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The power of touch during communication within heterosexual married dyads

by

Joann C. Seeman Smith

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Psychology (Counseling Psychology)

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Ames, Iowa

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ABSTRACT

The literature on sex differences in nonverbal behavior is mixed. Some studies find differences in intimate relationships whereas others do not. One reason may be that no study has examined different measurements of touch in intimate couples and examined sex differences based on who chose the topic. The present study was designed to fill this gap in the research in regards to the assessment of touching behavior within married dyads and their possible expression of power moves by measuring seven different measurement of touch (i.e., overall touches, power touches, supportive touches, hand touches, non-hand touches, touches while talking, touches while listening) across a problematic topic chosen by the wife and a topic chosen by the husband. In partial support of the hypotheses, the results of mixed-model ANOVAs showed that women engage touches while talking than men during their own discussion while no differences were found on the man's discussion. A trend for significance was found for women engaging in more overall touch and power touches than men on the females' discussion then on the males' discussion. For touches more thought of as support (supportive touches and touches while listening) females engaged in significantly more of these types of touches than males regardless of whose discussion. Contrary to predictions, hand touches were found to have no differences based on who choose the topic, although women were found to engage in more overall hand touches than males. Also contrary to predictions, women engaged in more non-hand touches; however, they were doing so only during their own conversation. Implications of these results and suggests for future research on nonverbal behaviors associated with power are discussed.

INTRODUCTION

All social groups have a power structure. Awareness of that structure allows for an understanding of how the group functions (Wrong, 1979). Not surprisingly, in the marital domain, the power structure present within a couple has been implicated as a key factor in the development and maintenance of the relationship (Tichenor, 1999). For example, the distribution of power between spouses has been associated with marital stability (Gray-Little, Baucom, & Hamby, 1996), domestic violence (Babcock, Waltz, Jacobson, & Gottman, 1993), and psychopathology (Byrne & Carr, 2000). Investigating the power dynamics within a couple should, therefore, lead to a better understanding of interpersonal relationships and to the development of more effective interventions in marital and couples therapy.

It has been stated that power is a key function of nonverbal behavior (Patterson, 1995). It is estimated that 60-65% of meaning in a social situation is communicated nonverbally (Birdwhistell, 1970). Argyle (1988) reported that nonverbal behavior has two main dimensions, including expressing warmth and expressing dominance. Similarly, Mehrabian (1981) described three primary dimensions of relationship-level communication: responsiveness, liking, and power or control. It is thought that females are socialized to be nice to others and form relationships, so they tend to employ greater nonverbal communication that signals liking than men (i.e., smiling; Stewart, Stewart, Friedley, & Cooper, 1996). In terms of power and control, it is thought that men, in general, exceed women in nonverbal efforts to exert control and that they tend to use nonverbal behavior (i.e., touch) to assert and reinforce status (Henley & Freeman, 1995; Spain, 1992). The literature states that women are more likely than men to initiate

nonverbal behavior that expresses support, affection, and comfort, whereas men more often use nonverbal behavior to direct others, assert power, and express sexual interest (Hall, 1998; Pearson, West, & Turner, 1995).

One of the ways power has been identified and studied in interpersonal interactions is through the nonverbal behaviors employed. In particular, it has been documented that individuals with different power levels exhibit distinct nonverbal behaviors (Henley, 1973; 1977). For example, Henley (1977) was one of the first to document that in the workplace those with higher status are more likely to take up space and touch subordinates, while those with lower status are more likely to smile and be touched. The explanation put forth is that the person with greater status (i.e., greater power) could exert and continue to maintain that power nonverbally through touch and posture, while the person with less status (i.e., lesser power) was able to show his/her recognition of the power differences by being agreeable (i.e., smiling) and less assertive (i.e., taking up less space).

Within interpersonal relationships, these differences in nonverbal behaviors have also been linked with partner's biological sex (Henley, 1977, 1995). Specifically, several early studies found that females and males, during mixed-sex interactions, differed in the their display of nonverbal behaviors with women exhibiting nonverbal behaviors more consistent with an individual of lower status and males exhibiting nonverbal behaviors more consistent with an individual of higher status (Halbertstadt, Hayes, & Pike, 1988; Hall, 1984; Henley, 1977; Stier & Hall, 1984). For example, females during a mixed-sex discussion were found to smile more, (Hall, 1984) whereas males were found to have

more open and relaxed posture (Burgoon, 1991) and use more hand touches than females (Hall & Veccia, 1990).

These differences in the use of nonverbal behaviors by women and men have been explained as being due to sex-based resource inequalities within contemporary life (e.g., men's control over household income, women's responsibility for housework or childcare; LaFrance & Henley, 1994). The inequalities in status and income in Western society are thought to give men more power in the relationship and allow them to exert that power to gain successful outcomes to a discussion (Sagrestano, Christensen, & Heavey, 1998). Thus, men are thought to have and maintain power in a mixed sex-interaction by using more assertive nonverbal behaviors (e.g., touching, taking-up space; Tichenor, 1999). However, although there are differences in women's nonverbal behaviors and men's nonverbal behaviors in mixed-sex dyads in general (e.g., strangers and acquaintances), it is not clear that the same nonverbal differences are present in married couples. Most of the studies that have been conducted looking at power and nonverbal behaviors have been in the workplace (Hall & Friedman, 1999; Henely, 1977), in public settings (DiBiase & Gunnoe, 2004; Chapell, Beltran, Santanello, Takahashi, Bantom, Donovan, Hernandez, Oculato, & Ray, 1999; Guerrero & Anderson, 1994; Hall & Veccia, 1990; Major, Schmidlin, & Williams, 1990; Remland, Jones, & Brinkman, 1995; Willis & Briggs, 1992; Wills & Dodds, 1998), or with acquaintances and strangers (Bente, Donaghy, & Suwelack, 1998; Halbertson, Hayes, & Pike, 1988; LaFrance & Hecht, 1999). In these settings, power differences may be more distinct (i.e., a supervisor and a supervisee) than in a marital relationship and thus fewer differences in nonverbal behaviors may be present in a marital relationship.

There have been studies that have examined power in married and dating couples (Aida & Falbo, 1991; Ball, Cowan, & Cowan, 1995; Beach & Tesser, 1993; Gray-Little, Baucom, & Hamby, 1996; Howard, Blumstein, & Schwartz, 1986; Komter, 1989; Matthews, Wickrama, & Conger, 1996; Sprecher & Felmlee, 1997; Willis & Briggs, 1992; Willis & Dodds, 1998;). However, these studies have generally used self-report questionnaires (Aida & Falbo, 1991; Howard et al., 1986), and did not examine nonverbal behavior (Ball et al., 1995; Gray-Little et al., 1996; Matthews et al., 1996; Willis & Dodds, 1998). Furthermore, those that have examined nonverbal behavior and relationship power may tell us little about what happens in married couples, as these studies have been overwhelmingly naturalistic in nature (e.g., observing couples in the airport) and have not taken into account what the participants are talking about. This is an important omission, as persons with more power would be most likely to be exerting their power during a discussion where they are attempting to get their way (Tichenor, 1999); for married couples this might mean during a discussion in which they are trying to convince their partner to change their behavior (i.e., a discussion of a problem in their relationship). It is only by examining the nonverbal behaviors of married couples during a problem solving discussion that researchers will start to understand the true degree to which nonverbal behaviors are exhibited in married couples.

As gender roles are changing and more women are entering previously male dominant occupations, the traditional link of power and sex should be decreasing between the sexes (DiBiase & Gunnoe, 2004; Diekman, Goodfriend, & Goodwin, 2004). Thus, one may see fewer differences in touch between married couples and unacquainted individuals. At the same time, researchers examining power in marital relationships have

demonstrated that economic resources have little impact on women's decision-making and other aspects in the relationship (Whyte, 1990). Thus, it is yet unknown how power is playing out in decision making of married couples. One possibility is that in intimate relationships men and women are employing different influencing strategies to achieve their goals (Kalbfleisch & Herold, 2006). It might be that women are using more socially skilled behaviors to influence their partners. In the context of romantic relationships, power and dominance via socially skilled behavior is thought to be associated with better outcomes and may appear less threatening than more aggressive and violent expression of power and dominance (Burgoon & Dunbar, 2000). A study conducted in 1994 by Felmlee showed that those in equalitarian relationships tend to use more dominant behavior than those in non-equal relationships. It is thought that in these relationships women may employ more friendly, expressive nonverbal behavior to gain power and influence others (Guerrero & Floyd, 2006). Sergin (1993) found that when positive and appropriate forms of touch were used by the persuader the targets were more likely to comply with requests. Jones (1994; Jones & Yarbrough, 1985) observed that relational partners use touch more as an integral strategy to get someone to comply with a request.

It is also not clear if the nonverbal behavior exhibited in a married couple has the same meaning as it does in a public or a work setting. Touching a person's shoulder of someone we don't know very well may have a very different meaning than touching the shoulder of someone we are married to. In the first case, it may be a sign of dominance (i.e., I have the power to touch you) while in the later it may be a sign of affection or support. Major (1981), for example, pointed out that touch is often used to express warmth and love in an intimate relationship but that it also can convey negative messages

and this distinction needs to be further explored. Thus, there is need to examine how nonverbal behaviors such as touch are used by married partners during a problem-solving discussion.

Study of touch

Given that the tactile system is one of the earliest systems to develop in humans, as well as the importance of touch in development early in life, it may establish the foundation of all other forms of communication developed later in life (Hertenstein, Verkamp, Kerestes, & Holmes, 2006). Frank (1957) stated that the study of tactile communication was severely neglected, and although there has been some focus on touch in relationships, it has not been thoroughly examined how touch plays out in discussions between married couples. Touch has been said to be “a universal aspect of human interaction” (DiBiase & Gunnoe, 2004). There have been mixed results that have been found in the research on touching behaviors in mixed-sex dyads. Some information has stated that women initiate more touch than men in married couples (Guerrero & Anderson, 1994; Willis & Briggs, 1992). Henley (1977), pointed out that status equals usually touch each other about the same amount, but that those in superior positions have the option, whether they take it or not, to touch the subordinate and that option is not reciprocated. Hall (1996) found no gender asymmetry but did find that higher-status individuals touched in a more familiar way than lower status individuals (e.g., higher status hand on shoulder, lower status handshake); however, she did find that when status was held constant, men were found to initiate more touch than women.

