Gender Differences in Interaction Style and Influence

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Observed 128 Ss in mixed- and same-sex dyads to examine effect of interaction on sex differences in influence. Ss discussed 2 topics on which they disagreed. During the 2nd discussion, 1 S in each pair was told to influence the other. Ss showed more agreement and positive social behavior when paired with a woman and more disagreement and task behavior when paired with a man. Although women were more easily influenced, this effect was mediated by the partners' behavior. Ss were influenced more by a partner who agreed with them and less by one who disagreed. Path analyses and ANCOVAs revealed that Ss' sex predicted the partners' behavior toward them, which in turn predicted the sex difference in influence. When instructed to be influential, Ss increased disagreements, but only with male partners. Results indicate that the masculine interaction style used when interacting with men is less effective than the feminine style used when interacting with women.

Researchers investigating gender differences in social influence have often reported that women are more easily influenced and less influential than men (Eagly, 1978). Although there is little evidence to support the notion that men are more influential (Eagly, 1978), a meta-analytic review has shown that women are more easily influenced (Eagly & Carli, 1981). What remains to be investigated is the process by which this difference may occur. Specifically, what types of behavior do people use when trying to influence men or women and what types of behavior lead to influence?

The purpose of this article is to examine how the sex composition of dyads may affect gender differences in interaction style and, in turn, how these differences in interaction may lead to gender differences in influence. A second objective is to determine what happens to gender differences in interaction style and influence when subjects are specifically attempting to induce persuasion.

Gender Differences in Group Interaction

Research has demonstrated that gender does indeed have an effect on group interaction. Studies examining gender differences in interaction style have typically used Bales's (1950, 1970) method for analyzing contributions to group discussions.

In these studies, women generally exhibit a greater amount of agreement and other positive social behaviors—such as relieving group tension and showing group solidarity—whereas men engage in a greater amount of disagreements (Mabry, 1985; Piliavin & Martin, 1978; Stake, 1981) and task behaviors—such as giving opinions, suggestions, and directions (Aries, 1982; Carli, 1981; Heiss, 1962; Piliavin & Martin, 1978; Strodtebeck & Mann, 1956; Zelditch, 1955).

One explanation for this difference is that men, as a group, have higher status than women (Lockheed & Hall, 1976; Meeker & Weitzel-O'Neill, 1977). This is reflected in the tendency of men and masculine traits to be more favorably evaluated than are women and feminine traits (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972). According to Berber and his associates, high status group members, such as men, are assumed to be more competent, receive more opportunities to make task contributions to the group discussion, and receive more support for their contributions (Berger, Cohen, & Zelditch, 1972; Berger & Fisek, 1974; Berger, Fisek, Norman, & Zelditch, 1977; Berger, Rosenholtz, & Zelditch, 1980). Competing for status is acceptable for men and other high status group members but illegitimate for low status members and women (Meeker & Weitzel-O'Neill, 1977).

Gender differences in positive social behavior have also been linked to status. It has been suggested that women may try to gain acceptance from other group members by engaging in high amounts of positive social behavior; such behavior may communicate to others that female members are not competing for status but are simply trying to help the group achieve its goals (Meeker & Weitzel-O'Neill, 1977; Ridgeway, 1978).

The status explanation suggests that gender differences would be larger in mixed-sex than in same-sex interactions when gender acts as a diffuse status characteristic (Berger & Fisek, 1974). Although stereotypical gender differences in interaction have been found in both types of groups (Carli, 1981), no study has directly compared mixed-sex with same-sex groups. One study did report, however, that men disagree more when interacting with men than with women, and that women are more dramatic
when interacting with women than with men (Piliavin & Martin, 1978). These results suggest that gender differences in interaction may actually be larger in same-sex groups. Further support for this hypothesis has been found in research on other behaviors. For example, all-male groups have a more rigid status hierarchy and more competition than do all-female groups; mixed-sex groups fall between these extremes (Aries, 1976). Stereotypical gender differences in nonverbal behavior are also larger for same-sex groups (Hall, 1984; Hall & Braunwald, 1981). What evidence there is, then, has suggested that gender differences in interaction style may be larger in same-sex groups.

