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Attitudes toward Interpersonal Silence within Dyadic Relationships

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Abstract

As a universal characteristic of every social interaction, interpersonal silence is a meaningful, yet clearly under-studied form of nonverbal communication within interpersonal relationships. The current study attempted to address this oversight by investigating the relationship between sex, relationship type, relationship quality, and attitudes towards interpersonal silence. Results indicate that both men and women in same-sex friendships have more favorable attitudes toward interpersonal silence than opposite-sex friends or married partners. Further, attitudes toward interpersonal silence were found to be significantly correlated with, and predictive of, four key characteristics of relationship quality. Implications for the gendered nature of same-sex versus opposite-sex interaction styles are explored as explanations for these findings.

Key Words: silence, friendship, marriage, gender

Silence is a multifaceted, yet generally unappreciated, component of human communication, both in meaning and function. It is omnipresent within human interaction, often ambiguous in meaning, potentially interpersonally awkward and uncomfortable, and yet generally understood to communicate respect, intimacy, thought, and a host of other related ideas. Yet despite its universal importance and potential for multiple meanings within every interpersonal interaction, the extant research on interpersonal silence is limited at best.

The word silence is generally defined as the absence of sound, or "…a total lack of audible vocal signals" (Jaworski, 1993, p. 73). Silence is the occurrence of quiet that precedes, interrupts, punctuates, or follows any spoken interaction. In the narrower context of interpersonal relationships, silence is the absence of speech, but not necessarily the absence of message and meaning between individuals who are engaged in interaction (Jaworski, 1997).

Human communication is made possible through mutually understood verbal and nonverbal symbolic interaction (Blumer, 1969; Cronkhite, 1986). Interpersonal silence is a form of nonverbal symbolic interaction that represents more than a simple lack of speech. Silence is a communicative act with the potential to convey specific messages and meanings to those involved (Johannesen, 1974); it is a distinct, intentional, meaningful form of interpersonal communication. Silence is not the absence of communication; instead, it has the potential to provide great insights into human thought, emotion, relationship, attitudes, and behaviors (Richmond & McCroskey, 2003). Silence serves as an always potentially meaningful break within any given interaction, thereby providing the opportunity to search for understanding because internal thought, intentionality, and nonverbal behaviors continue in its presence (Cook, 1964; Johanneson, 1974).

Silence and speech are both integral forms of human communication. Instead of perceiving speech as primary and silence as a secondary influence, Bruneau (1973) argued that the two are complimentary and actually inform each other. Silence can be considered the backdrop of any vocal interaction or, as Bruneau (1973) noted, "Silence is to speech as the white of this paper is to this print" (p. 18). Speech always arises from and returns to silence (van Manen, 1990). And while silence gives birth and potential meaning to speech (Picard, 1952), it is also true that individuals use what is said vocally to interpret the intervening silence. The more unexpected a silence, the more potential it has to be analyzed by those involved (Jaworski, 1993). Within the field of communication, silence is seen as possessing a distinct cooperative quality. Only one person has to speak in order to banish silence, but both partners in an interaction must choose to be quiet for silence to exist (Jaworski, 1993).

The study of silence warrants scholarly attention for several reasons. First, to some degree, silence is a part of every communication act; it is a universal component of communication because of its constant, natural, underlying presence. Silence is a continuous phenomenon that exists separate from speech, providing context and contrast to talk, and holding the potential to inform verbal interaction. Silence serves as an omnipresent backdrop to all human interaction (Johannsen, 1974; van Manen, 1990).

Second, despite its omnipresent nature within all forms of interaction, silence is not widely acknowledged or understood as a form of human communication. While talk is generally viewed as the primary and/or most meaningful channel for communication, silence is commonly seen simply as a pause or gap between moments of talk. For this reason, further study of silence is important because silence often *does* serve as a channel for message and meaning exchange (Newman, 1982). At the very least, silence is a backdrop that offers contextual cues and clues providing relational partners with the opportunity for greater understanding of interpersonal

communication within their relationships (Bruneau, 2008; Johansen, 1974). Communication behaviors that go unnoticed and unanalyzed are often those actions with internal significance to the relationship *because* of their inconspicuousness.

Third, silence is important because it is arbitrary in nature, meaning interpretations of silence can and will differ significantly based on situation and participants. As a fluid concept, silence can inform interpersonal practices, attitudes, and behaviors – and conversely, may be informed by them as well (Bruneau, 1973; Knapp & Hall, 2006). Though silence is an inherently valueless occurrence (i.e., possessing no negative or positive meaning in and of itself), individuals develop their own set of interpretations for its meaning. The many mantras and proverbs passed down throughout the years in regard to silence are evidence of the wide array of meanings attached to the topic. Phrases such as, "silence is golden," "silence is deadly," or "awkward silence" are examples of value assignment. Opinions and uses of silence are also culturally based. For example, various scholars have noted the differences that exist between U.S. perceptions of silence and those of the Japanese (Kogure, 2007), Native American (Dumont, 1972), Amish (Enniger, 1984), and Aboriginal cultures (Mushin & Gardner, 2008). In all four cases, research findings reported that people in the U.S. were generally less comfortable with, and less appreciative of silence than were members of the other cultures in question. According to Bruneau (2008), long silences make many Americans anxious because of various meanings they may associate with past experiences of anger, hurt, or interpersonal conflict.

Fourth, silence performs multiple communication functions (Jenson, 1973). Silence has diverse functionality within the interpersonal context, mainly because there are many causes and motivators for the occurrence of silence between individuals (Baker, 1955; Bruneau, 1973; Johannsen, 1974). For instance, most cultures develop and practice, to varying extents, what Ephratt (2007) describes as the "eloquent silence." This category includes use of silence at religious ceremonies, with certain acts of fasting, during moments of memorial, at funerals, as a legal privilege, or in response to a rhetorical question (Ephratt, 2007). Eloquent silences are widely acknowledged, well-recognized instances of quiet that serve a particular purpose and communicate clear, intentional meaning. Other functions of interpersonal silence would include (but are not limited to) lack of enough information to respond, no sense of urgency to respond, pondering or processing information, topic avoidance, agreement, disagreement, indecisiveness, boredom, expression of great joy or awe, disregard for another person, insecurity, daydreaming or preoccupation, sulking (Johanneson, 1974), anger, frustration, attentive listening, uncertainty (Myers, 1973), self-reflection, disdain, hesitancy, the expression of comfort or sympathy toward another (i.e., "just being there"), admittance to a particular charge, an attempt to punish another, and/or disinterest. Silence is often the result of contemplation, feelings of nostalgia, meditation, resting, or some combination of these activities (Bruneau, 2008). Clearly, silence is a distinct form of nonverbal communication that performs a host of interaction-related functions.

Finally, the extant research on interpersonal silence is sparse. Silence as a form of human communication has been studied intermittently throughout the years with research focusing primarily on the role of silence in conversation (Cappella, 1980; McLaughlin & Cody, 1982; Zimmerman & West, 1975), silence as nonverbal communication (Kogure, 2007; Richmond, McCroskey, & Hickson, 2003), practices of silence in other cultures (Jaworski, 1989; Kogure, 2007; Pang, 1996), silence as a conflict-management strategy (Oduro-Frimpong, 2007), and the use of silence within the context of psychotherapy (Frankel, 2006; Gale, 2005; Ladany, 2004; Ronningstam, 2006). Few studies, however, have explored how individuals interpret and react to silence within their close, interpersonal relationships. A majority of the current body of literature

on the subject is either definitional or descriptive in nature. Few, if any, methodologically-driven studies have examined the interpersonal meanings, attitudes, and outcomes associated with perceptions of interpersonal silence within close, personal relationships.