Major (1981) pointed out that touch is often used to express warmth and love but also stated that there can be negative messages that are conveyed with touch that are

often times ignored in the literature. Hertenstein et al. (2006) reported that there are three major domains in which touch plays a fundamental role: compliance, power relations, and affective phenomena. They report that touch seems to encourage compliance in interpersonal interactions. As stated above, mixed results have been found in the literature. Following are studies that have examined touch in some form and show the gaps the current study is trying to fill.

Many researchers have examined touching in dyads in naturalistic settings. These studies often do not explore the relationship of the dyad or the topic of conversation. DiBiase and Gunnoe (2004) observed 120 people who they visually categorized to be in their early to mid 20s and contained Italians, Czechs, and Americans. These dyads were observed early in the evenings in dance clubs in their respective countries. Observations were conducted so the subjects would not know they were being studied. It was found that men engage in more hand touches than women. Women were found to engage in more non-hand touches, although the means for male ($M = 2.20$, $SD = 1.82$) and female ($M = 2.26$, $SD = 1.66$) Americans are nearly identical. Hall and Veccia (1990) observed 4,500 dyads in public places. Observations were again done unobtrusively and age of subjects was estimated. Dyads were coded as male-male, female-female, or mixed and touches were recorded during 10 second observations. They found that 85% of the dyads never touched. In the mixed dyads, both males and females were found to touch in 120 of the pairs. The study showed that for new touches there was a significant difference in initiator with the males initiating 20% more of the touches. They also found that men are more likely to touch women with their hand but that women were more likely to initiate non-hand touches.

Major, Schmidlin, and Williams (1990) also conducted an observational study where they recorded the sex of the touch initiator and of the touch recipient. They found that male-to-female touch ($n = 291$) was significantly more frequent than female-to-male touch ($n = 210$) and that cross-sex touching ($n = 501$) was significantly more frequent than same-sex touching ($n = 298$). They also found that men initiated more hand touches than women and women in Italy and Czech Republic initiated more non-hand touch than men; however, the non-hand difference was not found within the US sample.

McDaniel and Andersen (1998) conducted their observational study in an airport terminal. Their subjects were 154 dyads from 26 nations and touch was coded when generated in cross-sex dyads. They found that touch occurred in those that categorized themselves as friend/lovers ($M = 5.32$) significantly more than the other three categories: family ($M = 2.64$), spouses ($M = 3.17$), and strangers/acquaintances ($M = 4.00$). Another public observational study was conducted by Willis and Briggs (1992). They also approached the mixed-sex dyad after the observation was collected and asked them for more information about their relationship. They did not find a significant difference between male and female initiated touch. In turn, Willis and Dodds (1998) conducted a similar study and found that women ($n = 103$) more than men ($n = 66$) initiated touch. Finally, a study conducted by Remland, Jones, and Brinkman (1995) examined dyads from different countries. The dyads were videotaped and were observed for 60-second intervals. Touch was observed in 19.4% of the dyads in the study. They did find a main effect of culture with English (8%), French (5%), and Dutch (4%) touching the least. In the mixed-sex dyads there was no significant difference found between men and women.

Only one study was found that measured touch in an experimental setting.

Guerrero (1997) examined nonverbal behaviors across three relationship types: same-sex

friend, opposite-sex friend, and opposite-sex romantic partner. During the course of the study, Guerrero collected 102 6-minute videotaped interactions. The dyads were asked to sit on a couch facing a one-way mirror and were asked to list three impersonal and three personal conversations they discuss frequently. Dyads were videotaped and asked to talk about the three impersonal topics for the first three minutes and the three personal topics for the final three minutes. They analyzed touch using a repeated measure ANOVA that compared touch across the three interactions. A significant main effect for relational partner on touch was found, showing that participants engaged in more touch with romantic partners than with friends. Dyads were also found to touch an average of three times per 6-minute interaction, showing touch to be a somewhat more frequent nonverbal display in romantic relationships than has been shown in some other touch studies (Hall & Veccia, 1990).

Power in nonverbal communication

The social exchange model looks at power, dominance, and status in the social arena and not as a personality dimension. This model assumes that individuals act to maximize their interpersonal rewards and minimize their interpersonal costs (Rusbult & Arriaga, 1997; Thibaut & Kelley, 1959). This model views power as a characteristic of the relationship, not the individual. In the literature there appears to be two opposing theories explaining power and dominance within the social exchange model. These theories are the Gender Politics Hypothesis (Henley, 1977, 1995; LaFrance & Henley, 1993) and the Dyadic Power Theory (DPT; Dunbar, 2000, 2004).

Before Henley (1973, 1977, 1995) brought to the forefront the idea that nonverbal communication could be related to power and dominance, it was thought that most nonverbal behaviors could be associated with intimacy and commitment (Hall, 1996).

Henley (1973, 1977, 1995), defined power as “the ability to influence other persons to do what one wants” and she believed that status and power reflected the nonverbal behaviors that individuals engaged in. She especially focused on differences observed in the workplace between high and low status coworkers for space, time, touch, and many other behaviors. Henley (1977, 1995) reported that touch is used as a form of dominance and the person with higher power is given the option of touching, whereas the person in lower power is not. She stated in her 1977 work that she believed an important aspect of touch was being overlooked in the hierarchical society that we live in. She hypothesized that the use of touch (especially in mixed-sex dyads) was to maintain the social hierarchy, in which men fill the more powerful positions. Henley’s theory has been given a few different names, including the Gender Politics Hypothesis (Burgoon & Dunbar, 2004), the Oppression Hypothesis (Hall 1984), and the Subordination Hypothesis (Burgoon, 1994). Her argument rests on three claims: 1) that men have more power, dominance, and status than women; 2) that men and women differ in their nonverbal communication; and 3) that people in high versus low power, dominance, and status differ in their nonverbal communication in the same way that men and women differ. It is stated by this theory that nonverbal behaviors are a primary means by which those in power (usually men) exercise social control and interpersonal dominance (Henley 1977, 1995; LaFrance & Henley, 1998). Based on the theory, it is believed that men would attempt more touches than women even in intimate relationships as a way to maintain inequalities present in society. The hypothesis also states that women are superior in nonverbal sensitivity or decoding skills because of their subordinate standing in society. Henley’s theory has been accepted as true by many people in the field although there has been mixed results found in the literature.

Traditionally power has been linked to males based on their status and income; however, marital power research has demonstrated that changes in the economic resources have little impact on women's power over decision-making and other aspects in the relationship (Whyte, 1990). Research has since identified resources that are available to both partners in the dyad; these resources include, health and energy, social support, social skills, emotional strength, and age (Crosbie-Burnett & Giles-Sims, 1991; Kulik, 1997). As such, researchers have adapted Henley's theory of non-verbal behaviors and power. One theory that has been proposed since Henley's work is the Dyadic Power Theory (Dunbar, 2000, 2004; Rollins & Bahr, 1976). This theory, as does Henley's Gender Politics Theory, defines power as the capacity to produce intended effects, and in particular, states power is the ability to influence the behavior of another person (Bachrach & Lawler, 1981; Berger, 1994; Burgoon, Johnson, & Koch, 1988; Foa & Foa, 1974; French & Raven, 1959; Gray-Little & Burks, 1983; Henley, 1995; Olson & Cromwell; 1975). Yet, unlike Henley's theory it assumes that power is based as much on the perception of legitimate authority (i.e., is perceived as having the right to make the decisions) in a romantic relationship as it does access to specific resources. There have been no empirical studies examining the DPT and touching behaviors. Previous studies examining this theory have looked at other verbal and nonverbal behaviors and found support for the theory (Dunbar, 2004, Dunbar & Burgoon, 2005).

Dunbar (2000, 2004) named the theory based on Rollins and Bahr's (1976) work but expanded the theory to include communication in the explanation of power in marital relationships. DPT includes Olson and Cromwell's (1975) three domains of power and French and Raven's (1959) five power bases. The importance of redefining power has been brought to the attention of researchers because of the differences that were being

found in different studies (Babcock, Waltz, Jacobson, & Gottman, 1993). Hall, Coates, & Smith LeBeau (2005) in their meta-analysis on nonverbal behavior and the vertical dimension (e.g., power, dominance, and status) of social relationship, determined that power is not a unitary construct and should be broken up into different domains. They pointed out that authors do not use the different vertical dimension terms consistently and sometimes the constructs are not even defined.

One assumption of the Dyadic Power Theory (Dunbar, 2000, 2004) is that power and control are only relevant in relationships when conflict exists between the goals of the partners and that power differences that have been latent in the relationship arise when there is a conflict and are shown through different attempts to control the situation. Based on these ideas, Dunbar and Burgoon (2005) stated that differences in relative power are typically small in romantic relationships as both partners are often viewed as having authority to make decisions and they predicted a curvilinear relationship between relative power and dominant communication, by strengthening the positive relationship between resources and power. The curvilinear relationship would show individuals with a power-balanced relationship would engage in more dominance than those in high or low relative power. They theorized that partners with equal power would display more control attempts to gain dominance (Felmlee, 1994; Gray-Little & Burks, 1983). In fact, when differences are found they might even favor women as women are more often thought to be responsible for relationship domains and that women will use more indirect forms of influence (Steil & Weltman, 1991). It is thought that in the context of close relationships, dominance and power expressed via socially skilled behavior is likely to be associated with higher individual relation outcomes and satisfaction (Guerrero & Floyd, 2006). Some scholars have even conceptualized dominance in terms of socially skilled behavior

that reflects assertiveness (Burgoon & Dunbar, 2000). It is thought that since women sometimes use more referent power than men (Carli, 1999), using more socially skilled behaviors, such as friendly nonverbal touching may be a way for women to seek more power and influence their partner.

If power and dominance is expressed by women in socially skilled ways, differences may also exist in touching behaviors depending on who is talking. It is thought that touching while making a request results in more social influence (Argyle, 1988). For example, it has been reported that powerful individuals look at others more while speaking than while listening (Exline, Ellyson, Lory, 1975). Aiello (1977) reported the close link between increased gaze in women and the high level of involvement and close interaction. Segrin (1993) found that targets were more likely to comply with requests made when direct gaze (average $r = .23$) and appropriate touch (average $r = .21$) were used. It has also been suggested that eye contact while speaking is more effective at persuading someone than while listening (Linkey & Fireston, 1990). Thus, while researchers have not looked at touch while speaking, it has been suggested that similar to gaze, touching while talking may be more of a power move than touching while listening.