In explaining this pattern of findings, Hall (1984) has argued that segregation by sex is common among children and adults in our culture, and that norms are often well established for sex-segregated sports, occupations, and games. The types of activities that men and women traditionally engage in may have shaped the norms that developed for each gender (Hall, 1984). Subjects may have clear expectancies about how men and women ought to behave in same-sex groups and may interact in such groups in a way that is consistent with their stereotypes. They may be less sure about the appropriate norms for mixed-sex groups and may modify their behavior to fit the type of interaction they expect from members of the opposite sex. Therefore, the gender of the other group members may be an important determinant of behavior. For example, group members expecting a friendly social interaction from women may be more friendly and social with them than with men.

A second possible reason that gender differences may be larger in same-sex groups is that once subjects begin interacting, they are likely to model the behaviors of the other group members. That is, subjects may be more likely to exhibit positive social behaviors or disagreements when their partners do. This would result in an exaggeration of gender differences in same-sex groups and a reduction of these differences in mixed-sex groups.

Hypothesis 1: Subjects will exhibit more stereotypically feminine behavior when interacting with women and more stereotypically masculine behaviors when interacting with men. Therefore, gender differences in behavior, with a higher proportion of social behaviors and agreements among women and a lower proportion of task behaviors and disagreements among men, will be larger in same-sex than in mixed-sex groups.

Gender Differences in Influence Strategies

Although there is no evidence that group members who are deliberately trying to persuade other members behave differently than those who are not trying to be persuasive, it is likely that they do. Research in which subjects are asked to report how they gain compliance has suggested that people who possess little power may use indirect strategies (Johnson, 1976; Kipnis, Schmidt, & Wilkinson, 1980). For example, in families women report greater use of referent power, relying on their similarity to others and being likable, and men report greater use of expert power, relying on perceived knowledge and skill (Raven, Centers, & Rodrigues, 1975). In dating relationships, women report using indirect strategies, such as hinting or crying, and unilateral strategies, such as withdrawing from the relationship or doing what they want to do without their partner, more than do men (Falbo & Peplau, 1980).

The research just described has focused on gender differences in gaining the compliance of intimate partners, and many of the strategies identified in this research would not be used to persuade a stranger. For example, withdrawing would hardly be an effective strategy to induce persuasion. However, the general observation that women tend to be more indirect than men can be tested for in persuasion settings. An indirect approach to persuasion may involve expressing agreement with the other person’s position and positive social behavior toward the other. A direct approach may involve presenting many arguments or task contributions to support one’s own opinion and expressing disagreement with the other person’s position. These direct versus indirect strategies correspond to the gender differences in interaction already predicted in the present study. Gender differences should occur even when subjects are not specifically instructed to persuade another group member. However, if men and women use different strategies to induce persuasion, instructing subjects to persuade another member should increase gender differences in interaction style as compared with the gender difference when persuasion instructions are not given.

Hypothesis 2: Subjects will exhibit a more sex-stereotyped interaction style when instructed to persuade another group member than when no such instructions are given.

Effects of Group Interaction on Influence

No study has examined the effect of interaction style on the private opinions of group members. Nevertheless, it is likely that behaviors that are either stereotypically feminine or masculine may have an effect on influence. For example, those who contribute many task behaviors are likely to be considered experts (Bales, 1950; Berger et al., 1980) or leaders (Stein & Heller, 1979). Therefore, the extent to which a person makes task contributions should also be positively associated with his or her ability to influence others.

Agreement and other positive social behaviors should communicate an altruistic desire to help the group, and thereby increase a group member’s ability to influence others (Meeker & Weitzel-O’Neill, 1977; Ridgeway, 1978). These behaviors may be most effective when the influence agent is of low status, such as a woman attempting to influence a man (Meeker & Weitzel-O’Neill, 1977; Ridgeway, 1978). Disagreement, on the other hand, should be viewed as a direct attempt to influence others and enhance one’s status in the group. Other members may respond to direct disagreement by experiencing reactance, which in turn could make them more resistant to influence attempts (Brehm & Brehm, 1981).

Hypothesis 3: The extent to which a subject is influenced by another member of the group will be positively correlated with the other member’s use of task behaviors, agreements, and positive social behaviors and negatively correlated with the other member’s disagreements.