Understanding how individuals perceive and interpret interpersonal silence and how they feel when silence occurs will help bolster the understanding of its effects on human relationships. Although we are clearly aware that silence plays a role within human communication and that individuals often hold to socially-constructed notions about its occurrence (Mushin & Gardner, 2008), what is not known and what has not been studied is the influence of sex and/or relationship type on perceptions of interpersonal silence shared between members of a dyad. Therefore, the overall goal of the current study was to more fully understand attitudes and perceptions concerning interpersonal silence within human relationships. This study attempted to investigate interpersonal silence by comparing various relational dyads in order to discover what associations might exist between sex, relationship type, and attitudes toward interpersonal silence. Additionally, the study sought to determine what variables of relationship quality might actually be associated with attitudes toward interpersonal silence and what such attitudes might predict. Following a discussion of the main arguments for the study, the methods, results, and a summary discussion will be presented.

Relationship Type, Uncertainty, and Ambiguity

As Berger (1986; 1987) argued in his Uncertainty Reduction Theory, uncertainty is central to all social interaction, thus a primary concern or goal of most social actors is to reduce feelings of uncertainty about each other and the relationship they share. And while we acknowledge that not all uncertainty is considered negative, nor is the primary goal of every interpersonal interaction driven by a need to reduce uncertainty (e.g., Kellerman &Reynolds, 1990; Sunnafrank, 1986), for the most part, high levels of uncertainty have been argued to decrease levels of liking, intimacy, nonverbal warmth, and self-disclosure, while decreasing levels of uncertainty promote the opposite, e.g., decreases in uncertainty produce increases in liking (Berger, 1987). Furthermore, similarity between people has also been argued to reduce uncertainty, such that as perceived similarity between individuals increases, uncertainty will decrease. Overall, uncertainty in relational interaction is considered detrimental to several important interpersonal processes, while decreasing uncertainty and ambiguity is related to many positive outcomes. Based in this well established theoretical perspective, we propose the following hypotheses about the role of silence in three different interpersonal relationships.

Marriage and opposite-sex friendship are two types of relationships that offer a wealth of comparison in terms of the distinct similarities and differences they share. Fundamentally, both are opposite-sex relationships, but usually there are differences in expectations, closeness, and degree of ambiguity. Traditional marriage is commonly characterized by physical and emotional intimacy and often enjoys unrivaled levels of interpersonal closeness; this is expected, in part, because married couples typically know and understand each other better than do members of other relationships such as within friendship (Laurenceau, Barrett, & Rovine, 2005). Marriage offers a clearly defined structure, both legally and traditionally, and provides an opportunity for increased time, experience, comfort, certainty, and acceptance between spouses. Because of the nature of the marital relationship, spouses are afforded the opportunity to develop deep levels of emotional intimacy. Given the assumed lack of relational uncertainty and ambiguity that results between marital partners who have connected on both physical and emotional levels, we propose that an expectation for more positive attitudes toward instances of interpersonal silence would seem logical. As such, silence could possibly serve as an indicator and/or expression of the

expected or perceived intimacy within the marriage and thus could be associated with much lower levels of relational ambiguity typically existing within the well defined nature of the husband and wife dyad.

While the marital union is an example of an interpersonal relationship that reduces certain aspects of relational uncertainty, in contrast, one particular relationship that typically struggles with high degrees of uncertainty is the opposite-sex platonic friendship (Bleske & Buss, 2000; 2001; Koenig, Kirkpatrick, & Ketelaar, 2007). Cross-sex friendships often differ from romantic or married relationships in the level of intimacy that is experienced, the motives for the relationship, and the types of interactions that take place. Platonic friendships are generally seen as less intimate than romantic relationships, primarily because more obstacles to intimacy exist within an opposite-sex friendship. For example, opposite-sex friends must determine what kind of emotional bond will be shared, what feelings of sexual attraction will be allowed or restricted, what balance of role equality will be struck, and what image of the relationship will be presented to the public (O'Meara, 1989). While romantic relationships also must be mutually negotiated, the opposite-sex platonic friendship faces unique challenges in terms of survival, perhaps more so than any other dyadic relationship. This is due, in great part, to the fact that opposite-sex friendships struggle with issues of uncertainty as relational members must navigate questions of roles, norms, and appearances, yet within a strictly platonic context (Rawlins, 1982; Booth & Hess, 1974). There are no solid rules, contexts, or expectations that have been set or modeled for opposite-sex friendships (O'Meara, 1989); sexual, emotional, or power jealously can easily arise, making it difficult for some opposite-sex friends to reach deep levels of emotional intimacy without romantic or sexual feelings interfering (Davis & Todd, 1982). In light of these challenges, we argue that instances of silence between opposite-sex friends may serve potentially to *increase* the uncertainty, ambiguity, and tension that is constantly being negotiated. If so, then logically we argue that a relationship that has higher levels of uncertainty has the potential to be adversely affected by silence, therefore making its occurrence undesirable for platonic opposite-sex friends unless a mediating activity is involved (e.g., studying, watching TV, etc.), giving context to the interpersonal silence.

Though both of these dyads must mediate the opposite-sex nature of the relationship, there is potentially a marked difference in the level of closeness and relational certainty that is commonly experienced. Therefore, based on the preliminary argument regarding the potential associations between silence, relationship type, intimacy, and uncertainty, the following hypothesis is proposed:

Hypothesis 1: Married couples will have more favorable attitudes toward interpersonal silence than platonic opposite-sex friends.

Men, Women, and Silence

For both men and women, communication within their same-sex and opposite-sex friendship dyads are associated with socialized learning and sex similarity (Wood, 1995, 2009, 2011). Decades of scholarly work has focused on male and female communication styles in an effort to understand further the differences and similarities that exist (for an extensive review, see Dindia & Canary, 2006). According to some scholars, even at a very young age, boys and girls are socialized into different communication styles, in part by the games they play (Mehta & Strough, 2009). For example, Maltz and Borker (1982) argue that typical boy games such as football, fort building, or "capture the flag" are structured in a way that does not necessitate talking. In these games, activity is the focus while talk is primarily used to negotiate power or rules, not to build closeness or relationships. However, when girls play games like dress-up,

house, or tea party, talking serves as a way for participants to learn about each other. Intimacy is developed through talking and the activity is seen as secondary to the communication taking place (Maltz & Borker, 1982). These socially cultivated communication styles may facilitate relatively simple same-sex communication patterns for those interacting with another member of the same sex and as a result, men and women often experience challenges communicating with each other because of differing interpersonal orientations based on activity and talk (Tannen, 1990a; 1990b).