Many studies of touch behavior are naturalistic and do not take into account the type of discussion, who makes up the dyad, and who chose the topic being discussed. These are important omissions, as the Dyadic Power Theory (Dunbar, 2000, 2004) suggests that power and control are only relevant when conflict exists between the goals of the partners. It is only at these points when latent power differences in the relationship arise through different attempts to control the situation. Therefore, to add to the literature

there is a need to directly assess different aspects of touching behavior and to look at the effect of whose discussion, which has not been tested.

Current Study

Omissions in the above literature suggest the need to better understand nonverbal behaviors exhibited by a married couple and how these behaviors relate to individual power in the relationship. Based on the concept of power (i.e., different meanings and ways of gaining power) and the yet unknown combination of this concept and gender, it is still unclear how power is playing out in decision making of married couples. These questions bring us to the need to better understand not only verbal forms of power the couple engages in but also the importance of nonverbal behaviors and how they relate to an individual's power in the relationship. Married couples were chosen because this research has not been conducted before and we wanted to have enough statistical power and including other groups would have needed a much larger sample to examine any possible differences between groups.

In this study, touch was selected as it was one of the first nonverbal behaviors to be linked to power by Henley (1977). Henley's (1977, 1995) findings suggest that status equals usually touch each other about the same amount, but that those in superior positions have the option, whether they take it or not, to touch the subordinate and that option is not reciprocated. Hall and Veccia (1990) also examined the difference in male and female touching patterns across different cultures and found that males use more hand touches and females use more non-hand touches. Hertenstein et al. (2006) reported that intentional touch with the hand is more likely to communicate status and power than non-hand touch. It is thought that touching while making a request results in more

social influence (Argyle, 1988). Based on this suggestion it was thought that touching while talking would be more of a power move than touching while listening.

The goal of this study is to examine the presence of touching behaviors in married couples and to examine if any differences will be seen based on whose discussion is being discussed. It is not fully clear how the studies of non-married couples and mixed-sex acquaintances will translate into married couples discussing an area of conflict in their relationship. The present study will examine married couples to record the frequency of touching behaviors during problem-solving discussions (i.e., total touches, support touches, hand touches, non-hand touches, touches while talking, and touches while listening) and if these behaviors follow the predictions of Henley (1977, 1995; i.e., more touching by males than females) or be more in line with the Dyadic Power Theory (Dunbar, 2000, 2004; i.e., who touches the most will be dependent on whose discussion is being discussed).

Hypothesis 1: *Overall Touch*. One of the main functions of touch is to exert power (Argyle, 1988). Therefore, according to the Dyadic Power Theory (Dunbar, 2000, 2004), who touches the most should be most influenced by the discussion topic because the need to exert power should be greater who has more invested in the topic (DiBiase & Gunnoe, 2004). As such, it was hypothesized that who touches the most will coincide with whose topic is being discussed (i.e., the person who raises the problem will touch the most). During the females' discussion the wives will touch the most and during the males' discussion the husbands will touch the most.

Hypothesis 2: *Supportive Touch*. Supportive touches are thought to be an expression of warmth and affection. Women are thought to use touch in constructive and

socially skilled ways (Burgoon & Dunbar, 2000). Therefore, it was hypothesized that women would engage in a greater frequency of supportive touch than men. Furthermore, because supportive touching is not believed to be a reflection of power, but rather warmth and affection, this type of touching should not differ based whose topic is being discussed.

Hypothesis 3: *Hand and Non-Hand Touch*. Hand touches are believed to be a form of exerting power. In turn, non-hand touches are believed to be a source of support. In non-intimate relationships, men engage in more hand touches than women and women engage in more non-hand touches than men. However, based on Dyadic Power Theory (Dunbar, 2000, 2004) power attempts such as the use of hand touches should be most influenced by the discussion topic. Therefore, it was hypothesized that within intimate relationships who uses the most hand touches will coincide with whose topic is being discussed (i.e., the person who raises the problem will touch the most). During the females' discussion the wives will touch with their hand the most and during the males' discussion the husbands will touch with their hand the most. However, since non-hand touches are not based on power attempts but rather support attempts it was hypothesized that women would engage in a greater frequency of non-hand touch than men. Furthermore, non-hand touch should not differ based whose discussion is being discussed.

Hypothesis 4: *Touch while Talking and Listening*. Touches while talking (e.g., touch while making a suggestion or asking for change) and listening (e.g., touch while partner is explaining their side) have not been investigated in any of the research I located. However, it has been suggested that touching while making a request results in

more social influence (Argyle, 1988) and that targets were more likely to comply with requests made when direct gaze were used (Exline, Ellyson, Lory, 1975; Segrin, 1993). These findings led me to theorize that touches while talking would be a form of exerting power; whereas touches while listening would be showing support. Therefore, it was hypothesized that within intimate relationships who touches while talking the most will coincide with whose topic is being discussed (i.e., the person who raises the problem will touch the most). During the females' discussion the wives will touch while talking the most and during the males' discussion the husbands will touch while talking the most. However, because touches while listening are not based on power attempts, but rather support attempts it was hypothesized that women would engage in a greater frequency of touch while listening than men. Furthermore, touch while listening should not differ based whose discussion is being discussed.

METHODS

Participants

An archived set of videotaped interactions of married couples (IRB # 05-167) was used in this study. The couples in this data set were originally solicited from an email advertisement placed in the University's weekly newsletter offering \$60 to couples willing to participate in a study of problem solving in their marriage. The first 67 couples that responded to the email and arrived for their scheduled appointment comprised the current sample. Two couples did not show up for their scheduled appointments and two couples declined to participate in the videotaped discussions after completion of their questionnaires. Of the 67 couples that fully completed the procedures, husbands averaged 38-years-old ($SD = 11$; *Range* 22-67) and wives averaged 37-years-old ($SD = 11$; *Range* 20-63). Eighty percent of husbands were employed, 19% were students, and 1% was retired. Fifty-five percent of wives were employed, 23% were students, and 12% were homemakers. Eighty-five percent of male participants and 96% of female participants were Caucasian (3% Asian males and 4% Asian females, 9% other nationalities for males and 0% other nationalities for females, and 3% missing for males). Men reported a mean DAS-7 score of 23.35 ($SD = 3.5127$) and women had a mean score of 24.05 ($SD = 2.6553$), showing on average a satisfied sample. The highest score possible on the DAS-7 is 36, men ranged from 10-30 and women ranged from 18-30. On average, 15% ($n = 10$) of men and 12% ($n = 8$) of women scored at or below the cutoff range again showing a significantly satisfied sample.

Procedures

After the couple arrived for the initial visit, each spouse was escorted to a separate

room, where informed consent was obtained (see Appendix A for copy of the informed consent). While separated, each participant was asked independently to complete a questionnaire and asked to identify a problem area in the relationship to discuss (copy of the questionnaire can be found in Appendix B). Only demographic data and topic information were used for the current study. The problem area for the couple to discuss was identified by asking each spouse to select an issue in the relationship in which he or she desires the most change and that cannot be resolved without the partner's cooperation. Subsequently, the spouses were brought together and asked to discuss two problem topics (one identified by each spouse). The room was arranged with a regular size futon with pillows, two lamps, and a small table. The couples were allowed to sit anywhere on the futon and the arrangement of the room was the same for all couples. Whose problem was discussed first was randomized through a coin flip. If both spouses chose the same topic, the spouse who lost the coin flip was asked to choose a second topic. This occurred in 31% of the couples (females = 15%; males = 16%). Each discussion was videotaped and audiotaped. At the end of the discussions, couples were separated again. While separated, each spouse was debriefed (see Appendix C for copy of debriefing form) and her/his feelings and reactions to the study discussed. Referrals to local mental health and family clinics were given to all participants.

Nonverbal Behavioral Coding

Touching. Touching was measured using the definitions and dimensions outlined in previous studies (DiBiase & Gunnoe, 2004; Guerrero & Anderson, 1994). Specifically, coders watched the videotaped interactions and coded touching on four different

measurements (i.e., frequency of touch, type of touch, who initiated the touch, and behavior while touching). Whether the touch was supportive was also coded. Type of touch was coded as either hand touch or non-hand touch. Hand touch was defined as a touch that is initiated by one partners' hand to any part of the other partner's body. Examples of hand touch behaviors are touch from hand to hand, touch from hand to body, touch from hand to face, touch from hand to leg, and touch from hand to arm (DiBiase & Gunnoe, 2004). Non-hand touch was defined as contact of any body part of one partner, except the hand, to any part of their partner's body. Examples of non-hand touch include touching from body to body, hugging, and kissing (DiBiase & Gunnoe, 2004).

In turn, touch initiation was defined as "occurring when an individual touched his/her partner first, or engaged in action (such as outstretching a hand), which led to [a] ... touch" (Guerrero & Anderson, 1994, p. 144). Coders marked who initiated the touch. If a touch appeared to be mutually initiated (e.g., both individuals reached for one another at the same time) then it was coded as mutual touch initiation. Mutual touches occurred in less than 6% of the interactions and were not used in the analysis because they did not show any asymmetry of touching behavior between males and females. Finally, coders recorded the behavior of the person who initiated the touch at the time of the touch (i.e., are they listening or talking). An example of the coding sheet for touch is provided in Appendix D.

In order to ensure an accurate recording of the different behaviors, the coders were trained to watch each tape and code for touch on the four different measurements (i.e., frequency of touch, type of touch, who initiated the touch, and behavior while

touching). Two undergraduate research assistants watched each tape and coded the four measurements of touch. They then met to discuss any inconsistencies and come up with a final code. Research assistants were trained until they reached an 80% reliability rate on the practice tapes before they were able to start coding the current set of tapes. During their viewing of the interactions the coders coded for touch for both the male and female. Throughout coding of the interactions, the three research assistants maintained an 80% reliability rate on coding frequency of touch within interactions. Of the touches that were agreed upon, reliability for indicating who initiated the touch was 99%, the type of touch was 99.5%, and the behavior while touching was coded at 93.5%.