Because gender differences in interaction are predicted for same-sex groups, it follows that gender differences in influence will also occur. In same-sex groups, women are likely to agree
with one another and to engage in a high amount of positive social behavior and little disagreement, whereas men are likely to disagree with one another and to exhibit little agreement or positive social behavior. The interactions of the women should, therefore, lead to a greater amount of social influence than those of the men. As men and women are expected to behave more similarly when in mixed-sex groups, gender differences in influence may not occur in such groups. Moreover, if gender differences in influence are mediated by differential treatment of men and women by other group members, it should be possible to eliminate gender effects on influence by statistically controlling the behavior of the other group members.

Hypothesis 4: In same-sex groups, women will be influenced to a greater degree than will men. The gender difference should be smaller or absent in mixed-sex groups.

Hypothesis 5: Gender differences in influence will be reduced to nonsignificance by statistically controlling the variability of the other group members’ behavior toward the subjects.

The present experiment examines the relation between sex composition of groups and gender differences in interaction style and influence. I included two measures of social influence: a private measure of persuasion and a public measure of conformity. To obtain a clear measure of persuasion and to identify which subject was the source of the persuasion, the groups consisted of pairs of subjects who were asked to discuss two topics on which they disagreed. Private measures of opinion were taken before and after the discussion. The amount of attitude change in the direction of the partner’s opinion constituted the measure of persuasion. I included a private measure of influence because private measures are less susceptible than public measures to external demands (Deaux & Major, 1987) and are probably more accurate reflections of subjects’ true attitudes. However, because of this, such measures are less likely to reveal stereotypical gender differences (Eagly, Wood, & Fishbaugh, 1981).

I also examined a public measure of influence. During each discussion, subjects were asked to write down three ideas that they both agreed were of primary importance to consider when forming an opinion on the topic of discussion. For each subject, the amount of public influence consisted of the number of mutually agreed-on issues that reflected his or her partner’s opinion.

Method

Pretest

A pretest questionnaire was administered to 226 undergraduates in introductory psychology courses at the University of Massachusetts—Amherst. Students were contacted in their classrooms at the beginning of the semester and asked if they would fill out a questionnaire indicating their opinions on a number of topics. They were told that by responding to the questionnaire, they might gain an opportunity to participate in a study later in the semester.

Subjects responded to an opinion questionnaire on which they rated each of 27 current issues, indicating their agreement with each item on a scale ranging from completely disagree (1) to completely agree (10), their interest in each item on a scale ranging from no interest (1) to extremely high interest (10), and their knowledge of each item on a scale ranging from no knowledge (1) to extremely high knowledge (10). Examples of the items are “Laws should be passed prohibiting the possession of handguns in this state,” “The national speed limit (55 mph) should be abolished,” and “Capital punishment should be reinstated in Massachusetts.”

The purpose of the questionnaire was to identify topics for which there was a diversity of opinion. This ensured that subjects could be paired with partners with whom they disagreed. In addition, because it has been demonstrated that women are more easily influenced by masculine topics and men are more easily influenced by feminine topics (Feldman-Summers, Montano, Kasprzyk, & Wagner, 1980; Goldberg, 1975; Sistrunk & McDavid, 1971), the topics to be used in the study could not favor the interests or expertise of one gender over the other. Finally, topics were chosen so that they would reveal no gender differences in initial opinion. The two items that met these criteria and were chosen to be used in the experiment were “The drinking age should be lowered to 18 in this state (Massachusetts)” and “The federal government should provide free day-care for working parents.”

Subjects

Of the 226 pretest subjects, 64 men and 64 women made up the final sample of participants. I did not include respondents who had reported relatively neutral opinions on the selected topics, with opinion scores of 5 or 6 out of 10, in the sample. The sample was selected at random from the remaining pretest subjects.