Two decades of research has clearly established a compelling argument that men and women have different ways of developing and maintaining relational closeness. Swain (1989) was the first to coin the phrase "closeness in the doing" to describe the way in which men foster closeness in their friendships. In fact, over two thirds of the men Swain surveyed cited an activity other than talking as being the most meaningful aspect of their friendship(s). This idea was further developed by Wood and Inman (1993) who argued for an acceptance of different styles of closeness (e.g., closeness in the doing versus closeness in the dialog) and by Floyd (1995) who called for a "gendered closeness" understanding of same-sex intimacy within the friendship bond. Both sexes desire intimacy in their relationships, but it is achieved in typically different, gendered modes. Men typically engage a more masculine style of intimacy that values activity exchange while generally women who engage a more feminine style of intimacy prefer more verbal exchange (Wood & Inman, 1993). Men rely on activity and nonverbal bonding in the establishment of their close relationships, however, closeness within women's friendships grows out of self-disclosure and emotional support (Fehr, 2004; Rubin, 1985; Wood, 1995; 2009). Women tend to share a broad spectrum of their lives with other women, creating a multi-faceted, complex sense of closeness (Aries & Johnson, 1983; Johnson, 1996). And while neither approach to intimacy is inferior or superior to the other, both promote a type of intimacy that is welcomed, familiar, and commonly understood within each same-sex dyad (Fehr, 2004; Wood & Inman, 1993).

Furthermore, Wright (1982) introduced the concept of masculine and feminine body orientations assumed by men and women while interacting. Wright argued that women maintain a face-to-face orientation, directly talking to each other and sharing their feelings and emotions. Face-to-face orientation promotes individuals' focus on each other, including more awareness of nonverbal communication and less need for action. Conversely, men prefer a side-by-side orientation, sharing activities, playing games, and watching sports together as a means of creating and maintaining closeness. Side-by-side orientation encourages an increased focus, not on the individuals themselves, but on the activity at hand. Focus is on the doing, not the talking.

In light of this research, it is easy to understand why opposite-sex friendships – in which these styles of closeness and body orientation come into conflict – are often harder to navigate for both men and women because of the lack of similarity in preferred communication styles. Men and women are able to develop closeness within same-sex friendships more easily than within opposite-sex friendships because of the way communication is socially learned throughout life and the sex similarities that exist, both biologically and socially. Based on this line of research, we propose that men and women would have more positive attitudes toward silence within same-sex friendships than they would within opposite-sex friendships. Additionally, because of the heightened ambiguity and uncertainty that can exist within opposite-sex friendships, men and women may potentially experience more negative attitudes toward silence than they would within a same-sex friendship. As noted above, opposite-sex friends must constantly negotiate roles, rules, emotional/sexual feelings, and public presentation (O'Meara,

1989), while same-sex friendships benefit from much more clearly defined relational boundaries, more commonly understood expectations for the relationship, more similarity and thus, far less uncertainty. Therefore, the following three-part hypothesis is proposed:

Hypothesis 2a: Same sex friendships will experience more favorable attitudes toward interpersonal silence than opposite-sex friendships.

Hypothesis 2b: Men in same sex friendships will have more favorable attitudes toward interpersonal silence than men in opposite-sex friendships.

Hypothesis 2c: Women in same sex friendships will have more favorable attitudes toward interpersonal silence than women in opposite-sex friendships.

Marriage, Same-Sex Friendship, and Silence

Finally, having advanced some preliminary arguments concerning attitudes toward interpersonal silence and the differences between married and platonic relationships and between same- and opposite-sex friendships, the final area of interest within the current study was in regards to any potential differences for attitudes toward interpersonal silence between marriage and same-sex friendship. Research supports the notion that married couples experience levels of love and intimacy that are not normally experienced equally in other relationships (Laurenceau, Barrett, & Rovine, 2005). While platonic friendships are often more temporary and transitional, the commitment associated with marriage can lend itself to a much deeper development of emotional closeness. However, given the extant research on the differences men and women must negotiate regarding both interpersonal orientation and preferred styles of maintaining closeness, same-sex friendship may have an advantage over marriage in terms of attitude toward silence because, fundamentally, marriage is an opposite-sex relationship subject to many of the same challenges faced by non-married, opposite-sex friends. One potential challenge is that men and women maintain different interpersonal orientations while interacting, i.e., men tend to practice a side-by-side orientation while women prefer a face-to-face orientation (Wright, 1982); therefore, in an opposite-sex relationship such as marriage, participants create a side-to-face orientation which can pose unique challenges to effective communication, particularly in terms of nonverbal communication. Additionally, as noted above, male-male friendship dyads more readily engage a more masculine, activity oriented style of intimacy where the "doing" is superior to talking; on the contrary, female-female friendship dyads tend to prefer the more feminine dialogue based gendered style of maintaining intimacy where talk trumps activity. Therefore, based on these two compelling arguments favoring interpersonal similarity, i.e., same-sex over opposite-sex closeness styles and interpersonal orientation, the following hypothesis is proposed:

Hypothesis 3: Same-sex friends will have more favorable attitudes toward interpersonal silence than married couples.

Relationship Quality and Silence

As noted above, we have proposed a number of arguments concerning relationship closeness and its perceived association with attitudes toward interpersonal silence in three specific relationship types. Our argument is basically that the more intimacy a relationship experiences, the less uncertainty and ambiguity will be present, thus the often ambiguous instance of interpersonal silence will be perceived in a more clear and favorable manner. However, closeness is only one relationship quality variable that logically could be argued to have a positive association with attitudes toward interpersonal silence. Clearly, other commonly studied characteristics of relationship quality might also be related to favorable attitudes about interpersonal silence, regardless of relationship type. The extant literature on interpersonal

silence provides no foundation upon which to build these types of arguments; however, based on the general logic of uncertainty reduction principles, we propose that just like with closeness, the more satisfied, committed, and involved friends or partners are within their relationship, potentially the less ambiguity and uncertainty will exist in their relationship (for reviews on these specific relationship characteristics, see Fincham & Beach, 2006; Laurenceau & Kleinman, 2006; Moore, McCabe, & Stockdale, 1998; Rusbult, Coolsen, Kirchner, & Clarke, 2006). We believe it is logical to argue that relationships with satisfied, committed, close, and engaged partners will be more comfortable with and appreciative of moments of silence in the relationship and therefore hold more favorable attitudes toward silence. All four of these commonly studied markers of relationship quality arguably help lessen uncertainty within the friendship or marriage because they are indicators of active engagement, investment, and certainty for the individuals involved, thereby potentially reducing uncertainty, ambiguity, or doubt within moments of interpersonal silence that arise in social interaction. Therefore, based on this line of reasoning, we propose the following hypothesis:

Hypothesis 4: Attitudes toward interpersonal silence will be positively associated with interpersonal closeness, satisfaction, commitment, and involvement.

Method

Participants

Participants (N = 384) in this study were recruited from two different sources. The first group (73.7%) originated from the population of a mid-sized, private, south-central university and numbered 118 male and 165 female undergraduate communication students enrolled in the basic speech course. The second group (26.3%) consisted of 37 married males and 64 married females from two separate mid-sized nondenominational churches in the south-central U.S. Overall, 155 men (40.5%) and 228 women (59.5%) participated in the study, ranging in age from 17 to 65 (M = 23.03, SD = 8.40). A majority (77.8%) identified themselves as Caucasian, followed by those indicating Hispanic (7.6%), Black/African American (7.3%), Asian/Pacific Islander (3.7%), Native American (1.8%), and "Other" (1.8%) as their ethnic background. At the time of the study, 76.5% of participants had obtained their high school diploma/GED or were pursuing a Bachelor's degree; others reported having earned an Associate's degree (2.1%), Bachelor's degree (13.3%), graduate degree (3.9%), doctoral degree (0.3%), professional degree (0.5%), or were currently pursuing a graduate degree (3.4%). A majority of respondents (72.6%) reported being single, while 27.4% self-identified as married.