After the four measurements of touches were coded two new undergraduate research assistants met for four hours of training to code whether each touch was supportive. The coders first trained on practice tapes. After the coders reached 80% reliability with the supportive code, they started on the study tapes to code for supportive touch. No literature was found to define what a supportive touch would look like so two undergraduate research assistants and myself discussed what supportive touches would look like (e.g., show interest in the partner, express kindness and love) and the two research assistants then intuitively coded touches as supportive. The research assistants met for four hours of training to discuss codes they saw as supportive on training tapes. Each research assistant coded each tape for supportive touch and then met to discuss any inconsistencies and decide on a final agreed upon code. The two coders were 85% reliable with each other throughout the final coding.

RESULTS

Preliminary Analyses

Ten topic options were given to the dyads to choose from or they could write in their own topic for discussion. Men wrote in their own topic 12% of the time and women wrote in their topic 15% of the time. The most common issues for men were finances and money, housework and responsibilities, and problems with family and friends. The most common issues for women were housework and responsibilities, problems with family and friends, finances and money, and feelings/emotions haven't/don't express. See Table 1 for summary of the topics chosen by men and women for their discussions.

Table 1: Topics Chosen by Males and Females for Discussions

Topic	<u>Male Topic</u>		<u>Female Topic</u>	
	n	Percent	n	Percent
Problems with Family and Friends	10	15%	9	13%
Needs in the relationship not being met	2	3%	2	3%
Sexual Issues/Problems	3	5%	3	5%
Finances/Money	14	21%	8	12%
Problems with Intimacy	3	5%	1	2%
Problems with time spent together or apart	7	10%	7	10%
Feelings/Emotions haven't/don't express	3	5%	8	12%
Specific Area you want change	0	0%	5	8%
Making Decisions	5	8%	2	3%
Housework or Responsibilities	12	18%	12	18%
Other (Written In)	8	12%	10	15%

Note. $N = 67$

Touch has been reported to be a difficult phenomenon to study as it happens infrequently during many observed interactions (Hall & Veccia, 1990; Remland, Jones, & Brinkman, 1991). However, we found that touch occurred in the majority (61%) of the interactions. Because the data does not fall in a normal distribution, we took the square root of all of the data before running the analyses to make the data fall into a more normal

distribution and to be more conservative in our analyses.

Main Analyses

Total touch. It was hypothesized that who touches the most will coincide with whose topic is being discussed (i.e., the person who raises the problem will touch the most). Therefore, I predicted an interaction where the wives will touch the most during their discussion and the husbands will touch the most during their discussion.

To test this hypothesis, a 2x2 (Sex X Discussion) mixed model ANOVA was conducted. The first factor was whose topic was being discussed (his discussion vs. her discussion) the second was biological sex (male vs. female). The order of the interactions (i.e., whose topic was discussed first) was entered as a between-subjects blocking variable. The dependent variable was frequency of touches. A main effect for sex was found [$F(1,65) = 14.757, p < .001, \eta_p^2 = .19$], indicating a difference in the overall amount of touch behaviors between men and women. A main effect was not found for discussion [$F(1,65) = .003, p = .958, \eta_p^2 < .001$]. The predicted discussion by sex interaction was not [$F(1,65) = 3.821, p = .055, \eta_p^2 = .06$] significant, but a trend toward significance was found. To examine this trend more closely, 4 paired sample *t*-tests (Bonferroni corrected, $.05/4 = .012$) were conducted to better understand the interaction effects by examining sex differences within each discussion and across discussions. Females were found to engage in more touching than males during the female discussion ($t = -3.994, df = 66, p < .001, d = -.57$) but males were not found to touch more during the male discussion ($t = -2.107, df = 66, p = .039, d = -.28$). In turn, females did not differ in their own behavior ($t = -1.225, df = 66, p = .225, d = -.14$) and males did not differ in their own behavior ($t = 1.629, df = 66, p = .108, d = .19$) across each other's discussions.

Therefore, partial support was found for the hypothesis, with women touching more than men on their own discussion but no differences were found on the men's discussion.

Means and standard deviations for these variables can be found in Table 2.

Table 2: Means and SD for Overall Touches

Touches	Male		Female	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Male Discussion	.3675	.7973	.5972	.8537
Female Discussion	.2348	.5682	.7310	1.0954

Note. $N = 67$

Supportive touch. It was hypothesized that women would engage in a greater frequency of supportive touching than men. I also hypothesized no main effect of discussion or interaction of sex and discussion will be found. A 2x2 (Sex X Discussion) mixed model ANOVA with a blocking factor of who went first was again conducted. The dependent variable was the frequency of supportive touches. A main effect of sex [$F(1,65) = 4.848, p = .031, \eta_p^2 = .07$] but no main effect for discussion [$F(1,65) = .069, p = .793, \eta_p^2 = .001$] or interaction effect of sex and discussion were found [$F(1,65) = 1.71, p = .196, \eta_p^2 = .03$] to be significant. The results are supportive of the hypothesis that females engage in significantly more supportive touches than males regardless of whose discussion.

Touches other than support. Since women were found to engage in a greater amount of overall touches and a greater amount of supportive touches, I decided to examine whether the significant differences between men and women in regard to overall touches was a result of the number of supportive touches. If women continued to show greater frequency of touches after eliminating the supportive touches, it would be a clearer indicator that they were exerting touch as a form of power (Argyle, 1988). A 2x2

(Sex X Discussion) mixed model ANOVA with a blocking factor of who went first was again conducted. The dependent variable was power touches (overall touch with supportive touches removed). The main effect of sex was still significant [$F(1, 65) = 15.344, p < .001, \eta_p^2 = .19$]. No main effect of discussion was found [$F(1, 65) = .101, p = .751, \eta_p^2 = .002$], however, the interaction between sex and discussion showed a trend toward significant [$F(1, 65) = 3.059, p = .085, \eta_p^2 = .05$]. I conducted paired sample t -tests (Bonferroni corrected, $.05/4 = .012$) to better understand the results. Again, it was found that women engaged in significantly more touching behaviors than men during the female discussion ($t = -4.023, df = 66, p < .001, d = -.57$) and no sex differences were found during the male discussion ($t = -2.224, df = 66, p = .03, d = -.29$). In turn, females did not differ in their behavior ($t = -1.327, df = 66, p = .189, d = -.14$) and males did not differ in their behavior ($t = 1.283, df = 66, p = .204, d = .15$) across topics. It would seem that women are engaging in more touching behaviors on their discussion than what can be explained by supportive touches and provides support for women displaying more power moves during their discussion. Means and standard deviations for these variables can be found in Table 3.

Table 3: Means and SD for Overall Touches Minus Supportive Touches

Touches	Male		Female	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Male Discussion	.2839	.7028	.4969	.7633
Female Discussion	.1920	.5005	.6164	.9256

Note. $N = 67$

Hand and non-hand touch. It was hypothesized that who uses hand touches the most will coincide with whose discussion is being discussed (i.e., the person who raises the problem will touch the most). Therefore, I predicted an interaction where the wives

will use hand touches the most during their discussion and the husbands will use hand touches the most during their discussion. It was hypothesized that women would engage in a greater frequency of non-hand touches than men and no main effect of discussion or interaction of sex and discussion for non-hand touches. Two 2x2 (Sex X Discussion) mixed model ANOVAs with a blocking factor of who went first were again conducted. The first examined hand touches and the second examined non-hand touches. A significant sex main effect was found for hand touches [$F(1,65) = 12.677, p = .001, \eta_p^2 = .16$], the main effect of discussion was not significant [$F(1,65) = .524, p = .472, \eta_p^2 = .008$]. The interaction was also not significant [$F(1,65) = .881, p = .351, \eta_p^2 = .01$]. Not supportive of my hypothesis, while females engaged in significantly more hand-touches than men, the main effect of discussion and the interaction of sex and discussion were not significant indicating no differences based on who chose the topic.

For non-hand touches, no main effects were significant [Sex: $F(1,65) = 5.846, p = .018, \eta_p^2 = .08$; Discussion: $F(1,65) = .031, p = .860, \eta_p^2 < .001$]. However, the interaction of sex and discussion was significant [$F(1,65) = 7.633, p = .007, \eta_p^2 = .19$]. Paired sample *t*-tests (Bonferroni corrected, $.05/4 = .012$) were conducted to better understand the results. It was found that women were making significantly more non-hand touches than men during the female discussion ($t = -3.295, df = 66, p = .002, d = -.57$). No sex differences were found during the male discussion ($t = -.504, df = 66, p = .616, d = -.07$). In turn, females did not significantly differ in their touching behavior ($t = -2.055, df = 66, p = .044, d = -.19$) and males did not significantly differ in their touching behavior ($t = 1.973, df = 66, p = .053, d = .32$) across discussion. Partially supporting the hypothesis, women did engage in more non-hand touches; however, women were doing

so only during their own conversation. Means and standard deviations for these variables can be found in Table 4.

Table 4: Means and SD for Non-Hand Touches

Touches	Male		Female	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Male Discussion Non-Hand	.1373	.5184	.1713	.4929
Female Discussion Non-Hand	1.493E-02	.1222	.2827	.6472

Note. $N = 67$

Touch while talking and listening. It was hypothesized that, within intimate relationships, who touches while talking the most will coincide with whose discussion is being discussed (i.e., the person who raises the problem will touch the most). During the females' discussion the wives will touch while talking the most and during the males' discussion the husbands will touch while talking the most. However, since touches while listening are not based on power attempts it was hypothesized that women would engage in a greater frequency of touch while listening than men. Furthermore, this type of touching should not differ based on whose discussion is being discussed. In examining the last hypothesis, a 2x2 (Sex X Discussion) mixed model ANOVA with a blocking factor of who went first was conducted examining touch while talking and another 2x2 (Sex X Discussion) mixed model ANOVA with a blocking factor of who went first, for touching while listening. A significant main effect for sex was found for touches while talking [$F(1,65) = 9.649, p = .003, \eta_p^2 = .13$] but the main effect of discussion was not significant [$F(1,65) = .348, p = .558, \eta_p^2 = .005$]. However, a significant interaction was found for touches initiated while talking [$F(1,65) = 6.771, p = .011, \eta_p^2 = .09$]. Paired sample t-tests (Bonferroni corrected, $.05/4 = .012$) were conducted to better understand

the interaction effects. Partial support for the hypothesis was found women significantly touched more while talking than males during the female discussion ($t = -3.895$, $df = 66$, $p = .002$, $d = -.56$). No sex differences were found during the male discussion ($t = -1.326$, $df = 66$, $p = .616$, $d = -.19$). Females did not significantly differ in their touching behavior ($t = -1.848$, $df = 66$, $p = .052$, $d = -.20$) and males did not significantly differ in their touching behavior ($t = 1.619$, $df = 66$, $p = .053$, $d = .18$) across discussions.

