in which one person

had chronic pain that prohibited many health promoting activities. For these couples, health issues may in fact be a stressor in the relationship. The directed discussion about health goals may have been rehashing a continuous argument where conversational roles have been long established.

Secondly, couples who agree to participate in a couples' health study may be different from those couples who did not participate in the study. The couples willing to share many private aspects of their relationship may be more secure than those couples who are not willing to share the information. To this end, there was a lack of variability in this sample as shown by the reported feelings of love by both men and women: on a 1 to 9 Likert scale, the average reported feelings of men were 8.1 with a SD of .74 and women reported 8.2 with a SD of .75. Additionally, none of the 178 participants reported a love score less than 4.4. Similar patterns were seen in the follow up survey, only one man reported a love score below 5.10 and the lowest love score for women was 4.8. This relatively low variability may have prohibited more significant results from emerging.

Third, few couples broke up in the one year lapse between the surveys. This may indicate that these couples were indeed happier than most couples, or at least satisfied enough to stay in the relationship, or it may indicate that the time between the two surveys was not sufficiently long to make a clear prediction about how word choice may contribute to the relationship. This lack of variability, again, may have prevented significant results from emerging.

Fourth, once the couples were separated by relationship type, the number of participants became extremely small. This sample size may not be large enough for significant correlations to emerge. Similarly, the reliability of the conflict scores for

women at Time 2 was extraordinarily low. This will prevent nearly any results from

emerging in correlations with the pronouns.

Lastly, with the number of correlations in this data set, it is possible that some of

the correlations are simply due to chance. We accepted $p < .10$ as potentially significant,

yet this is less strict than many studies accept, increasing our risk of a Type 1 error.

Future Directions

In the present study, pronoun use percentages were correlated with romantic

quality assessments. In future research, language style matching (LSM) should be

correlated with romantic quality to assess the influence of LSM on established couples.

Previous research has indicated that higher levels of LSM in a speed-dating study are

more frequently interested in future contact and have better relationship success than

those with lower levels of LSM (Ireland, Slatcher, Eastwick, Scissors, Finkel, &

Pennebaker, 2011). However, in that study LSM was not correlated with romantic quality

(Ireland et al., 2011). Perhaps this was due to the short length of the relationships.

Another direction to be considered would be to compare writing samples and oral

conversations. Although conversations are quick and less planned, writing requires more

thought and deliberation. Combining the two forms of communication may be a valuable

tool. Similarly, conversations at different times, such as captured using EAR technology,

should be analyzed. EAR technology is a device worn by a participant that is activated at

predetermined intervals to capture natural speech. Writing that contains changes in

perspective, such as more self-focus at some times, but not at all times, has been

correlated to positive health outcomes (Campbell & Pennebaker, 2003). It may be that

variation in the focus of the conversation (sometimes more "I" than "we," balanced by times of more "we" than "I") could indicate more healthy relationships than those couples who tend to focus solely on themselves, solely on the couple, or solely on each other.

Although neither a clear pattern was found, nor were our hypotheses confirmed, this study contributed to the literature in several valuable ways. First, subject and object "you" were separated in the transcripts and analyzed separately. It was still found that subject "you" predicted several relationship quality measures. Secondly, "we" usage was analyzed and only included when the participants were talking about the couple. Both of these actions reduced the percentages for each pronoun, but ensured more accuracy and validity. Last, the idea that speech littered with "we" indicates the happiness and success of the couple was not confirmed.

The implications of this type of research are vast. Relationships are created and maintained through communication, frequently verbal communication. Research that focuses on improving verbal communication can be a valuable tool in improving relationship quality. A deeper understanding of word choice and word interpretation in conversations will impact many types of relationships, from intimate and romantic relationships to work and organizational relationships. Each of these relationships consists of many different kinds of conversations, such as conflict resolution and requests for cooperation. Further research may reveal ways of improving communication based on the goal of the communication. Therapeutic interventions can help couples and individuals be aware of their own word use and help them to realize the implications of their word choice on the relationships they are trying to maintain.