For the purpose of the study, unmarried participants were randomly divided into two groups, one of which reported based on the nature of their closest platonic, opposite-sex friendship, while the other group reported based on their closest same-sex friendship. Married participants were asked to respond with their spouse as the focus of their responses. Participants were asked to include demographic information about their same-sex friend, opposite-sex friend, or spouse. Length of same-sex friendships ranged from 10 months to 21 years (M = 6.44, SD = 5.26), while opposite-sex friendships ranged in length from 8 months to 20 years (M = 5.01, SD = 4.35). Marriages ranged in duration from 6 months to 44 years (M = 9.61, SD = 11.34). Across all three groups, average relationship duration was approximately six years (M = 6.75, SD = 7.35).

Procedure

This study utilized pencil and paper questionnaires. To encourage honesty among respondents, participants were assured of their anonymity and confidentiality and were informed of their rights as subjects in the study. As mentioned previously, the unmarried population was

randomly assigned to one of two conditions – one asked participants to answer the questions according to their closest same-sex friendship and the other asked participants to answer according to their closest opposite-sex, non-romantic friendship. The surveys were distributed to students enrolled in two sections of the basic speech course, completed in class, and returned upon completion. The third survey was distributed to married individuals associated with two mid-sized nondenominational churches. In this survey, participants were asked to answer questions by referencing their relationship with their spouse. All surveys were completed on-site and collected immediately following completion. In order to promote thought generation about the target relationship, at the beginning of the survey, respondents were asked to report simple demographic information about their same-sex friend, opposite-sex friend, or spouse. Additionally, at the conclusion of the survey, participants were asked to complete demographic information about themselves.

Measures

In order to gain information about the quality of the participants' relationships, the surveys employed specific scales to determine relational satisfaction, involvement, commitment, closeness, attitude toward silence, assertiveness, and responsiveness. Most measures on the questionnaires employed a 7-point Likert-type scale in which 1 = strongly disagree and 7 = strongly agree.

Relationship satisfaction was measured by Floyd and Morman's relational satisfaction scale (2000). Using six Likert-type items, the scale measured the extent of participants' satisfaction with the nature of their relationship with their friend or spouse as demonstrated by such items as, "My relationship with my same-sex friend is just the way I want it to be" (α = .87). This item was altered to reflect the focus on opposite-sex friends and spouses in the other two surveys used for the study.

Relationship involvement was measured by a series of seven Likert-type items developed by Floyd & Morman (2000). This scale included items that assessed how much time is devoted to each other in the friendship or marriage, how involved participants feel in each other's lives, and how positive their interactions are, as illustrated by such comments as, "I am always spending time with my friend" (α = .93). Again, the items were changed to reflect the focus on opposite-sex friends and spouses in the other two surveys used for the study.

Relationship commitment was assessed with a modified version of the Investment Model Scale by Rusbolt, Martz, and Agnew (1998). This five-item commitment scale was used to measure the degree to which commitment varied within participants' friendships or marriages. The original Investment Model Scale is a 37-item, self-report, Likert-type scale instrument used to measure a person's perceptions of commitment to a personal relationship. Items were modified to reflect the specific friendship or marriage focus of the current project, (e.g., "I want our friendship to last for a very long time") (α = .92).

Relationship closeness was measured with the Inclusion of Other in the Self (IOS) scale developed by Aron, Aron, and Smollan (1992). The IOS scale asserts that in a close relationship, an individual acts as if there is a degree of inclusion of the *other* within them; close dyads believe they are interconnected with each other. The IOS scale consists of a set of Venn-like diagrams, each representing varying levels of overlap. One circle in each pair is labeled "self" and the other circle is labeled "other." The participants were instructed to select the pair of circles that best depicted the nature of perceived closeness in the relationship with their friend or spouse. If a participant was close to their friend/spouse, they chose more overlapped circles; if they were not as close to their friend/spouse, they chose more separated circles. The IOS scale

has been extensively validated in both experimental and correlation research paradigms (see Aron et al., 1992).

A scale to measure *attitudes toward interpersonal silence* was developed for the current study. The eight-item semantic differential scale (Osgood, Suci, & Tannenbaum, 1957) included corresponding pairs of words such as "nervous/relaxed," "uncomfortable/comfortable," and "distant/close." For each item, subjects were asked to circle a number (1-7) on a continuum which indicated how closely they identified with the feelings associated with each pair of concepts in association to their feelings about experiencing silent moments within their relationship ($\alpha = .95$).

Finally, gender orientation was assessed with Richmond and McCroskey's (1990) Assertiveness-Responsiveness scale. Respondents were asked to indicate the degree to which they felt each of the ten personality characteristics for Assertiveness (e.g., independent, assertive, competitive) ($\alpha = .58$) and the ten personality characteristics for Responsiveness (e.g., helpful, sincere, sympathetic) ($\alpha = .61$) applied to their personality while interacting with others.

At the conclusion of the study, participants answered demographic questions about themselves, including age, sex, race, education, and marital status.

Results

The primary purpose of the current study was to attempt to understand the attitudes individuals have toward the occurrence of silence in the context of their interpersonal relationships. For the purpose of comparison, the relationship dyads chosen for study consisted of same-sex friendships, opposite-sex friendships, and marriage relationships. Three main hypotheses were proposed regarding the connection between relationship type, sex, and attitude toward silence; a fourth hypothesis was presented related to the association of attitudes toward interpersonal silence and four common indicators of relational quality. The results of the analysis are detailed here.

Before any of the hypotheses were tested, we wanted to ensure that none of our demographic variables were serving as potential confounds for the between group comparisons. Basically, we collected data on one continuous demographic variable (age) and three categorical demographic variables (race, education, & marital status). In order to address the issue of any potential confounds, we first ran a one-way ANOVA with survey group (i.e., same-sex friends, opposite-sex friends, & married couples) as the independent variable and age as the dependent variable and found it to be significant. Thus, we ran an ANCOVA with survey group as the independent variable, attitudes towards silence as our dependent variable, and placed age in as the covariate. The ANCOVA revealed that even when controlling for the effects of age, the survey grouping variable was significant, $F(2, 374) = 9.435$, $p = .000$. Because the other three potential confound demographic variables were categorical in nature, we ran three different one-way ANOVAs with each of the variables (race, education, & marital status) as the independent variables and attitude towards silence as the dependent variable. All three one-way ANOVAs were *insignificant*: Race: $F(5, 375) = .408$, $p = .843$; Education: $F(7, 373) = .602$, $p = .754$; Marital Status: $F(1, 379) = 1.104$, $p = .294$. Therefore, these tests gave us confidence to believe that none of these demographic variables were serving as confounds to our data.

Hypothesis 1—Marriage and Opposite Sex Friendships

The first hypothesis predicted that married individuals would have more favorable attitudes toward silence than would opposite-sex friends. In order to test the hypothesis, an ANOVA was conducted with sex and relationship type as the independent variables and attitude towards silence as the dependent variable. No main effect was found for either sex or

relationship type, such that married individuals do not, in fact, have more favorable attitudes (M = 5.78, SD = 1.16) toward interpersonal silence than individuals in opposite-sex friendships (M = 5.69, SD = 1.06) ($F(2, 382) = .3$, $p = .74$, $\eta^2 = .002$). Hypothesis One was not confirmed.