For touches while listening, a significant main effect for sex was found [$F(1,65) = 19.402$, $p < .001$, $\eta_p^2 = .23$] but the main effect of discussion [$F(1,65) = .316$, $p = .576$, $\eta_p^2 = .005$] and the interaction was not significant [$F(1,65) = 1.216$, $p = .274$, $\eta_p^2 = .018$]. These results are in support of the hypothesis as women are found to do more touches while listening than men regardless of whose discussion. Means and standard deviations for these variables can be found in Table 5.

Table 5: Means and SD for Touches while Talking

Touches	Male		Female	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Male Discussion Talking	.3104	.7022	.4488	.7834
Female Discussion Talking	.1977	.5278	.6198	.9314

Note. $N = 67$

Summary of Results

Further investigation of a trend toward significance, found that females engaged in more touching than males during the female discussion but males were not found to touch more during the male discussion. Therefore, partial support was found for the hypothesis, with women touching more than men during their own discussion but no differences were found on the men's discussion. For supportive touches, a main effect of sex was significant, but no main effect for discussion or interaction effect of sex and

discussion were found. This was supportive of the hypothesis, females engage in significantly more supportive touches than males regardless of whose discussion. For power touches, further investigation of a trend towards significance found that women engage in significantly more touching behaviors than men during the female discussion but no sex differences were found during the male discussion. It would seem that women are engaging in more touching behaviors during their discussion than what can be explained by supportive touches and provides support for women displaying more power moves during their discussion.

A significant sex main effect was found for hand touches but the main effect of discussion was not significant nor was the interaction. Not supportive of my hypothesis, while females engaged in significantly more hand-touches than men, no differences based on who chose the discussion were found. It was also found that women were making significantly more non-hand touches than men during the female discussion but no sex differences were found during the male discussion. Partially supporting the hypothesis, women did engage in more non-hand touches; however, women were doing so only during their own conversation. A significant main effect for sex was found for touches while talking but the main effect of discussion was not significant. However a significant interaction was found for touches initiated while talking. Partial support for the hypothesis was found; women significantly touched more while talking than males during the female discussion but no sex differences were found during the male discussion. For touches while listening a significant main effect for sex was found but the main effect of discussion or the interaction was not significant. These results are in support of the hypothesis as women are found to do more touches while listening than men

regardless of whose discussion. Females did not significantly differ in any of their touching behavior and males did not significantly differ in any of their touching behavior across discussions.

DISCUSSION AND CONCLUSIONS

The goal of the current study was to examine the presence of touching behaviors in married couples. I examined the presence of overall sex differences in touch behavior and whether any differences in touch behavior were found based on who chooses the topic. Since it has not been fully clear how the studies of non-married couples and mixed-sex acquaintances will translate into married couples discussing an area of conflict in their relationship, the current study examine married couples to record what touching behaviors occur during problem-solving discussions (i.e., frequency, support, hand, non-hand, while talking, while listening). It was unknown if these behaviors would follow the predictions of the Gender Politics Hypothesis (Henley, 1977, 1995; i.e., more touching by males than females) or be more in line with the Dyadic Power Theory (Dunbar, 2000, 2004; i.e., the person who raises the problem will touch the most). This current data supported Dyadic Power Theory and not the Gender Politics Theory. Rather than men attempting more touches than women as a way to maintain inequalities present in society, women touched more than men, and particularly used touches representing power more during their own topics.

Although Henley's theory (1977) has been previous accepted as true, it was found that women touched with a greater frequency than men. Specifically, more in line with the Dyadic Power Theory (Dunbar, 2000, 2004), it was found that although women are engaging in more touching behavior; they are doing so only during their own chosen topic. No differences in touching behavior were seen during the men's topics or sex differences across topics. So, in partial support of my first hypothesis, women are engaging in more touching behavior, they are using touch more during the conversation

they chose and have more investment in, possibly because of the relative power fluctuating in an intimate relationship combined with the socially skilled behaviors that women seem to use to persuade and gain compliance (Dunbar, 2000, 2004; Kalbfleisch & Herold, 2006). However, no support was found for men engaging in more touching behavior during their own topic. There have been mixed results found in the research on touching behaviors in mixed-sex dyads, in general. However, the current findings are consistent with one study that has found that women initiate more touch than men in married couples (Guerrero & Anderson, 1994; Willis & Briggs, 1992).

Support was also examined in this study as it seemed important to look at both of the major dimensions of touch behavior. As predicted, women were found to engage in more supportive touch behaviors regardless of whose topic was being discussed. This finding shows the importance of breaking touch up into different categories and not lumping all touch onto one dimension. Furthermore, the findings that no differences were found based on topic may reflect that this type of touching should be removed from studies that examine touch as power behavior.

Because of the above finding about supportive touch, I decided to compute a category of touch defined as power touch, overall touch with the supportive touches removed. These findings show that even when deducting supportive touch, women engage in more power touches than men on their own topic but no differences were found on the males' topic or differences between males and females across topics. These findings provide further support for women engaging in more power moves to influence their partner during their own topic.

The findings did not support hypotheses regarding hand touches. In non-intimate relationships, men engage in more than hand touches than women and women engage in more non-hand touches than men. However, based on Dyadic Power Theory (Dunbar, 2000) power attempts such as the use of hand touches should be most influenced by the discussion topic. Therefore, I hypothesized that within intimate relationships who uses the most hand touches will coincide with whose topic is being discussed (i.e., the person who raises the problem will touch the most). It was found that women do engage in more hand touches than men, but a significant difference was not found based on topic.

Since non-hand touches are thought to not be based on power attempts but rather as a supportive gesture, it was hypothesized that women would engage in a greater frequency of this type of supportive touch than men. Furthermore, this type of touching should not differ based whose topic is being discussed. It was also found that women engage in more non-hand touches than men during her topic. These findings provide partial support of the hypothesis showing that non-hand touches are used more by females during her chosen topic; however, the difference was not found for the male topic. This might indicate that although non-hand touches have not been indicated as power touches, these touches may fall into the socially skilled, persuasive touches that women are thought to use to get compliance and persuade others. Also, Hall (1996) found that those with higher status used more familiar touches; this could provide support for non-hand touches as being more of a power touch than previously thought.

A new dimension of touching behaviors was examined in this study. In the past, researches have not examined the effects of talking and listening while touching. Although there is no specific theory that states these behaviors would be indicative of

power moves, it was thought that they may follow the same patterns as found for other nonverbal behavior (e.g., gaze). Partial support was found for women touching while talking during the females' topic; however, no difference was found to support that during the males' topic the husbands will touch the most while talking. The findings did support the hypothesis that women would engage in a greater frequency of touch while listening than men, and this type of touching not differ based whose topic was being discussed.

Another aspect that the current study added to the previous research is the focus of touch between topics. Examining just the overall frequency of touches we would see that females engage in more touches. However, we would have missed the information that males and females do not significantly differ on any of the touching behaviors during the male topic. When females engage in significantly more touching behavior it was found in the current study to either be during their own conversation or the interaction was not significant. This finding is interesting as it has never been examined before. Furthermore, I hypothesized that topic would matter for all touches defined as indicating power and would be significant for men during their topic and women during their topic. This might be explained by the fact that women are more often thought to be responsible for relationship domains and that women will use more indirect forms of influence (Steil & Weltman, 1991). It has been suggested that in the context of close relationships, dominance and power expressed via socially skilled behavior is likely to be associated with better individual relation outcomes (Guerrero & Floyd, 2006) and is more likely to be used by women to seek more power and influence their partner. This study provides

support for men and women employing different influencing strategies to achieve their goals in intimate relationships (Kalbfleisch & Herold, 2006).

If we look at the choices of topics that men and women chose for their discussions, we can see a large amount of overlap. As stated above, the most common issues for men and women included finances and money, housework and responsibilities, and problems with family and friends. Although these choices were made at different frequencies, it does show that men and women are seeing similar conflicts in their relationships. It is also important to note that 31% of the couples (females = 15%; males = 16%) had to choose a second topic because of their spouse already having chosen the same topic. This again states that, in our sample, the men and women in the dyads were seeing similar conflict in their relationship. This might be one of the reasons that we did not find support for males doing more touches during their topic. As we have seen in the larger marital communication literature, during times of conflict, men may withdraw from the conversation as a power move while women will engage in the conversation and the use of more socially skilled form of touching may be a way for the wives to draw the husband back into the conversation (i.e., a useful power move for females). This is also a possible explanation for not finding support for hand-touches being a power move. In the literature, it states that men engage in more hand touches and women engage in more non-hand touches, although the means for male and female Americans were nearly identical. They also found that men are more likely to touch women with their hand but that women are more likely to initiate non-hand touches.

Future Research & Limitations

Although findings did mostly follow predictions, it is important to note that they are contradictory to most of the previous research examining non-intimate relationships. As noted earlier, this difference may be due to most research on touch and the links with power have not been conducted with dyads in romantic relationships and have not controlled for the type of topic being discussed. As has been shown by the current study these are important aspects to examine when trying to understand the effects and meanings of touch behaviors. One study by Guerrero (1997) did experimentally control for topic discussed; however, she did not examine the differences within dyads based on topic.