Appendix A. *Love and Conflict survey*

Please read the following questions and circle the number that best describes your feelings about your romantic partner.

1. To what extent do you have a sense of "belonging" with your partner?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

2. How often do you and your partner argue with one another?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

3. How much do you feel you "give" to the relationship?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

4. To what extent do you try to change things about your partner that bother you (behaviors, attitudes, etc)?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

5. To what extent do you love your partner at this stage?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

6. To what extent do you feel that things that happen to your partner also affect or are important to you?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

7. How often do you feel angry or resentful toward your partner?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

8. How committed do you feel toward your partner?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

9. How close do you feel toward your partner?

   <u>1 2 3 4 5 6 7 8 9</u>
   Not at all   Very much

10. How much do you need your partner at this stage?

    <u>1 2 3 4 5 6 7 8 9</u>
    Not at all   Very much

11. How sexually intimate are you with your partner?

    <u>1 2 3 4 5 6 7 8 9</u>
    Not at all   Very much

12. How attached do you feel to your partner?   1 2 3 4 5 6 7 8 9
                                                       Not at all   Very much

13. When you and your partner argue, how serious are the   1 2 3 4 5 6 7 8 9
    problems or arguments?   Not at all   Very much

14. To what extent do you communicate negative feelings   1 2 3 4 5 6 7 8 9
    toward your partner (e.g., anger, dissatisfaction, frustration, etc.)?   Not at all   Very much

15. To what extent do you feel your relationship is special compared   1 2 3 4 5 6 7 8 9
    to other relationships you've been in?   Not at all   Very much

Appendix B. *Videotaped interaction task instruction sheet and goal sheet*

Interaction Task

For the next 10 minutes we would like you and your partner to talk about your health goals. A health goal is anything you would like to do to improve your health. Some examples of health goals are listed below.

1st -- Discuss your health goals, and agree on three goals for each person. You can select different goals for each person. After deciding on your goals, write them on the following paper.

2nd -- Next, discuss how you and your partner could work together to accomplish these goals. Write this down on the following paper.

3rd -- Finally, prioritize <u>all 6</u> health goals. In other words, as a couple, decide which of the 6 health goals is the most important. Put a number 1 next to this health goal. Then, decide which of the 6 goals is the second most important. Put a 2 next to this health goal. Continue in this fashion until all 6 goals are ranked from 1 = most important to 6 = least important.

Examples of health goals:

Begin an exercise regimen

Take the stairs instead of the elevator at work

Quit smoking

Manage stress better

Go to the doctor more often

Take a multivitamin once a day

Health Goals

HIS three health goals

1)_____ ___
Rank

how could you and your partner work together to accomplish this goal?
_____
_____

2)_____ ___
Rank

how could you and your partner work together to accomplish this goal?
_____
_____

3)_____ ___
Rank

how could you and your partner work together to accomplish this goal?
_____
_____

HER three health goals

1)_____ ___
Rank

how could you and your partner work together to accomplish this goal?
_____
_____

2)_____ ___
Rank

how could you and your partner work together to accomplish this goal?
_____
_____

3)_____ ___
Rank

how could you and your partner work together to accomplish this goal?
_____
_____

Appendix C. *Follow-up survey sent to all participants approximately one year after*

initial interview

When you came to our lab last year, you came with your significant other

_____.

1. Are you still in a relationship with this person?   yes   no

2. Would you say that your relationship with this person
   changed in any significant way in the last year?   yes   no

3. If you circled yes to #2, HOW would you say your relationship has changed?
   Describe any relevant changes on the lines below (e.g., gotten married, had a child, live apart,
   divorced, become closer, etc.)

   _____

   _____

IF YOU ARE STILL IN A RELATIONSHIP WITH THIS PERSON, PLEASE ANSWER THE BELOW
QUESTIONS. IF YOU ARE **NOT** IN A RELATIONSHIP WITH THIS PERSON, PLEASE SKIP TO THE NEXT
PAGE.