Procedure

Beginning approximately 5 weeks after completing the pretest questionnaire, subjects were contacted by telephone and asked to schedule an appointment to participate in the study. Each subject participated as a member of a two-person group. Half of the subjects were paired with same-sex partners and half with opposite-sex partners, resulting in 32 female pairs, 32 male pairs, and 64 mixed-sex pairs. Participants were always paired with partners who disagreed with them on both topics. Aside from this restriction, pairings were made randomly. Subjects who favored lowering the drinking age, for example, were always paired with someone who was opposed to lowering it. The amount of disagreement was allowed to vary randomly among the pairs.

To ensure that the difference in opinion was the same for the three types of dyads (mixed-sex, same-sex male, and same-sex female), I computed the absolute value of the difference in opinion for each dyad. This was done separately for the day-care and drinking age topics. I conducted one-way analyses of variance (ANOVAs) on the difference scores with type of dyad as the independent variable. I found no differences among the three types of dyads for either topic, F(2, 61) < 1.00. The differences in opinion ranged from 3 to 9 points, with an average of 5.92 for the day-care topic and 6.72 for the drinking age topic. Levene's (1960) test to detect heterogeneity of variance revealed no differences between the groups in variability of difference scores, F(2, 61) < 1.00.

Subjects received no information about the study until they arrived at the laboratory. On arrival, they were told that they would be discussing controversial topics with one other subject and that their discussions would be videotaped. Subjects were then given an opportunity to withdraw. One female subject refused to participate, was given credit, and was excused.

Participants were presented with the first topic, which for half of the subjects concerned the drinking age and for the other half concerned day care. Participants were then separated from their partners and given pencils and paper. They received written instructions asking them to write down three ideas or arguments that were of primary importance in forming their opinion on the topic. This served as a check to establish
that subjects had not changed their opinions since the pretest. It also provided a measure of public influence, as each subject’s three ideas could be compared with the list of the most important ideas generated by each dyad during the discussion. All subjects then read the following, Instruction A:

Now you and your partner are going to discuss the ideas you each generated. You will be videotaped during the discussion. Work with your partner to decide which three ideas you both feel are most important to consider when forming an opinion on this topic. You have ten minutes for the discussion. Write down your final list of ideas on the paper provided. The experimenter will tell you when to begin.

Subjects were given up to 10 min to discuss the topic and come up with their mutually agreed-on ideas. They were videotaped during the discussion from an adjacent room through a one-way mirror. The experimenter left the room during the discussion and returned after the participants had finished or after 10 min, whichever came first.

After the discussion, subjects were once again separated from their partners. Each participant indicated his or her opinion concerning the first topic on a 10-point scale. They also rated on a scale ranging from ‘not at all’ (1) to ‘a great deal’ (10) how concerned they had been with convincing their partners that their ideas were the best. They were then given the second topic. The procedure used for the second topic was identical to that used for the first topic, with one exception. One randomly selected member of each pair received instructions that he or she should try to influence his or her partner. Instead of receiving Instruction A, as did their partners, these persuader subjects read the following, Instruction B:

Now you and your partner are going to discuss the ideas that you each generated. You will be videotaped during the discussion. This time, you must try to be as convincing as possible when presenting your ideas to your partner. Try to convince your partner that your ideas are the most important. You have ten minutes for the discussion. Write down your final list of ideas on the paper provided. The experimenter will tell you when to begin.

Subjects rated their opinions on the second topic. They then indicated how concerned they had been with convincing their partners that their ideas were the best and rated how much they liked their partner on a scale ranging from dislike a great deal (1) to like a great deal (10).

**Results**

I performed separate ANOVAs for the data on the mixed-sex and same-sex pairs because the models required to test the two data sets were different. For the mixed-sex groups, gender was treated as a within-groups variable because both men and women participated together in pairs. For the same-sex data, gender was treated as a between-groups variable because men and women did not participate together. I used an approach similar to that of Kraemer and Jacklin (1979) to combine the two data analyses, which involved computing a linear combination of the means and error terms. This analysis yields $t$ tests of all the effects included in the design and also allows comparisons that specifically test the hypotheses. For example, to test the hypothesis that the size of the gender difference is larger in same-sex dyads than in mixed-sex dyads, I performed the following contrast:

$$\frac{(M_m - M_{mm} - M_{fm} + M_{mm})}{((2MS_e^2 + 2MS_m)(1/n))^{1/2}}$$

in which $M_w$ is the mean for the women in same-sex dyads, $M_{men}$ is the mean for the men in the same-sex dyads, $M_{fm}$ is the mean for the women in the mixed-sex dyads, and $M_{mm}$ is the mean for the men in the mixed-sex dyads. $MS_e$ is the mean square error of the gender effect in same-sex dyads, $MS_m$ is the mean square error of the gender effect in mixed-sex dyads, and $n$ is the number of observations on which the means were based.