Also, it is important to try to continue understanding the complex nature of power and how it is exerted in romantic relationships. Power has been defined many ways and I think future research should try to examine the different aspects of power and the effects they have in relation to nonverbal behavioral. The Dyadic Power Theory (Dunbar, 2000) discusses the importance of defining the different aspects of power. I believe it will be important in future research to incorporate measures of power inline with Cromwell and Olson's (1975) definitions. They defined power by dividing it into three domains: power bases (what may happen), power processes (what is happening), and power outcomes (what did happen). These different domains try to tap into the many different ways that power can be measured in relationships. Power bases include the individual's personal assets. Power processes refer to the individual's assertiveness and problem solving ability and power outcomes refer to who makes the final decision. It was found that these three domains of power are only minimally correlated (Szciniowacz, 1987), suggesting they are possibly tapping into the somewhat unique aspects of the power in a relationship and thus that each may need to be measured separately to understand the role of power in a

relationship. French and Raven (1959) identified five power bases including reward, coercive, legitimate, expert, and referent. Reward bases are the ability to give others the desired resources, coercive bases are the ability to punish others, legitimate bases are those that are perceived as having the right or authority to influence others, expert bases are related to specialized knowledge, and referent bases are related to how likeable and dynamic the person is. The omission of these aspects in some of the previous research is an important oversight, as the role of these power dimensions is likely complex. In future research, it would be important to try and find measures that consistently and reliably measure the different kinds of power present and exerted in romantic relationships. As pointed out by Hall and Veccia (1990), the vertical dimensions of power are not fully understood and are defined differently in studies which could lead to the different findings in the multiple studies conducted looking at what should be the same topic.

Hertenstein et al. (2006) points out some of the difficulties in studying touch. They suggest that because most touch takes place in private, it is difficult to study the phenomena without interfering. The authors also noted that it is difficult to study touch based on the complexity of the issue of different aspects of touch that are occurring, including the variation in the action, intensity, velocity, abruptness, temperature, location, frequency, duration, and extent of surface touch (Hertenstein, 2002). Thayer (1986) suggested that there are three main approaches to studying touch: self-report, observational study, and experimental methods. It is also a difficult phenomenon to study as touch seems to happen infrequently during many observed interactions (Hall & Veccia, 1990; Remland, Jones, & Brinkman, 1991). A strength of this study was to examine different aspects of touch, overall, supportive, hand/non-hand, while talking/listening across sex and topic. For the reasons above and considering the findings

of the current study, future research should continue to look at the different aspects of touch and the meaning attributed to these touch behaviors. Perception is a powerful piece associated with power, and although it was not examined in the current study, it would be important in future research to investigate how the individuals in the dyads perceive the touches by their partner and the perception of the meaning the initiator of the touch ascribes to the touch. One way that this could be done is for the dyads to watch the videotapes of the discussions and give their perceptions of what the touch was conveying (e.g., I touched my partner then to show I was listening or I touched my partner there to make sure they were listening to me).

One of the strengths of the current study is also a limitation. The pros and cons between naturalistic observation studies and laboratory studies are always under debate. Although I was able to directly examine who chose the topics that were discussed by the couple it was in an artificial setting. Even though the setting had comfortable surroundings, it was a setting where the couple knew they were being videotaped and they may not have interacted as they would in a private, natural setting. However, the behavioral data gathered from the laboratory study provided important data to further our understanding of how men and women are interacting in these conflict discussions.

As discussed above, we found that 31% of the couples (females = 15%; males = 16%) had to choose a second topic because of their spouse had already chosen the same topic. This indicates that men and women in the dyads were seeing similar conflict in their relationship; however, this could be a methodological issue that should be examined in future studies. Specifically stating for the individual to choose the issue that is most

important to them and continuing to randomly select who will need to change topics if they still choose the same.

I think that future research replicating the current study and adding more nonverbal and verbal measures will help us to better understand the function of power in romantic relationships. Another limitation of the current study was that it only focused on one aspect of nonverbal behavior, touch. Although touch was broken down into different measurements, a strength of this study, it is important to remember that nonverbal behavior, similar to verbal behavior, does not happen in a vacuum. Future research examining the interaction between different nonverbal behaviors (e.g., touch, gaze, proximity) and verbal behaviors (e.g., demand/withdraw, interruptions, talking time) will further help to understand how males and females in romantic relationships are dealing with conflict. Helping to further our understanding of these behaviors will have major implications for counselors in working with couples and families. Understanding power dynamics in relationships and how those are playing out nonverbally and verbally will help the therapist bring these actions to the attention of the clients and help them to be more aware of their actions and the actions of their partners. This study also has implications for counselors in understanding the power of touch, especially for women. Most research in therapeutic context shows touch as a form of warmth and support (Mayor, 1981); however, understanding how the dynamics of equalitarian relationships might interact to induce more power moves will be information for therapists. For example, if counselors are viewing touches between the couple as supportive but they see that often the person being touched gives in or changes their position and seems

somewhat uncomfortable with the decision, this could lead to a discussion about how couples influence their partners and power dynamics in relationships.

Another limitation of the study was the lack of statistical power. Although we had 67 dyads, touch is an infrequent action (Hall & Veccia, 1990). Even though we had 61% of dyads that engaged in touching behaviors, increasing power could help to see if a larger sample would continue to show the same effects. In previous research, Hall and Veccia (1990) observed 4,500 dyads in public places and found that 85% of the dyads never touched. In the mixed dyads, both males and females were found to touch in 120 of the pairs; however these dyads were not all romantic couples. A larger sample size will help to further understand the differences in males and females touch behaviors, specifically looking at those in romantic relationships. In the past, studies have lumped together same-sex and mixed-sex dyads as well as not always knowing the relationship between the dyads. If we are to truly understand how touch is playing out in mixed-sex romantic relationships, more laboratory research like Guerrero (1997) and the current study should be conducted.

A major limitation of the current study was that the sample came almost exclusively from university associated individuals in the Midwest, were mostly Caucasian, and almost all satisfied couples. Future research should try to diversify the sample. For example, DiBiase and Gunnoe (2004) found that men engaged in more hand touches than women, but when they examined this difference across Nationality, they found this difference only in the American sample. Therefore, examining more diversified samples may allow researchers to fully understand possible differences based on demographics. Also, examining the differences based on length of marriage and

changes over time in married dyads would also add important information. It would also be important for future research to engage in longitudinal studies for a better understanding of touching behaviors over time and if these changes match the current study or if different touches emerge as power touches. It should also be included in further studies looking at different types of relationships (i.e., homosexual relationships, dating relationships, cohabitating relationships) to see if any differences in touching behaviors emerge based on the different types of relationships.

Conclusions

It has been stated that power is a key function of nonverbal behavior (Patterson, 1995). Argyle (1988) reported that nonverbal behavior has two main dimensions, including expressing warmth and expressing dominance. The current study found that women engage in more overall touch, power touches, and touches while talking than men on their own topic but no differences were found on the men's topic. For touches more thought of as support, supportive touches and touches while listening females engaged in significantly more of these types of touches than males regardless of topic. Contrary to predictions, hand touches were found to have no differences based on who choose the topic were found, although women were found to engage in more overall hand touches than men. Also contrary to predictions, women engaged in more non-hand touches; however, they were doing so only during their own conversation. Hand touches, which were thought to be better predictive of power touches, showed the relationship of a more supportive touch, whereas non-hand touch seemed to be more predictive of a power touch.

Many studies examining touch behavior have been naturalistic and do not take into account the type of discussion, who makes up the dyad, and who choose the topic being discussed. This study was conducted to control for these variables and examine as Dunbar (2000) suggested if power and control can be more readily identified when conflict exists between the goals of the partners. Therefore, to add to the literature I assessed different aspects of touching behavior and examined the effect of topic.

APPENDIX A. INFORMED CONSENT DOCUMENT

Title of Study: Communication in Committed Relationships
Investigator: David L. Vogel, Ph.D.

This is a research study. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time.

INTRODUCTION

The purpose of this study is to investigate the couples' communication patterns discussions of problems in their relationship.

DESCRIPTION OF PROCEDURES

If you agree to participate in this study, your participation will last for approximately 60-80 minutes. During the study you may expect the following study procedures to be followed. You will answer some self-report questionnaires and then be video and audiotaped while discussing an area you would like changed in your relationship and an area your partner would like changed in your relationship. The questions you are asked may contain personal and sensitive relationship questions that may also include questions about illegal behaviors. You do not have to answer any questions you do not want to answer.

RISKS

We do not anticipate that these procedures will cause you any harm, but if you experience discomfort you may talk to the investigators about your concerns. We will also provide you with the name of community referrals for you to discuss any relationship or personal issues that may arise from these discussions. You are free to skip any question that you do not wish to answer or that makes you feel uncomfortable. You are also free at any time – even during or after the discussions – to choose to end your participation. There will be no negative effects if you choose to skip a question or discontinue your participation in the study. If you choose to end your participation all data collected will be erased.

BENEFITS AND COMPENSATION

Your participation in this project will help the researchers develop a better understanding about the influences of physiological responses on communication pattern in couples. This increased understanding may lead to better treatment for couples in distress and may even lead to preventative solutions for couples just starting to develop problems. Additional benefits for you also include the opportunity to discuss life experiences and problems with your partner, which can elicit improved communication about problems in the relationship. Furthermore, you and your partner will each be compensated \$30 for your participation.

PARTICIPANT RIGHTS:

Your participation in this study is completely voluntary and you may refuse to participate or leave the study at any time. If you decide to not participate in the study or leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled.

CONFIDENTIALITY:

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. In addition, precautions will be taken to protect your privacy including: (a) assigning you a unique code number that will be used instead of your name; (b) combining your data with the data collected from other participants so that no individual information will be identifiable; (c) tapes will be stored in a locked file cabinet in a room for which access is restricted and controlled by the principal investigator; (d) these tapes will be erased after their use in the current study; (e) these tapes will be only be seen by researcher members, trained to code them for research purposes; and (f) if a research member were to recognize you from the video or audiotape, that individual would not be permitted to continue to watch the tape or listen and would have no further access to the tape.

There are a few limits to this confidentiality. First, discussions involving reports of current or past abuse, threats, or harm to anyone, cannot be treated as confidential, and other parties may have to be notified for the protection and welfare of those involved. Second, federal government regulatory agencies such as the National Institute of Health and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy our records for quality assurance and data analysis. These records may contain private information.

QUESTIONS OR PROBLEMS

You are encouraged to ask questions at any time during this study. For further information about the study contact David L. Vogel, Ph.D. [294-1582, dvogel@iastate.edu]. If you have any questions about the rights of research subjects or research-related injury, please contact the Human Subjects Research Office, 2810 Beardshear Hall, (515) 294-4566; austingr@iastate.edu or the Research Compliance Officer, Office of Research Compliance, 2810 Beardshear Hall, (515) 294-3115; dament@iastate.edu

SUBJECT SIGNATURE

Your signature indicates you voluntarily agree to participate in this study, the study has been explained to you, you have been given the time to read the document and your questions have been satisfactorily answered. Your signature also acknowledges you give permission to be videotaped. You will receive a copy of the informed consent prior, to your participation in the study.