Hypothesis 2—Same-Sex Friendships

Hypothesis Two-A predicted that, overall, members of a same-sex friendship dyad would have more favorable attitudes toward silence than would members of an opposite-sex friendship dyad. To test this hypothesis, an ANOVA was conducted with relationship type (same-sex, opposite-sex, married) as the independent variable and attitude toward silence as the dependent variable. The ANOVA revealed a significant main effect for relationship type ($F(2, 382) = 9.72$, $p = .00$, $\eta^2 = .05$). Tukey HSD post-hoc follow-up analysis revealed significant differences between groups, such that members of a same-sex friendship did, in fact, have more favorable attitudes toward interpersonal silence (M = 6.22, SD = .89) than did members of an opposite-sex friendship (M = 5.69, SD = 1.06). Hypothesis Two-A was confirmed.

Hypothesis Two-B predicted that men in same-sex friendships would have more favorable attitudes toward silence than would men in opposite-sex friendships. Using only the data from the men in the study, an ANOVA was conducted with relationship type (same-sex, opposite-sex, married) as the independent variable and attitude as the dependent variable. The ANOVA revealed a significant main effect for relationship type ($F(2, 154) = 4.09$, $p = .02$, $\eta^2 = .05$). Tukey HSD post-hoc follow-up analysis confirmed there was a significant difference between groups, such that men in same sex friendships do, in fact, have more favorable attitudes (M = 6.61, SD = .91) toward interpersonal silence than men in opposite-sex friendships (M = 6.17, SD = 1.08). Hypothesis Two-B was confirmed.

Hypothesis Two-C predicted that women in same-sex friendships would have more favorable attitudes toward silence than would women in opposite-sex friendships. Using only the data from the women in the study, an ANOVA was conducted with relationship type (same-sex, opposite-sex, married) as the independent variable and attitude as the dependent variable. The ANOVA revealed a significant main effect for relationship type ($F(2, 228) = 6.45$, $p = .002$, $\eta^2 = .054$). Tukey HSD post-hoc follow-up analysis confirmed there to be a significant difference between groups, such that women in same-sex friendships do, in fact, have more favorable attitudes (M = 6.25, SD = .88) toward interpersonal silence than women in opposite-sex friendships (M = 5.75, SD = 1.05). Additionally, women in same-sex friendships (M = 6.25, SD = .88) were also found to have significantly more favorable attitudes toward interpersonal silence than married women (M = 5.75, SD = 1.12). Hypothesis Two-C was confirmed.

Hypothesis 3—Marriage and Same-Sex Friendship

The third hypothesis predicted that members of a same-sex friendship dyad would have more favorable attitudes toward silence than would married individuals. An ANOVA was conducted with relationship type (same-sex, opposite-sex, married) as the independent variable and attitude towards silence as the dependent variable. The ANOVA revealed a main effect for relationship type ($F(2, 382) = 9.72$, $p = .00$, $\eta^2 = .05$). Tukey HSD post-hoc follow-up analysis revealed significant differences between groups, such that members of a same-sex friendship did, in fact, have more favorable attitudes toward interpersonal silence (M = 6.22, SD = .89) than did members of a marital dyad (M = 5.78, SD =1.16). Hypothesis Three was confirmed.

Hypothesis 4—Relationship Quality and Silence

In addition to the study's interest in the main effects of sex and relationship type on attitudes toward silence, Hypothesis Four predicted a positive relationship between four key variables of relational quality and attitudes towards interpersonal silence. A series of simple

Pearson correlations were conducted across all variables in the study revealing strong, positive associations between satisfaction, involvement, commitment, and closeness (see Table 1).

Table 1: Pearson Correlations of Relationship Quality Variables

Variables	Closeness	Satisfaction	Involvement	Commitment	Attitude
Closeness	—				
Satisfaction	.546**	—			
Involvement	.675**	.594**	—		
Commitment	.670**	.456**	.618**	—	
Attitude	.221**	.353**	.292**	.217**	—

***Correlation is significant at the 0.01 level (2-tailed)*

Additionally, five significant correlations emerged with attitudes toward silence. First, a significant positive correlation was discovered between relational satisfaction and attitude toward interpersonal silence (r = .353, p = .01), between relational involvement and attitude (r = .292, p = .01), between relational commitment and attitude (r = .217, p = .01), and between closeness and attitude toward silence (r = .221, p = .01). Finally, through use of the Assertiveness-Responsiveness scale (Richmond & McCroskey, 1990) which measured gender orientation, a positive correlation was discovered between feminine gender orientation and attitudes toward silence (r = .140, p = .006), suggesting that the more feminine (i.e., responsive) a person is within his or her relationship, the more favorable the attitudes toward interpersonal silence will be.

These significant correlations regarding key interpersonal variables of relationship quality lead us to further explore the predictive nature of attitudes toward interpersonal silence. Regression analysis was employed to determine if attitude toward silence was predictive of relational satisfaction, involvement, commitment, and closeness. Results of the first linear regression determined that attitudes toward interpersonal silence significantly predicted relationship satisfaction, $\beta = .35$, $t(375) = 7.31$, $p = .000$. Attitude toward silence also explained a significant proportion of the variance in satisfaction, $R^2 = .125$, $F(1, 376) = 53.54$, $p = .000$.

The second linear regression reported that attitudes toward interpersonal silence significantly predicted relationship involvement, $\beta = .29$, $t(374) = 5.92$, $p = .000$. Attitude towards silence also explained a significant proportion of the variance in relationship involvement, $R^2 = .085$, $F(1, 375) = 35.03$, $p = .000$.

The third linear regression reported that attitudes toward interpersonal silence significantly predicted relationship commitment, $\beta = .22$, $t(379) = 4.32$, $p = .000$. Attitude toward silence also explained a significant proportion of the variance in commitment, $R^2 = .047$, $F(1, 380) = 18.69$, $p = .000$.

The final linear regression found that attitudes toward interpersonal silence significantly predicted relationship closeness, $\beta = .22$, $t(373) = 4.38$, $p = .000$. Attitude toward silence also explained a significant proportion of the variance in closeness, $R^2 = .049$, $F(1, 374) = 19.19$, $p = .000$. Hypothesis Four was confirmed.

Discussion

The purpose of the current project was to assess the relationship between sex, relationship type, and attitudes toward interpersonal silence. The overall finding of the study is that significant differences for relationship type exist, such that participants in same-sex friendships

reported more favorable attitudes toward interpersonal silence than those in opposite-sex friendships or those who were married. Additionally, the data revealed that attitudes toward interpersonal silence significantly predicted all four characteristics of relational quality (i.e., satisfaction, involvement, commitment, closeness), accounting for almost 31% of the variance of these four variables.