Circle the dot on the scale line which best describes the degree of happiness, everything considered, for
your present relationship. The middle point "happy" represents the degree of happiness which <u>most</u>
people get from a relationship, and the scale gradually ranges on one side to those few who are very
unhappy in a relationship, and on the other, to those few who experience extreme joy or felicity in a
relationship.

```
    •        •        •    •        •      •          •
_____
 Not Very                  Happy                     Perfectly
  Happy                                                Happy
```

2. To what extent do you have a sense of "belonging" with your   <u>1 2 3 4 5 6 7 8 9</u>
   partner?   Not at all   Very much

3. How often do you and your partner argue with one another?   <u>1 2 3 4 5 6 7 8 9</u>
                                                                    Not at all   Very much

4. How much do you feel you "give" to the relationship?   <u>1 2 3 4 5 6 7 8 9</u>
                                                                    Not at all   Very much

5. To what extent do you try to change things about your partner   <u>1 2 3 4 5 6 7 8 9</u>

that bother you (behaviors, attitudes, etc)?   Not at all   Very much

6. To what extend to you love your partner at this stage?   <u>1 2 3 4 5 6 7 8 9</u>
                                                                 Not at all   Very much

7. To what extent do you feel that things that happen to your   <u>1 2 3 4 5 6 7 8 9</u>
   partner also affect or are important to you?   Not at all   Very much

8. How often do you feel angry or resentful toward your partner?   <u>2 3 4 5 6 7 8 9</u>
                                                                 Not at all   Very much

9. How committed do you feel toward your partner?   <u>1 2 3 4 5 6 7 8 9</u>
                                                                 Not at all   Very much

10.How close do you feel toward your partner?   <u>1 2 3 4 5 6 7 8 9</u>
                                                                 Not at all   Very much

11. How much do you need your partner at this stage?   <u>1 2 3 4 5 6 7 8 9</u>
                                                                 Not at all   Very much

12. How sexually intimate are you with your partner?   <u>1 2 3 4 5 6 7 8 9</u>
                                                                 Not at all   Very much

13 How attached do you feel to your partner?   <u>1 2 3 4 5 6 7 8 9</u>
                                                                 Not at all   Very much

14. When you and your partner argue, how serious are the   <u>1 2 3 4 5 6 7 8 9</u>
    problems or arguments?   Not at all   Very much

15. To what extent do you communicate negative feelings   <u>1 2 3 4 5 6 7 8 9</u>
    toward your partner (e.g., anger, dissatisfaction, frustration, etc.)?   Not at all   Very much

16. To what extent do you feel your relationship is special compared   <u>1 2 3 4 5 6 7 8 9</u>
    to other relationships you've been in?   Not at all   Very much

Table 1

Basic Percentages from the Transcriptions

	Combined	Men	Women
Word Count	578	560	596
Function Word Percentage	52.91	52.72	53.10
Pronoun Percentage	16.00	15.88	16.11
I	4.95	4.73	5.17
Me	.90	.86	.93
Subject you	3.27	3.35	3.19
Object you	.79	.70	.88
Inclusive we	1.58	1.44	1.72
Us	.27	.28	.25
Other Pronouns	4.24	4.52	3.97

Table 2

Female Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	-.098 / -.079	-.007 / **-.188**[+]	-.069	-.072 / .096	.010 / **-.239***
Me	.058 / .111	**-.355**** / -.061	-.016	.076 / -.041	.131 / .021
Subject You	-.017 / .098	.023 / .148	-.121	-.112 / .149	-.212 / -.084
Object You	.102 / .144	-.074 / -.124	**.191**[+]	.095 / -.051	.189 / .041
Inclusive We	-.009 / .166	-.029 / -.018	**.209**[+]	.158 / .179	-.009 / .193
Us	-.020 / -.072	.108 / .083	.031	.007 / -.131	-.151 / .016