Subject's Name (printed)

(Subject's Signature)

(Date)

INVESTIGATOR STATEMENT

I certify the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion the participant understands the purpose, risks, benefits and the procedures that will be followed in this study and has voluntarily agreed to participate.

(Signature of Person Obtaining Informed Consent)

(Date)

APPENDIX B. SELF-REPORT QUESTIONNAIRE

Code # _____

Date _____

The following are questions concerning yourself and your current relationship. Please respond to them using the scales provided. If you are not sure if an item pertains to you or your partner, please estimate your answer. Please be as forthright as possible on all of your answers. Estimated completion time is 20-30 minutes. ***Please do not discuss your answers with your partner, fill out the questionnaires separately.***

Most people have disagreements in their relationships. Please indicate below the approximate extent of agreement or disagreement between you and your partner for each item based on the following scale:

- 5 = Always agree**
- 4 = Almost always agree**
- 3 = Occasionally disagree**
- 2 = Frequently disagree**
- 1 = Almost always disagree**
- 0 = Always disagree**

- _____ 1. Handling family finances
- _____ 2. Matters of recreation
- _____ 3. Religious matters
- _____ 4. Demonstrations of affection
- _____ 5. Friends
- _____ 6. Sex relations
- _____ 7. Conventionality (Correct or proper behavior)
- _____ 8. Philosophy of life
- _____ 9. Ways of dealing with parents or in-laws
- _____ 10. Aims, goals, and things believed important
- _____ 11. Amount of time spent together
- _____ 12. Making major decisions
- _____ 13. Household tasks
- _____ 14. Leisure time interest and activities
- _____ 15. Career decisions

The following questions have different answers. Please read the questions and answers carefully. Now, please indicate below approximately how often the following items occur between you and your partner based on this scale:

- 0 = All the time**
- 1 = Most of the time**
- 2 = More often than not**
- 3 = Occasionally**
- 4 = Rarely**

5 = Never

- _____ 16. How often do you discuss or have you considered divorce, separation or terminating your relationship?
- _____ 17. How often do you or your partner leave the house after a fight?
- _____ 18. In general, how often do you think that things between you and your partner are going well?
- _____ 19. Do you confide in your mate?
- _____ 20. Do you ever regret that you married (or lived together)?
- _____ 21. How often do you and your partner quarrel?
- _____ 22. How often do you and your partner "get on each other's nerves?"

How often would you say the following events occur between you & your partner?

23. How often do you kiss your mate? (Circle your response)

0 = Never
 1 = Rarely
 2 = Occasionally
 3 = Almost Every Day
 4 = Every Day

24. How many outside interests do you and your partner engage in together? (Circle your response)

0 = None of them
 1 = Very few of them
 2 = Some of them
 3 = Most of them
 4 = All of them

How often would you say the following events occur between you & your partner, based on the following scale:

0 = Never
 1 = Less than once a month
 2 = Once or twice a month
 3 = Once or twice a week
 4 = Once a day
 5 = More often

- _____ 25. Have a stimulating exchange of ideas
- _____ 26. Laugh together
- _____ 27. Calmly discuss something
- _____ 28. Work together on a project

There are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks. (circle yes or no)

Yes **No** 29. Being too tired for sex.

Yes **No** 30. Not showing love.

31. The numbers on the following line represent different degrees of happiness in your relationship. The middle point, "happy." represents the degree of happiness of most relationships. **Please circle the number** which best describes the degree of happiness, all things considered, of your relationship.

0	1	2	3	4	5	6
Extremely Unhappy	Fairly Unhappy	A Little Unhappy	Happy	Very Happy	Extremely Happy	Perfect

32. Which of the following statements best describes how you feel about the future of your relationship? (Please Circle the number)

- 5** I want desperately for my relationship to succeed, and would go to almost any length to see that it does.
- 4** I want very much for my relationship to succeed, and will do all I can to see that it does.
- 3** I want very much for my relationship to succeed, and will do my fair share to see that it does.
- 2** It would be nice if my relationship succeeded, but I can't do much more than I am doing now to help it succeed.
- 1** It would be nice if it succeeded, but I refuse to do any more than I am doing now to keep the relationship going.
- 0** My relationship can never succeed, and there is no more that I can do to keep the relationship going.

Instructions: Listed below are several areas that married couples make decisions on. Please consider each of these areas and indicate the extent to which you and your spouse agree on these things even before any discussion takes place, and also indicate who usually makes the final decisions in these areas.

	Extent to which you and your spouse agree	Who makes the final decision after discussion
1. Where you live and whether you should move.	1 2 3 4 5	1 2 3 4 5
2. What job you take and whether you should change or quit a job.	1 2 3 4 5	1 2 3 4 5
3. How many hours you work.	1 2 3 4 5	1 2 3 4 5
4. What job your spouse takes and whether he/she should change or quit a job.	1 2 3 4 5	1 2 3 4 5
5. How many hours your spouse works.	1 2 3 4 5	1 2 3 4 5
6. How many children there should be in your family.	1 2 3 4 5	1 2 3 4 5
7. When and how to praise or punish your children.	1 2 3 4 5	1 2 3 4 5
8. How much free time to spend together with your spouse.	1 2 3 4 5	1 2 3 4 5
9. How to spend your free time with your spouse.	1 2 3 4 5	1 2 3 4 5
10. How to spend your free time apart from your spouse.	1 2 3 4 5	1 2 3 4 5
11. How your spouse spends free time apart from you.	1 2 3 4 5	1 2 3 4 5
12. How much time to spend with children.	1 2 3 4 5	1 2 3 4 5
13. When to have social contacts with friends.	1 2 3 4 5	1 2 3 4 5
14. Which friends to see.	1 2 3 4 5	1 2 3 4 5
15. When to have social contacts with relatives.	1 2 3 4 5	1 2 3 4 5
16. Which relatives to see.	1 2 3 4 5	1 2 3 4 5
17. How to spend money on large purchases.	1 2 3 4 5	1 2 3 4 5
18. How to spend money on small purchases.	1 2 3 4 5	1 2 3 4 5
19. When to take vacation.	1 2 3 4 5	1 2 3 4 5
20. How to spend vacation time.	1 2 3 4 5	1 2 3 4 5
21. Whether to attend church, and if so, which church to attend.	1 2 3 4 5	1 2 3 4 5
22. How to follow or practice religion at home.	1 2 3 4 5	1 2 3 4 5
23. When to have sex.	1 2 3 4 5	1 2 3 4 5
24. How to have sex.	1 2 3 4 5	1 2 3 4 5

Next, we would like you to indicate how important it is to you that you personally decide what you and your spouse do in each of these areas, and how satisfied you are with your contribution in deciding on these things.

	How important is it to you that you decide	How satisfied are you with your contribution to decisions on
1. Where you live and whether you should move.	1 2 3 4 5	1 2 3 4 5
2. What job you take and whether you should change or quit a job.	1 2 3 4 5	1 2 3 4 5
3. How many hours you work.	1 2 3 4 5	1 2 3 4 5
4. What job your spouse takes and whether he/she should change or quit a job.	1 2 3 4 5	1 2 3 4 5
5. How many hours your spouse works.	1 2 3 4 5	1 2 3 4 5
6. How many children there should be in your family.	1 2 3 4 5	1 2 3 4 5
7. When and how to praise or punish your children.	1 2 3 4 5	1 2 3 4 5
8. How much free time to spend together with your spouse.	1 2 3 4 5	1 2 3 4 5
9. How to spend your free time with your spouse.	1 2 3 4 5	1 2 3 4 5
10. How to spend your free time away from your spouse.	1 2 3 4 5	1 2 3 4 5
11. How your spouse spends free time apart from you.	1 2 3 4 5	1 2 3 4 5
12. How much time to spend with the children.	1 2 3 4 5	1 2 3 4 5
13. When to have social contacts with friends.	1 2 3 4 5	1 2 3 4 5
14. Which friends to see.	1 2 3 4 5	1 2 3 4 5
15. When to have social contacts with relatives.	1 2 3 4 5	1 2 3 4 5
16. Which relatives to see.	1 2 3 4 5	1 2 3 4 5
17. How to spend money on large purchases.	1 2 3 4 5	1 2 3 4 5
18. How to spend money on small purchases.	1 2 3 4 5	1 2 3 4 5
19. When to take vacation.	1 2 3 4 5	1 2 3 4 5
20. How to spend vacation time.	1 2 3 4 5	1 2 3 4 5
21. Whether to attend church, and if so, which church to attend.	1 2 3 4 5	1 2 3 4 5
22. How to follow or practice religion at home.	1 2 3 4 5	1 2 3 4 5
23. When to have sex.	1 2 3 4 5	1 2 3 4 5
24. How to have sex.	1 2 3 4 5	1 2 3 4 5

In your relationship, who usually decides (circle one of the following five choices):

	1=Always me	2=Generally me	3=Both equally	4=Generally Partner	5=Always Partner
1. What you do on an outing?	1	2	3	4	5
2. Where you go?	1	2	3	4	5
3. What you talk about?	1	2	3	4	5
4. How much time you spend together?	1	2	3	4	5
5. Whether you generally spend time alone or with other couples?	1	2	3	4	5
6. If the tone of your conversations will be serious or silly?	1	2	3	4	5
7. Which movies you see?	1	2	3	4	5
8. If you have sex?	1	2	3	4	5
9. If you will hold hands or kiss in public?	1	2	3	4	5
10. If you should spend time with each other's parents?	1	2	3	4	5
11. If you will go out to the movies or stay home and rent one?	1	2	3	4	5
12. If you go to formal occasions such as dances?	1	2	3	4	5
13. When it is time to leave a party?	1	2	3	4	5
14. When to talk intimately with each other?	1	2	3	4	5
15. Which restaurant to attend?	1	2	3	4	5
16. When to end an argument?	1	2	3	4	5
17. Which song to listen to on the radio when you are in the car?	1	2	3	4	5
18. Which program to watch on television?	1	2	3	4	5
19. Where to sit in a theater?	1	2	3	4	5
20. Which one of you most frequently gives advice to the other person?	1	2	3	4	5
21. Which person most frequently asks the other for advice?	1	2	3	4	5

In your relationship, who is more likely (circle one of the following five choices):