Hypothesis One predicted that married individuals would be more comfortable with silence than those in opposite-sex friendships. This hypothesis was based on the idea that the intimacy fostered in a marriage relationship would seem to mitigate the uncertainty and ambiguity that is often present within an opposite-sex friendship thereby allowing for more positive attitudes toward silence. However, the analysis found that married individuals do not, in fact, have more favorable attitudes toward silence than opposite-sex platonic friends. While it seems logical to argue that marriage clearly allows for higher levels of physical and emotional intimacy, it is still fundamentally an opposite-sex relationship, making it similar in many ways to opposite-sex friendship. Perhaps due to different interpersonal orientations (side-by-side/face-to-face) and styles for establishing and maintaining closeness (activity/talking), men and women in either type of opposite-sex relationship face uncertainty or doubt during a silent period because each sex may be unsure or unfamiliar with the other's intimacy style, orientation, or expectations during silence. Marriage and opposite-sex friendship showed no significant differences in attitude toward silence perhaps because, fundamentally, both are vulnerable to the challenges of opposite-sex relationships and their differing approaches to negotiating meaning in the relationship.

Hypothesis Two-A asserted that, overall, same-sex friendships would enjoy more positive attitudes toward silence than opposite-sex friendships. The data confirmed this hypothesis, indicating that the similarities and clearer expectations found within same-sex friendships serve to make same-sex friends more comfortable with mutual silence than opposite-sex friends. As discussed previously at length, there are many issues such as role distinctions, sexual tension, public presentation, and overall ambiguity that can impede comfort and closeness within opposite-sex friendships (Koenig, Kirkpatrick, & Ketelaar, 2007). Additionally, uncertainty reduction theory, the same-sex similarity principle, and more broadly the similarity-attraction effect, would argue that similarities between people attract them to each other in relationships and promote continued relationship maintenance (Byrne, 1971; Montoya, Horton, & Kirchner, 2008; Selfhout, Denissen, Branje, & Meeus, 2009; Tenney, Turkheimer, & Oltmanns, 2009). This, coupled with the platonic nature of same-sex friendship and similar interpersonal orientations and intimacy styles appears to reduce relational uncertainty and ambiguity, creating a more clearly defined relational understanding for friends of the same-sex who experience silence during their interactions with each other.

Hypothesis Two-B claimed that men in same-sex friendships would experience more favorable attitudes toward silence than men in opposite-sex friendships. This hypothesis was also confirmed by the data. In a series of studies focused on intimacy within same-sex friendships, Fehr (2004) concluded that while both men and women acknowledge self-disclosure as the primary pathway to intimacy within their same-sex friendships, men choose not to engage disclosure in the manner that women do and also report activity as a second, equally compelling pathway to intimacy in their friendships with other men. As noted above, men have a distinct way of expressing friendship and closeness with other men, as seen by the way men value activity over talk in their relationships (Floyd, 1995; Swain, 1989). Even from childhood, boys are typically socialized to communicate much differently than girls (Tannen, 1990a; Wood,

2011); talk is seen as a means of more efficiently accomplishing the task or activity at hand, rather than for the purpose of self-disclosure and sharing. Both uncertainty reduction theory and the same-sex similarity principle would argue that, for men, similarities in communication styles serve to decrease the level of uncertainty and ambiguity experienced within the same-sex relationship. Stylistic similarities for communication encourage closeness and relational clarity. Men often spend time with other men by engaging in side-by-side activities such as playing sports or video games, watching sports together, or participating in other activities which do not necessitate continuous talk (Monsour, 1992; Sherrod, 1989; Williams, 1985; Wood, 1995). This activity-based orientation may promote more favorable attitudes toward silence in male same-sex friendships because men do not necessarily have expectations for a great deal of personal, emotional, or intimate talk with their same-sex male friends; in fact, many men report a strong preference for receiving social and emotional support from women, not other men (Burleson, Holmstrom, & Gilstrap, 2005; Umberson et al., 1996). On the other hand, silent moments or periods of time within opposite-sex friendships may call even more attention to the ambiguity and uncertainty that is constantly being negotiated.

Hypothesis Two-C argued that women in same-sex friendships would also have more favorable attitudes toward silence than women in opposite-sex friendships and the data confirmed this hypothesis. Regardless of how often silence occurs in either the male-male or female-female friendship, both sexes reported having more favorable attitudes toward silence when it occurred between them and a friend of the same-sex. Again, both uncertainty reduction theory and the same-sex similarity principle would argue that women share significant perceived similarities based on sex and gender, affecting the mutual understanding of the friendship. Typically, less uncertainty and ambiguity are found within a female-female friendship than within a female-male friendship because, in the former context, the woman usually does not have to navigate public presentation, what feelings to allow, how to negotiate sexual tension, or how much power to assume (O'Meara, 1989). There are much clearer expectations and potentially fewer questions that might arise internally during a silent moment between women. Additionally, given the more feminine orientation of female-female relationships (an orientation found to be significantly correlated with attitudes toward silence in the current study) promoting self-disclosure, intimacy, empathy, cooperation, helping, service, and a variety of other supportive relational qualities (Wood, 2011), there are likely to be strong elements of relational empathy that are shared between women, bringing meaning, rather than uncertainty, to silent moments of interaction. Just as men create closeness through activity, women create intimacy with each other through perceived similarity, disclosure, detailed conversation, and mutual empathy (Wood, 1995; 2011; Wood & Inman, 1993). Perceived similar life experiences between women promote a sense of feminine understanding and create mutual expectancies that apparently give the same-sex friendships of women an advantage with their attitudes toward silence, an advantage apparently not found in the opposite-sex relationship.

Furthermore, Hypothesis Three predicted that individuals in same-sex friendships would have more favorable attitudes toward silence than married individuals. This hypothesis was confirmed and, again, the same-sex similarity principle provides insight and support for this finding. Just as same-sex friendship was found to have more favorable attitudes than opposite-sex platonic friendship, same-sex friendship also exceeded marriage in terms of positive attitudes toward interpersonal silence. Despite the romantic and sexual aspects of marriage and the opportunity for the development of much deeper physical and emotional intimacy, fundamentally, heterosexual marriage is an opposite-sex relationship and therefore theoretically

subject to many of the same issues other opposite-sex relationships must manage. The marriage relationship may be more intimate in many regards, but that does not appear to have an effect on attitudes toward interpersonal silence. The finding that same-sex friends are more comfortable with the occurrence of silence than are married individuals may have to do with the fact that each relationship carries different expectations for interpersonal interactions. Therefore, overall, according to the findings of this study, relationship type appears to be an important context for understanding interpersonal silence.

The final hypothesis predicted significant associations between attitudes toward interpersonal silence and four common characteristics of relational quality: satisfaction, involvement, commitment, and closeness. Through use of Pearson correlations and regression analysis, the data revealed that all four relational variables of interest are positively associated with, and significantly predicted by attitudes toward interpersonal silence. Specifically, relational satisfaction, involvement, commitment, and closeness were found to be related to favorable attitudes toward silence, such that regardless of relationship type, increased relational quality in any of these areas appears to positively influence the experience of interpersonal silence within a relationship. As we speculated at the beginning of the study, for these key variables of relational quality to be significantly associated with attitudes toward silence seems fairly intuitive. Not only are they highly correlated with each other, but as traditional markers of the strength, maturity, and stability of any relationship type, it appears that the ability of friends or spouses to feel comfortable with each other in moments of silence is directly related to how close, satisfied, committed, and involved they feel with each other and their relationship. The more these four characteristics of relationship quality exist, the more friends or partners can reduce the uncertainty and ambiguity so often found in silent interaction, and focus instead on the closeness, satisfaction, commitment, and involvement that designate high quality relationships.