I used the same approach to compute $t$ statistics testing the main effects for gender, the sex composition of the dyads, the order of the topics, and whether subjects were persuaders or controls, as well as the interactions of these variables.

**Coding of Videotapes**

A female rater (the author) analyzed all of the videotapes, and a male rater independently analyzed the tapes of 24 randomly selected dyads (12 mixed-sex, 6 same-sex female, and 6 same-sex male) to establish reliability. The male rater was unaware of the purpose of the experiment and of the hypotheses being tested. Neither rater knew while coding the tapes which subjects had been given instructions to influence their partner during the discussion of the second topic. Using a modification of Bales’s (1950, 1970) categories of behaviors, a record was made for each subject of his or her number of task contributions (giving suggestions, opinions, or orientation), agreements, disagreements, questions, negative social behaviors (showing anger, nervousness, or negative affect toward the partner), and positive social behaviors (showing positive affect toward the partner, relieving tension, or showing solidarity).

Each type of behavior was recorded as a percentage of each subject’s total number of behaviors during a single discussion. A correlational analysis was used to test the reliability of the two ratings. Because each subject was a member of a dyad, the behavior of each pair of subjects could not be considered independent. To deal with this problem, the 24 pairs of subjects were randomly divided into two groups so that partners would not be included together in the same analysis. Pearson product-moment correlation coefficients were computed separately for these two groups of subjects, comparing the scores of the two raters. The average of the correlation coefficients for the two groups, computed separately for each type of behavior and for each discussion, ranged from $r(22) = .78$, $p < .001$ (for negative social behaviors) to $r(22) = .99$, $p < .001$. The judgments of the two raters were highly reliable.

I conducted ANOVAs including the raters as an independent variable to establish that the differences in the judgments of the raters did not contribute to the predicted gender effects. I also conducted a $2 \times 6 \times 2 \times 2$ (Gender of Subject × Dyad Nested Within Gender × Discussion × Rater) repeated measures ANOVA on the data from the same-sex interactions and a $12 \times 2 \times 2 \times 2$ (Dyad × Gender of Subject × Discussion × Rater) repeated measures ANOVA on the data from the mixed-sex interactions, with discussion and rater treated as repeated measures. There were no Gender of Subjects × Rater or Gender of Subjects × Discussion × Rater interactions. Contrasts were performed to test whether these two interactions were affected by the dyad’s sex composition. The error term against which these contrasts were tested was a combination of the mean
Analysis of Variance Models for the Same-Sex Dyads

Table 1

<table>
<thead>
<tr>
<th>Source of variance</th>
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<tbody>
<tr>
<td>Order of topics (O)</td>
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<td>MS0/MSD0O</td>
</tr>
<tr>
<td>Sex of persuader (S)</td>
<td>1</td>
<td>MS0/MSD0O</td>
</tr>
<tr>
<td>SO</td>
<td>1</td>
<td>MS0/MSD0O</td>
</tr>
<tr>
<td>D/SO</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Gender of subject (G)</td>
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<td>MS0/MSD0G</td>
</tr>
<tr>
<td>GO</td>
<td>1</td>
<td>MS0/MSD0G</td>
</tr>
<tr>
<td>GS</td>
<td>1</td>
<td>MS0/MSD0G</td>
</tr>
<tr>
<td>GSO</td>
<td>1</td>
<td>MS0/MSD0G</td>
</tr>
<tr>
<td>GD/SO</td>
<td>28</td>
<td></td>
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</tbody>
</table>

Note. SO refers to the Order of Topics X Sex of Persuader interaction, D/SO to the dyads within each SO condition, GO to the Gender of Subject X Order of Topics interaction, GS to the Gender of Subject X Sex of Persuader interaction, and GSO to the Gender of Subject X Sex of Persuader X Order of Topics interaction. MS refers to the mean square of each source of variance for the order of topics effect.

for the same-sex and mixed-sex dyads, as described earlier. Again, I found no interactions.