Note: [+] p < .1, * p < .05, ** p < .01; m = male, f = female

Table 3

Female Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
1st Person Singular	-.081 / -.047	-.091 / **-.201**[+]	-.072	-.048 / .082	-.115 / **-.330****
2nd Person	.033 / .149	-.014 / .067	-.009	-.049 / .098	.188 / .049
1st Person Plural	-.013 / .132	.000 / .005	**.197**[+]	.149 / .133	.051 / -.037
Separate	-.050 / .040	-.084 / -.132	-.065	-.070 / .121	.014 / **-.241**[+]

Note: [+] $p < .1$, * $p < .05$, ** $p < .01$; m = male, f = female

Table 4

Dating Female Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict, n = 25

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	-.062 / .030	-.046 / -.275	-.172	-.120 / .369	.172 / **.501***
Me	.220 / -.045	-.259 / .096	.034	.382 / -.350	.320 / -.407
Subject You	-.033 / -.090	.226 / .254	-.139	-.370 / -.202	-.315 / -.264
Object You	.075 / -.075	-.100 / .021	.248	-.139 / -.326	-.152 / -.384
Inclusive We	-.060 / .201	.053 / .093	.212	.065 / .317	-.103 / .353
Us	.109 / .059	.111 / .203	.063	.114 / .117	-.072 / .140

Note: [+] p < .1, * p < .05, ** p < .01; m = male, f = female

Table 5

Cohabitating Female Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict, n = 25

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	**-.381* / -.411***	-.041 / -.058	-.189	-.208 / .016	-.265 / -.050
Me	.119 / .035	**-.325$^+$ / -.176**	-.018	.366 / .277	.215 / .371
Subject You	-.055 / -.128	.137 / .301	.023	.085 / .141	-.079 / .035
Object You	.092 / .275	-.100 / -.203	.275	.327 / .275	.292 / .330
Inclusive We	.006 / .120	-.061 / .126	.063	-.022 / .037	-.005 / .139
Us	.146 / -.046	.017 / -.185	.106	-.179 / **-.399$^+$**	-.038 / **-.515****

Note: $^+$ p < .1, * p < .05, ** p < .01; m = male, f = female

Table 6

Married Female Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict, n = 16

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	.100 / .028	.293 / -.060	N/A	.383 / .215	.260 / .306
Me	-.301 / .190	**-.643** / -.233	N/A	**-.578*** / -.128	**-.546$^+$** / -.024
Subject You	.014 / .331	**-.429$^+$** / -.249	N/A	**-.486$^+$** / -.163	**-.541$^+$** / -.137
Object You	.028 / .118	.073 / -.234	N/A	-.014 / -.255	-.125 / -.172
Inclusive We	.089 / .289	-.185 / -.357	N/A	.042 / .059	.118 / .018
Us	-.320 / -.234	.372 / .157	N/A	**-.535$^+$** / .291	**-.478$^+$** / .426

Note: $^+$ p < .1, * p < .05, ** p < .01; m = male, f = female

Table 7

Male Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	**-.213*** / -.018	.038 / -.019	-.084	-.161 / .057	-.179 / .170
Me	.173 / -.004	-.049 / .044	.138	.182 / -.029	.171 / -.122
Subject You	.026 / -.059	.094 / .085	-.066	.207 / .174	.134 / .053
Object You	-.027 / -.089	.146 / .095	**-.212[+]**	-.050 / .188	-.025 / .048
Inclusive We	.051 / .095	-.124 / -.070	.029	.124 / -.006	.141 / -.020
Us	.106 / .081	-.025 / -.112	-.034	.021 / -.044	.139 / .015