Limitations and Future Research

This study faced certain limitations worth noting. First, the study was limited in terms of the variety of individual participants. A majority of the respondents self-reported as Caucasian, thus limiting the ethnic diversity of the overall sample. Approximately three-fourths of the study's sample were undergraduate college students while the remaining one fourth were recruited from two area churches. Future studies should attempt to increase the number of married participants and recruit different types of married couples (e.g., couples not involved in church). Also, the average time actually married was only nine years; perhaps marriages of longer duration would report different attitudes and levels of relational quality, making allowances for the familiarity developed over long periods of time together.

Understanding attitudes toward silence as influenced by relationship type and relational quality advances our knowledge of interpersonal silence as an important component of nonverbal communication within interpersonal relationships. However, the current project is the only quantitative study we are familiar with that has attempted such an investigation. As a universal characteristic of every social interaction, clearly silence warrants much more attention than it has received by scholars interested in nonverbal communication and human relating. What we report here is a first step toward achieving that goal.

References

Aries, E. J., & Johnson, F. L. (1983). Close friendships in adulthood: Conversational content between same-sex friends. *Sex Roles*, *9*, 1183-1196.

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63,* 596-612.

Baker, S. J. (1955). The theory of silences. *Journal of General Psychology, 53,* 145-167.

Berger, C. R. (1987). Communicating under uncertainty. In M. Roloff & G. Miller (Eds.), *Interpersonal Processes: New Directions in Communication Research* (pp. 39-62). Sage: Newbury Park, CA.

Berger, C. R. (1986). Uncertain outcome values in predicted relationships: Uncertainty reduction theory then and now. *Human Communication Research, 13*, 34–38.

Bleske, A. L., & Buss, D. M. (2001). Opposite-sex friendship: Sex differences and similarities in initiation, selection, and dissolution. *Personality and Social Psychology Bulletin, 27*, 1310-1323.

Bleske, A. L., & Buss, D. M. (2000). Can men and women be just friends? *Personal Relationships, 7*, 131-151.

Blumer, Herbert. (1969). *Symbolic interactionism: Perspective and method.* Englewood Cliffs, N.J: Prentice-Hall.

Booth, A., & Hess, E. (1974). Cross-sex friendship. *Journal of Marriage and the Family*, *36*, 38-47.

Bruneau, T. J. (1973). Communicative silences: Forms and functions. *Journal of Communication, 23,* 17-24.

Bruneau, T. J. (2008). How Americans use silence and silences to communicate. *China Media Research*, *4*, 77-85.

Burleson, B. R., Holmstrom, A. J., & Gilstrap, C. M. (2005). "Guys can't say that to guys": Four experiments assessing the normative motivation account for deficiencies in the emotional support provided by men. *Communication Monographs, 72*, 468-501.

Byrne, D. (1971). *The attraction paradigm*. Academic Press: New York.

Campbell, K. K. (1973). The rhetoric of women's liberation: An oxymoron. *Quarterly Journal of Speech, 59,* 74-86.

Cappella, J. N. (1980). Talk and silence sequences in informal conversations II. *Human Communication Research, 6*, 130-145.

Coates, J. (1986). *Women, men, and language: Studies in language and linguistics.* London: Longman.

Coates, J., & Cameron, D. (1989). *Women in their speech communities: New perspectives on language and sex.* London: Longman.

Cook, J. J. (1964). Silence in psychotherapy. *Journal of Counseling Psychology*, *11*, 42-46.

Cronkhite, G. (1986). On the focus, scope, and coherence of the study of human symbolic activity. *Quarterly Journal of Speech*, *72*, 231-246.

Davis, K., & Todd, M. (1982). Friendship and love relationships. *Advances in Descriptive Psychology*, *2*, 79-122.

Dindia, K., & Canary, D. J. (2006). *Sex differences and similarities in communication, 2nd ed.* Lawrence Erlbaum Associates: Mahwah, N.J.

Dumont, R. V., Jr. (1972). Learning English and how to be silent: Studies in Sioux and Cherokee classrooms. In C. Cazden, V. John, & D. Hymes (Eds.), *Function of language in the classroom.* New York: Teachers College Press.

Enniger, W. (1984). *Internal and external perspectives on Amish and Mennonite life.* Essen, Germany: Unipress.

Ephratt, M. (2007). The functions of silence. *Journal of Pragmatics, 40,* 1909-1938.

Erickson, E. H. (1959). *Identity and the life cycle.* New York: W.W. Norton & Company.

Fincham, F. D., & Beach, S. R. H. (2006). Relationship satisfaction. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge Handbook of Personal Relationships* (pp. 579-594). New York: Cambridge University Press.

Floyd, K. (1995). Gender and closeness among friends and siblings. *Journal of Psychology*, *129*, 193-202.

Floyd, K., & Morman, M. T. (2000). Affection received from fathers as a predictor of men's affection with their own sons: Tests of modeling and compensation hypotheses. *Communication Monographs, 67,* 347-361.

Frankel, Z., Levitt, H., Murray, D., Greenberg, L., & Angus, L. (2006). Assessing silent processes in psychotherapy: An empirically derived categorization system and sampling strategy. *Psychotherapy Research*, *16*, 615-625.

Fehr, B. (2004). Intimacy expectations in same-sex friendships: A prototype interaction-pattern model. *Journal of Personality & Social Psychology, 86,* 265-284.

Gale, J., & Sanchez, B. (2005). The meaning and function of silence in psychotherapy ith particular reference to a therapeutic community treatment programme. *Psychoanalytic Psychotherapy*, *19*, 205-220.

Hall, D., & Langellier, K. (1988). Story-telling strategies in mother-daughter communication. In B. Bate & A. Taylor (Eds.), *Women Communicating: Studies in Women's Talk* (pp. 197-226). Norwood, NJ: Ablex.

Jaworksi, A. (1989). The power of silence in communication. In L. K. Guerrero & J. A. Devito (Eds.), *The Nonverbal Communication Reader* (pp. 156-162). Prospect Heights, IL: Waveland Press.

Jaworski, A. (1993). *The power of silence: Social and pragmatic perspectives (language and language behavior).* Newberry Park, CA: Sage Publications.

Jaworski, A. (1997). *Silence: Interdisciplinary Perspectives.* Berlin: Walter de Gruyter & Co.

Jensen, V. (1973). Communicative functions of silence. *ETC*: *A Review of General Semantics, 30*, 249-257.

Johannesen, R. L. (1974). The functions of silence: A plea for communication research. *Western Journal of Speech*, *38*, 25-35.

Johnson, F. L. (1996). Closeness in the dialogue: Women's friendships. In J.T. Wood (Ed.), *Gendered Relationships: A Reader* (pp. 79-94). Mountain View, CA: Mayfield.

Kellerman, K., & Reynolds, R. (1990). When ignorance is bliss: The role of motivation to reduce uncertainty in uncertainty reduction theory. *Human Communication Research, 17*, 64-71.

Knapp, M., & Hall, J. (2006). *Nonverbal communication in human interaction (6th ed.)*. Belmont, CA US: Thomson Wadsworth.

Koenig, B. L., Kirkpatrick, L. A., & Ketelaar, T. (2007). Misperception of sexual and romantic interests in opposite-sex friendships: Four hypotheses. *Personal Relationships, 14*, 411-429.