1=Always me 2=Generally me 3=Both equally 4=Generally Partner 5=Always Partner

22. To talk about his/her accomplishments?	1	2	3	4	5
23. To talk about him/herself?	1	2	3	4	5
24. To express his/her personal beliefs and opinions?	1	2	3	4	5
25. To relay positive things about him/herself?	1	2	3	4	5
26. To talk about him/herself for a long time?	1	2	3	4	5
27. To boast about his/her own physical appearance?	1	2	3	4	5
28. To relay the kinds of things that make him/her especially proud of him/herself?	1	2	3	4	5
29. To say if he/she feels desired by the opposite sex?	1	2	3	4	5
30. The person to relay unhappy feelings when he/she may have them?	1	2	3	4	5
31. To discuss his/her weaknesses or frustrations?	1	2	3	4	5
32. To disclose native aspects of him/herself?	1	2	3	4	5
33. To express feelings about his/her own sexual inadequacy?	1	2	3	4	5
34. To relay insecurities about his/her physical appearance?	1	2	3	4	5
35. To discuss things in the present or past that they are ashamed of or feel guilty?	1	2	3	4	5
36. To explain what gets him/her worried, anxious, or ashamed?	1	2	3	4	5
37. To tell what would hurt his/her feelings?	1	2	3	4	5

Please respond to the answer the following questions regarding how satisfied you are with the following:

Very Unsatisfied							Very Satisfied
1	2	3	4	5	6	7	
1. My potential to influence my partner.							_____
2. My ability to influence my partner.							_____
3. My partner will likely do what I want.							_____
4. My potential to influence my partner.							_____
5. Who generally decides what we do together?							_____
6. Who has more say in deciding how much time we spend with each other?							_____
7. Who has more say in deciding how much time we spend with other people?							_____
8. Who generally decides what we do together?							_____
9. When we argue, who usually gets their way?							_____

Please answer the following questions from 1 to 5.

1. Have your perceptions of your partner changed since your marriage?

Yes(for the worse) -----			Yes(for the better)	
A lot	Somewhat	No	Somewhat	A lot
1	2	3	4	5

2. Has your partner's perception of you changed since your marriage?

Yes(for the worse) -----			Yes(for the better)	
A lot	Somewhat	No	Somewhat	A lot
1	2	3	4	5

3. Do you feel that your partner compares you with other men/women?

Yes(for the worse) -----			Yes(for the better)	
A lot	Somewhat	No	Somewhat	A lot
1	2	3	4	5

Please read each statement and circle a number 0, 1, 2 or 3 that indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 Did not apply to me at all**
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

1.	I found it hard to wind down	0	1	2	3
2.	I was aware of dryness of my mouth	0	1	2	3
3.	I couldn't seem to experience any positive feeling at all	0	1	2	3
4.	I experienced breathing difficulty (e.g., excessively rapid breathing or breathlessness in the absence of physical exertion)	0	1	2	3
5.	I found it difficult to work up the initiative to do things	0	1	2	3
6.	I tended to over-react to situations	0	1	2	3
7.	I experienced trembling (e.g., in the hands)	0	1	2	3
8.	I felt that I was using a lot of nervous energy	0	1	2	3
9.	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10.	I felt that I had nothing to look forward to	0	1	2	3
11.	I found myself getting agitated	0	1	2	3
12.	I found it difficult to relax	0	1	2	3
13.	I felt down-hearted and blue	0	1	2	3
14.	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15.	I felt I was close to panic	0	1	2	3
16.	I was unable to become enthusiastic about anything	0	1	2	3
17.	I felt I wasn't worth much as a person	0	1	2	3
18.	I felt that I was rather touchy	0	1	2	3
19.	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)	0	1	2	3
20.	I felt scared without any good reason	0	1	2	3
21.	I felt that life was meaningless	0	1	2	3

Please fill in the blank or circle the response that best fills in the blank for the following questions.

1. Age _____
2. Ethnicity _____
3. Occupation _____
4. Income (please circle) _____

<10,000	10,001-20,000	20,001-30,000	30,001-40,000
40,001-50,000	50,001-60,000	60,001-70,000	>70,001

5. Currently, my income is _____ the income of my partner.
 - a. greater than
 - b. less than
 - c. equal to
 - d. _____
6. Currently, my education is _____ the education of my partner.
 - a. greater than
 - b. less than
 - c. equal to
 - d. _____
7. Currently, my job status would be classified as _____.
 - a. professional
 - b. managerial
 - c. clerical
 - d. skilled
 - e. semi-skilled
 - f. unskilled manual
 - g. student
 - h. _____
8. Currently, my partner's job status would be classified as _____.
 - a. professional
 - b. managerial
 - c. clerical
 - d. skilled
 - e. semi-skilled
 - f. unskilled manual
 - g. student

On the scale from 1-5 (1= least satisfied; 5 = most satisfied) please rate how satisfied you are about the following questions.

- | | Least Satisfied | | | Most Satisfied | |
|--|-----------------|---|---|----------------|---|
| 1. The difference in income contributed by yourself and your partner to your relationship. | 1 | 2 | 3 | 4 | 5 |
| 2. The difference in education level between yourself and your partner. | 1 | 2 | 3 | 4 | 5 |
| 3. The difference in job status between yourself and your partner. | 1 | 2 | 3 | 4 | 5 |

Directions: No matter how well a couple gets along there are times when they disagree. We would like you to think of an issue that you see as the most

problematic in your relationship with your partner. Possible issues include but are not limited to:

- a. Problems with their friends or family members.
- b. Your needs in the relationship that aren't being met.
- c. Sexual issues/problems.
- d. Finances/Money.
- e. Problems with intimacy.
- f. Problems with the amount of time you spend together or apart.
- g. Feelings/emotions that you have not been able to express or that you feel they don't express.
- h. Specific areas in the relationship where you want change.
- i. Making decisions
- j. Housework or responsibilities

Feel free to select one of these or one of your own. Please write down the issue you choose in the space below and then answer the following questions about that topic.

We are interested in how you and your partner typically deal with this problem in your relationship. Please rate each item on a scale of 1 (= very unlikely) to 9 (= very likely).

A. WHEN THIS ISSUE OR PROBLEM ARISES,	Very Unlikely	Very Likely
1. <u>Mutual Avoidance</u> . Both members avoid discussing the problem.	1 2 3 4 5 6 7 8 9	
2. <u>Mutual Discussion</u> . Both members try to discuss the problem.	1 2 3 4 5 6 7 8 9	
3. <u>Discussion/Avoidance</u> . Man tries to start a discussion while Woman tries to avoid a discussion.	1 2 3 4 5 6 7 8 9	
Woman tries to start a discussion while Man tries to avoid a discussion.	1 2 3 4 5 6 7 8 9	

B. DURING A DISCUSSION OF THIS ISSUE OR PROBLEM,

- | | |
|---|-------------------|
| 4. <u>Mutual Expression</u> . Both members express their feelings to each other. | 1 2 3 4 5 6 7 8 9 |
| 5. <u>Mutual Blame</u> . Both members blame, accuse, and criticize each other. | 1 2 3 4 5 6 7 8 9 |
| 6. <u>Mutual Negotiation</u> . Both members suggest possible solutions and compromises. | 1 2 3 4 5 6 7 8 9 |
| 7. <u>Demand/Withdraw</u> .
Man pressures, nags, or demands while
Woman withdraws, becomes silent, or
refuses to discuss the matter further. | 1 2 3 4 5 6 7 8 9 |
| Woman pressures, nags, or demands while
Man withdraws, becomes silent, or
refuses to discuss the matter further. | 1 2 3 4 5 6 7 8 9 |
| 8. <u>Criticize/Defend</u> .
Man criticizes while Woman
defends herself. | 1 2 3 4 5 6 7 8 9 |
| Woman criticizes while Man
defends himself. | 1 2 3 4 5 6 7 8 9 |

APPENDIX C. DEBRIEFING

Thank you for your participation. The study you just participated in was designed to better understand how different aspects of the power one has in a relationship (i.e., ability to influence one's partner) are related to relationship satisfaction and the use of specific problem-solving behaviors (i.e., making demands versus withdrawing from the discussion). Increased understanding of the relationship between relational power, satisfaction with the relationship, and use of different problem-solving behaviors may lead to better treatment for couples in distress and may even lead to preventative solutions for couples starting to develop problems.

As mentioned before, all responses will be kept confidential and identifying information (i.e., names) will be removed at the end of your participation today. Your data will also be combined with the data of other participants to further ensure anonymity. Tapes of the discussions will be kept, but these will be kept in a locked cabinet, in a locked office. Only those trained to code the tapes for research purposes will ever have access to the tapes.

Again, thank you for your valuable contribution to our study. We realize the topic covered can be difficult or frustrating to talk about and we appreciate your sharing personal information with us. Couples may have trouble discussing these issues. Often times the topic discussed have been an issue for a long time and it is unreasonable to think that they could solve the problem during one discussion. If you have any concerns about the discussion you just had with your partner or what would happen later because of that discussion please talk to one of the experimenters about your concerns. We have also provided, below, some community resources for those couples or individuals interested in talking to someone about relationship issues. In addition, if you have any additional questions about this investigation you may contact the Principal Investigator: David L. Vogel, Ph.D., Assistant Professor, W149 Lagomarcino Hall, Department of Psychology, Iowa State University, Ames, IA 50011; 294-1582; dvogel@iastate.edu. If you have any questions about the rights of research subjects or research-related injury, please contact the Human Subjects Research Office, 2810 Beardshear Hall, (515) 294-4566; austingriastate.edu or the Research Compliance Officer, Office of Research Compliance, 2810 Beardshear Hall, (515) 294-3115; damentiastate.edu

Community Referrals

Marriage and Family Therapy Clinic. 4380 Palmer HDFS Building, Ames, IA. 294-0534.

Lutheran Social Services of Iowa. 1323 Northwestern Avenue, Ames, IA. 232-7262.

Richmond Center. 125 South 3rd Street. Ames, IA. 232-5811.

Student Counseling Services. 2223 Student Services Building. Ames, IA. 294-5056.

Youth & Shelter Services Inc. 420 Kellogg Avenue, Ames, IA. 233-2250.

APPENDIX D. CODING SHEET FOR TOUCH

Couple ID _____ Coder # _____ Date _____

[illegible]

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