Analysis of Videotaped Behaviors

I performed a 2 X 2 X 8 X 2 mixed-model ANOVA for the data on the mixed-sex pairs with two between-subjects variables, order (in which the topics were presented) and sex of persuader (a male persuader vs. a female persuader); one nested variable, dyad (eight pairs of subjects nested within each Order X Sex of Persuader cell); and one within-pair variable, gender of subject (see Table 1). I also performed a 2 X 2 X 8 X 2 mixed-model ANOVA for the data on the same-sex pairs with two between-subjects variables, order and gender of subject; one nested variable, dyad; and one within-pair variable, persuader (persuader subjects vs. control subjects; see Table 2). The data

Table 2

<table>
<thead>
<tr>
<th>Source of variance</th>
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<tr>
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<td>MS0/MSD0O</td>
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<td>Gender of subject (G)</td>
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<td>D/GO</td>
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<tr>
<td>Persuader (P)</td>
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<td>PG</td>
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<td>MS0/MSD0P</td>
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<td>PGO</td>
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<td>MS0/MSD0P</td>
</tr>
<tr>
<td>DP/G0</td>
<td>28</td>
<td></td>
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</tbody>
</table>

Note. GO refers to the Order of Topics X Gender of Subject interaction, D/GO to the dyads within each GO condition, PO to the Persuader X Order of Topics interaction, PG to the Persuader X Gender of Subject interaction, and PGO to the Persuader X Gender of Subject X Order of Topics interaction. MS refers to the mean square of each source of variance; for example, MS0 is the mean square of the order of topics effect.

MS refers to the mean square of each source of variance; for example, MS0 is the mean square of the order of topics effect.

square error terms for the same-sex and mixed-sex dyads, as described earlier. Again, I found no interactions.

Effect of Gender of Subject and Sex Composition of Dyad on Interaction

Discussion 1. I found a main effect of sex composition of dyad for the percentage of questions, t(56) = 2.90, p < .01, and negative social behaviors, t(56) = 2.36, p < .05, with more questions (M = 5.80 vs. 3.89) and negative social behaviors (M = 0.56 vs. 0.08) in mixed-sex dyads. There was also a main effect of gender of subject for positive social behaviors, t(56) = 5.01, p < .01, with higher percentages shown by women (M = 9.23 vs. 4.09).

To test Hypothesis 1, I compared the gender differences in same-sex pairs with those in mixed-sex pairs. As predicted, the effect of the subjects' gender interacted with the composition of the group so that larger stereotypical gender differences were found in same-sex pairs for the percentage of task behaviors, disagreements, positive social behaviors, and marginally for agreements. These findings and the simple effects comparisons are presented in Table 3. In same-sex pairs, women exhibited more positive social behaviors than men, and men engaged in more task behaviors and disagreements. I found no gender differences for the mixed-sex pairs and no other main effects or interactions.

Because the absence of gender differences in mixed-sex pairs could possibly be due to a reduction in sex-stereotyped behav-
both men and women behaved in a less sex-stereotyped manner when interacting with members of the opposite gender. Women engaged in more disagreements, $t(56) = 2.38, p < .05$, and fewer social behaviors, $t(56) = 3.60, p < .001$, when paired with a male partner. Men were less task-oriented when paired with a female partner, $t(56) = 2.43, p < .05$.

The results of both discussions support Hypothesis 1. The results indicate that partner's gender is an important determinant of subjects' behavior, with subjects exhibiting more feminine behavior toward a female partner and more masculine behavior toward a male partner.

I found a higher percentage of questions and negative social behaviors for both discussions in mixed-sex dyads. This finding is consistent with Hall's (1984) suggestion that subjects may be less certain about appropriate behaviors in mixed-sex interactions than when interacting with members of their own gender.