Kogure, M. (2007). Nodding and smiling in silence during the loop sequence of backchannels in Japanese conversation. *Journal of Pragmatics*, *39*, 1275-1289.

Kramarae, C. (1981). *Women and men speaking: Frameworks for analysis.* Rowley, MA: Newbury House.

Ladany, N., Hill, C., Thompson, B., & O'Brien, K. (2004). Therapist perspectives on using silence in therapy: a qualitative study. *Counseling & Psychotherapy Research*, *4*, 80-89.

Lakoff, R. (1975). *Language and woman's place.* New York: Harper & Row.

Laurenceau, J. P., Barrett, L. F., & Rovine, M. J., (2005). The interpersonal process model of intimacy in marriage: A daily-diary and multilevel modeling approach. *Journal of Family Psychology, 19*, 314-323.

Laurenceau, J. P., & Kleinman, B. M. (2006). Intimacy in personal relationships. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge Handbook of Personal Relationships* (pp. 637-653). New York: Cambridge University Press.

Lever, J. (1978). Sex differences in the complexity of children's play and games. *American Sociological Review*, *43*, 471-483.

Maltz, D. N., & Borker, R. (1982). A cultural approach to male-female miscommunication. In J. J. Gumpertz (Ed.), *Language and social identity* (pp. 196-216). Cambridge, UK: Cambridge University Press.

McLaughlin, M. L., & Cody, M. J. (1982). Awkward silences: Behavioral antecedents and consequences of the conversational lapse. *Human Communication Research, 8*, 299-316.

Mead, G. H. (1934). *Mind, self, and the society.* Chicago: University of Chicago Press.

Mehta, C. M., & Strough, J. (2009). Sex segregation in friendships and normative contexts across the life span. *Developmental Review, 29*, 201-220.

Monsour, M. (1992). Meanings of intimacy in cross- and same-sex friendships. *Journal of Social and Personal Relationships*, *9*, 277-295.

Montoya, R. M., Horton, R. S., & Kirchner, J. (2008). Is actual similarity necessary for attraction? A meta-analysis of actual and perceived similarity. *Journal of Social and Personal Relationships, 25*, 889-922.

Moore, K. A., McCabe, M. P., & Stockdale, J. E. (1998). Factor analysis of the Personal Assessment of Intimacy in Relationships Scale (PAIR): Engagement, communication and shared friendships. *Sexual & Marital Therapy, 13*, 361-368.

Mushin, I., & Gardner, R. (2008). Silence is talk: Conversational silence in Australian Aboriginal talk-in-interaction. *Journal of Pragmatics, 41*, 2033-2052.

Newman, H. M. (1982). The sounds of silence in communicative encounters. *Communication Quarterly, 30,* 142-149.

Oduro-Frimpong, J. (2007). Semiotic silence: Its use as a conflict-management strategy in intimate relationships. *Semiotica, 167*, 283-308.

O'Meara, J. (1989). Cross-sex friendship: Four basic challenges of an ignored relationship. *Sex Roles*, *21*, 25-543.

Osgood, E., Suci, G., & Tannenbaum, P. (1957). *The measurement of meaning*. Urbana, IL: University of Illinois Press.

Pang, V. (1996). Intentional silence and communication in a democratic society: The viewpoint of one Asian American. *The High School Journal*, *79*, 183-190.

Piaget, J. (1965). *The moral judgment of the child.* New York: Free Press.

Picard, M. (1952). *The world of silence*. South Bend, IN: Regnery/Gateway.

Rawlins, W. K. (1982). Cross-sex friends and the communicative management of sex-role expectations. *Communication Quarterly*, *30*, 343-352.

Richmond, V., McCroskey, J., & Hickson, M. (2003). *Nonberbal Behavior in Interpersonal Relations*. Boston: Pearson.

Ronningstam, E. (2006). Silence: Cultural function and psychological transformation in psychoanalysis and psychoanalytic psychotherapy. *International Journal of Psychoanalysis*, *87*, 1277-1295.

Rubin, Z. (1970). Measurement of romantic love. *Journal of Personality and Social Psychology*, *16*, 265-273.

Rubin, L. (1985). *Just friends: The role of friendship in our lives.* New York: Harper and Row.

Rusult, C. E., Coolsen, M. K., Kirchner, J. L., & Clarke, J. A. (2006). Commitment. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge Handbook of Personal Relationships* (pp. 615-636). New York: Cambridge University Press.

Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model scale: Measuring commitment level, quality of alternatives, and investment size. *Personal Relationships, 5,* 357-391.

Selfhout, M., Denissen, J., Branje, S., & Meeus, W. (2009). In the eye of the beholder: Perceived, actual, and peer-rated similarity in personality, communication, and friendship intensity during the acquaintanceship process. *Journal of Personality and Social Psychology, 96,* 1152-1165.

Sherrod, D. (1989). The influence of gender on same-sex friendships. In C. Hendrick (Ed.), *Close relationships* (pp. 164-186). Thousand Oaks, CA: Sage.

Sunnafrank, M. (1986). Communicative influences on perceived similarity and attraction: An expansion of the interpersonal goals perspective. *Western Journal of Speech Communication,* 50, 158-170.

Swain, S. (1989). Covert intimacy in men's friendships: Closeness in men's friendships. In B.J. Risman & P. Schwartz (Eds.), *Gender in intimate relationships: A microstructural approach* (pp. 71-86). Belmont, CA: Wadsworth.

Tannen, D. (1990a). Gender differences in conversational coherence: Physical alignment and topical cohesion. In B. Dorval (Ed.), *Conversational organization and its development.* (pp. 167-206). Norwood, NJ: Ablex.

Tannen, D. (1990b). *You just don't understand: Women and men in conversation*. New York: William Morrow.

Tenney, E. R., Turkheimer, E., & Oltmanns, T. F. (2009). Being liked is more than having a good personality: The role of matching. *Journal of Research in Personality, 43*, 579-585.

Umberson, D., Chen, M., House, J., Hopkins, K., & Slaten, E. (1996). The effect of social relationships on psychological well-being: Are men and women really so different? *American Sociological Review*, *61*, 837-857.

van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. London, Ontario: The University of Western Ontario Press.

Williams, D. (1985). Gender, masculinity-femininity, and emotional intimacy in same-sex friendship. *Sex Roles*, *12*, 587-600.

Wood, J. T. (2011). Growing up masculine, growing up feminine. In K. M. Galvin (Ed.), *Making Connections: Readings in Relational Communication*, 5th ed., (pp. 137-145). New York: Oxford University Press.

Wood, J. T. (2009). *Gendered lives*: *Communication, gender, and culture*. (8th Edition); Boston: Wadsworth Thomson Learning.

Wood, J. T. (1995). *Gendered relationships*. New York: McGraw-Hill.

Wood, J., & Inman, C. (1993). In a different mode: Masculine styles of communicating closeness. *Journal of Applied Communication Research*, *21*, 279-295.

Wright, P. (1982). Men's friendships, women's friendships and the alleged inferiority of the latter. *Sex Roles*, *8*, 1-20.

Zimmerman, D., & West, C. (1975). Sex roles, interruptions, and silences in conversation. In B. Thorne, C. Kramarae, & N. Henley (Eds.), *Language, Gender, and Society* (pp. 105-129). Rowley: Newbury House.