Note: [+] p < .1, * p < .05, ** p < .01; m = male, f = female

Table 8

Male Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
1st Person Singular	-.156 / -.108	.055 / .045	-.042	-.097 / .047	.151 / -.034
2nd Person	.072 / -.059	.165 / .044	-.146	.166 / **.230**[+]	.120 / -.132
1st Person Plural	.064 / .090	-.143 / -.135	.010	.112 / -.025	-.073 / -.078
Separate	-.094 / -.119	.128 / .059	-.108	.000 / .155	.179 / -.095

Note: [+] $p < .1$, * $p < .05$, ** $p < .01$; m = male, f = female

Table 9

Dating Male Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict, n = 22

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	-.063 / .060	.021 / -.024	-.098	-.108 / .011	.009 / .105
Me	.268 / -.058	.162 / .033	**.400***	-.013 / .388	-.083 / **-.520***
Subject You	.069 / .179	.201 / -.158	.072	.090 / **.413$^+$**	.247 / .234
Object You	.029 / -.092	.151 / .193	-.103	-.176 / -.204	-.131 / -.100
Inclusive We	-.044 / -.168	-.094 / .038	-.062	.109 / .001	.243 / .093
Us	-.063 / -.097	-.167 / .013	-.277	-.049 / -.028	-.016 / .054

Note: $^+$p < .1, * p < .05, ** p < .01; m = male, f = female

Table 10

Cohabitating Male Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict, n = 22

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	-.189 / -.128	.187 / -.111	-.043	-.050 / .052	-.110 / .082
Me	.212 / .080	-.145 / .000	-.106	.160 / .151	.152 / .027
Subject You	-.241 / **-.443***	-.099 / **.390***	-.167	-.098 / .059	-.248 / -.036
Object You	.046 / .061	.073 / .029	**-.423***	.179 / **.425**[+]	.072 / .360
Inclusive We	-.078 / .069	**-.333**[+] / .027	.084	.086 / -.163	.204 / .111
Us	.165 / .181	-.025 / -.206	-.009	.187 / .104	.145 / .129

Note: [+]p < .1, * p < .05, ** p < .01; m = male, f = female

Table 11

Married Male Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict, n = 14

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	-.378 / .036	-.096 / .058	N/A	**-.484$^+$** / .271	-.407 / .461
Me	-.061 / -.117	**-.457*** / .205	N/A	.137 / -.128	.114 / -.097
Subject You	.156 / -.130	.288 / .253	N/A	**.629*** / -.080	**.526$^+$** / -.191
Object You	-.239 / -.232	.177 / -.024	N/A	-.069 / -.080	-.172 / -.141
Inclusive We	.290 / .311	.065 / **-.381$^+$**	N/A	.269 / -.070	.282 / -.133
Us	.177 / .155	.068 / .062	N/A	.309 / -.255	.336 / -.234

Note: $^+$ p < .1, * p < .05, ** p < .01; m = male, f = female

Table 12

Combined Pronoun Use Correlated to Men and Women's Reported Feelings of Love and Conflict

Pronoun	Love at Time 1 m/f	Conflict at Time 1 m/f	Relationship Success	Love at Time 2 m/f	Conflict at Time 2 m/f
I	**-.193[+]** / -.060	.028 / -.128	-.095	-.164 / .139	.100 / -.116
Me	.153 / .069	**-.264*** / -.010	.083	.212 / .002	-.135 / -.056
Subject You	.008 / .020	.081 / .153	-.120	.063 / .133	.123 / .085
Object You	.063 / .055	.037 / -.036	.011	.120 / .075	.136 / .128
Inclusive We	.028 / .168	-.101 / -.058	.157	.102 / .024	-.072 / -.088
Us	.084 / .036	.030 / -.059	-.016	.073 / -.013	.135 / -.122

Note: [+] $p < .1$, * $p < .05$, ** $p < .01$; m = male, f = female

Table 13

Female Pronoun Use Correlated to Relationship Status and Length of the Relationship

Pronoun	Relationship Status	Length of Relationship
I	.005	-.037
Me	**.308****	-.037
Subject You	**-.327****	**-.242***
Object You	**-.220***	.001
Inclusive We	-.018	**-.225***
Us	.065	**.251***