### Effect of Instructions to Influence the Partner on Behavior

**Persuader versus control subjects.** I found no main effects for the persuader variable for Discussion 2. However, I did find Persuader $\times$ Sex Composition of Dyad effects for the percentage of task behaviors, $t(56) = 2.12, p < .05$; questions, $t(56) = 2.03, p < .05$; and disagreements, $t(56) = 2.09, p < .05$. Contrasts comparing persuaders with nonpersuaders separately for the mixed- and same-sex pairs revealed no differences in task behaviors or questions in mixed-sex dyads and no differences in disagreements for the same-sex dyads. However, in same-sex dyads, persuaders engaged in more task behaviors than did nonpersuaders ($M = 63.61$ vs. $58.81$), $t(28) = 2.46, p < .05$, and asked fewer questions ($M = 5.32$ vs. $9.22$), $t(28) = 3.89, p < .001$. In mixed-sex pairs, persuaders disagreed more than did nonpersuaders ($M = 1.83$ vs. $1.09$), $t(28) = 2.09, p < .05$.

**Comparison of persuaders' behavior during Discussions 1 and 2.** I included Discussion 2 to test Hypothesis 2—that giving subjects instructions to influence their partners would lead to an increase in stereotypical gender differences in behavior—and to see what effects these differences would have on influence. To test the prediction, I repeated the ANOVAs, treating discussion as a repeated measure. The data from the mixed- and same-sex dyads were combined to yield the effects of the discussion and the interactions of discussion with the sex composition of the dyad, gender of persuader, and order of topics on the behavior of the persuaders.

Main effects were obtained for discussion. As compared with Discussion 1, during Discussion 2 persuaders increased their

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1 The partner's gender had no effect on women's use of task behaviors or men's use of positive social behavior. However, these effects were found for Discussion 1. The absence of these effects during Discussion 2 may be due to the behavior of female persuaders. They increased their use of task contributions during Discussion 2 with both male and female partners. This may have eliminated the effect of the partner's gender on women's use of task behavior. In addition, the women's increased use of disagreements with male partners could have caused the partners to be less friendly and social with them, eliminating the gender-of-partner effect on men's use of positive social behavior.
percentage of task contributions \((M = 55.59\) vs. \(60.75\)), \(t(56) = 3.45, p < .01\), and disagreements \((M = 0.87\) vs. \(1.42\)), \(t(56) = 3.19, p < .01\), and decreased their percentage of agreements \((M = 27.15\) vs. \(23.94\)), \(t(56) = 2.13, p < .05\). A Discussion \(\times\) Gender of Persuader \(\times\) Sex Composition of Dyad interaction was obtained for disagreements, \(t(56) = 2.00, p < .05\). Contrasts revealed that the interaction was due to an increase in disagreements by persuaders with male partners \((M = 1.45\) vs. \(2.33\)), \(t(56) = 3.62, p < .001\), whereas persuaders with female partners showed no change in disagreements. No other effects were obtained.

Contrary to prediction, male and female subjects did not respond differently when given instructions to influence their partners. Both genders exhibited a higher percentage of task behaviors and agreements when attempting to be influential. Moreover, the sex of the partner affected the change in the persuaders' behaviors. Subjects exhibited a greater amount of stereotypical masculine behavior, in the form of disagreements, when attempting to influence a man than when attempting to influence a woman.

Conclusions regarding subjects' instructions to influence their partners are somewhat equivocal because this manipulation was confounded with the order of the discussion. However, because persuader subjects behaved differently than control subjects for the second discussion, it is unlikely that time or order was responsible for the effect.

**Analysis of the Questionnaire Data**

**Gender Differences in Influence**

I analyzed the questionnaire data in the same manner as the videotaped behaviors. The public and private attitude change data were analyzed separately for each discussion. To compute the amount of private attitude change, I subtracted subjects' opinion ratings on the questionnaire from their initial pretest opinions. Attitude change scores in the direction of the partner's opinion were assigned a positive value.