Note: ⁺ p < .1, * p < .05, ** p < .01

Table 14

Female Pronoun Use Correlated to Men and Women's Reported Change in Feelings of Love and Conflict

Pronoun	Change in Love m/f	Change in Conflict m/f
I	-.074 / **.274***	.033 / -.056
Me	.187 / .106	.201 / -.033
Subject You	-.008 / .020	.054 / -.181
Object You	.098 / .001	.148 / .042
Inclusive We	.074 / .039	.116 / .050
Us	-.108 / .005	-.033 / -.116

Note: [+] p < .1, * p < .05, ** p < .01; m = male, f = female

Table 15

Male Pronoun Use Correlated to Relationship Status and Length of the Relationship

Pronoun	Relationship Status	Length of Relationship
I	.008	-.082
Me	-.151	-.077
Subject You	**-.298****	**-.243***
Object You	-.031	**-.216**
Inclusive We	.095	.037
Us	.140	.118

Note: $^+$ p < .1, * p < .05, ** p < .01

Table 16

Male Pronoun Use Correlated to Men and Women's Reported Change in Feelings of Love and Conflict

Pronoun	Change in Love m/f	Change in Conflict m/f
I	.029 / **.243**[+]	.090 / -.130
Me	-.043 / .006	.005 / -.083
Subject You	.185 / **.268***	.025 / -.118
Object You	.035 / .188	.062 / -.036
Inclusive We	.033 / -.167	.016 / .041
Us	.004 / -.080	.081 / -.035

Note: [+] p < .1, * p < .05, ** p < .01; m = male, f = female

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Curriculum Vita

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Education:

M.A., Psychology, Rutgers University – Camden, NJ, 2012
    Thesis: Word Choice During a Cooperative Task and Romantic Partners'
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    Exemplary courses taken: Graduate Cognitive Psychology; Statistics & Research
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Teaching Certificate, Rutgers University – Camden, NJ, 2009
    Certified New Jersey High School Teacher of English
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B.A., English, Rutgers University – Camden, NJ, 2002, *With Honors*
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Research Positions:

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Research Assistant, May 2010 – present

    Romantic Relationships and Health Study
        Conduct literature searches and reviews using PSYCInfo
        Coordinate transcription of videotaped interactions
        Code transcribed interactions
        Analyze transcribed partner interactions for word usage using LIWC
        software
        Use SPSS to analyze correlational data and create graphs

Use Microsoft Excel to create graphs for presentation
Use PowerPoint to present my thesis proposal and defense
Use PowerPoint to create posters for conference presentations

Lesbian Couples Study

Coordinate participants' participation in project
Disseminate survey to participants
Interact with participants to administer questionnaires and conduct interaction tasks
Complete anthropometric measurements of participants
Ensure the proper functioning of video equipment during interaction tasks
Provide instruction about video-taped behavioral task
Contact participants for follow-up study
Clean data from the follow up surveys

Childhood Weight Concerns Study

Assist with preparation of web-based survey
Disseminate survey to participants
Use SPSS to analyze correlational data
Use Microsoft Excel to create graphs from pivot tables for presentation
Use PowerPoint to create posters for conference presentations

Gay Men Couples Study

Coordinate participants' participation in project
Disseminate survey to participants
Interact with participants to administer questionnaires and conduct interaction tasks
Complete anthropometric measurements of participants
Use Biopac MP150 physiological monitoring system with Acq*Knowledge* software to take heart rate and impedance measurements
Ensure the proper functioning of video equipment during interaction tasks
Provide instruction about video-taped behavioral tasks

Presentations:

Wood, E., Schulz, J., & Markey, C.N. (2012, March) *Factors Associated with Restrictive Child Feeding Practices*. Paper presented at the Eastern Psychological Association Convention. Pittsburgh, PA

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