The second measure of influence, the measure of public influence, was computed by referring to the list of ideas selected by each dyad as the most important to consider when forming an opinion on the topic of discussion. I compared this list to that which each subject generated before the discussion in support of his or her initial opinion. For each subject, public influence consisted of the number of mutually agreed-on ideas that came from the partner's initial list. The score on this measure ranged from zero to three ideas. On occasion, subjects came up with the third idea on their joint list by combining an idea from each of their initial lists. When this happened, they each received a score of one half for that idea.\(^2\)

For Discussion 1, I found a gender effect revealing greater attitude change among women for the amount of public influence \((M = 1.34\) vs. \(1.12\)), \(t(56) = 2.54, p < .05\). For Discussion 2, there were main effects of gender revealing greater attitude change among women for private influence \((M = 1.49\) vs. \(0.65\)), \(t(56) = 2.26, p < .05\), and a marginal gender effect with greater attitude change among women for public influence \((M = 1.12\) vs. \(0.95\)), \(t(56) = 1.82, p < .10\). No persuader effects were found for either discussion.

<table>
<thead>
<tr>
<th>Group</th>
<th>Private influence</th>
<th>Public influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(t(28))</td>
<td>0.63</td>
<td>0.30</td>
</tr>
<tr>
<td>Men</td>
<td>0.75</td>
<td>1.02</td>
</tr>
<tr>
<td>Women</td>
<td>1.06</td>
<td>0.98</td>
</tr>
<tr>
<td>Same sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(t(28))</td>
<td>2.51***</td>
<td>2.41**</td>
</tr>
<tr>
<td>Men</td>
<td>0.59</td>
<td>0.88</td>
</tr>
<tr>
<td>Women</td>
<td>1.91</td>
<td>1.25</td>
</tr>
<tr>
<td>Mixed vs. same sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(t(56))</td>
<td>1.43*</td>
<td>2.16**</td>
</tr>
</tbody>
</table>

Note: The means for private influence represent the amount of attitude change in the direction of the partner's opinion. The means for public influence represent the number of mutually agreed-on ideas that were consistent with the partner's opinion. Positive \(t\) tests comparing mixed- versus same-sex dyads are in the predicted direction. Tests are one-tailed.

\(* p < .10. \quad ** p < .05. \quad *** p < .01.\)

I tested Hypothesis 4 by comparing the gender differences in same-sex dyads with those in mixed-sex dyads. For Discussion 2, as predicted, the effect of subjects' gender interacted with the sex composition of the dyad such that larger gender differences in influence were found in same-sex pairs. The predicted effect occurred for public influence and was marginal for private influence. The interaction and simple effects tests are presented in Table 5. In same-sex pairs, women were more easily influenced than men. I found no gender differences for mixed-sex pairs.

**Relation Between Behaviors and Influence**

I tested Hypothesis 3—that subjects would be influenced more by partners who exhibited few disagreements and many task behaviors, agreements, and positive social behaviors—using Pearson product–moment correlations. The sample of 64 pairs was randomly divided into two groups so that partners would not be included together in the same analysis. The re-

\(^2\)The average public attitude change score was computed for male and female subjects separately for same- and mixed-sex dyads and separately for each discussion. For same-sex dyads, I averaged these scores over subjects within a dyad. Therefore, the maximum possible average score for same-sex pairs is 1.5. For example, if one member of each all-female dyad received a score of 3 and the other member received a score of 0, the average for same-sex female pairs would be 1.5. The means would be lower than 1.5 for those pairs who were unable to agree on three ideas.

For the mixed-sex dyads, the average scores for each gender were not averaged over subjects within a dyad, so the maximum average score is 3 for either the men or the women. This maximum could occur, for example, if each female subject had received a score of 3 and each male subject a score of 0. For each discussion, the sum of the male and female subject averages cannot exceed 3.
The majority of the text seems to be a continuation of the discussion on Influence and Gender, with a focus on the differences found between same-sex and mixed-sex pairs. The text discusses the results of path analyses and ANCOVA, which were used to determine the effects of gender on influence. The results show that the gender of the subject and partner affected the level of influence, with male subjects showing more influence when the partner was female, and vice versa. However, the effect of gender was reduced when the interaction involved high amounts of agreement and little disagreement. The results also indicate that mixed-sex dyads show more pronounced differences in liking between partners compared to same-sex pairs.

### Table 6

**Correlation Coefficients of Group Behaviors With Amount of Private and Public Attitude Change**

<table>
<thead>
<tr>
<th>Attitude change &amp; behavior</th>
<th>Discussion 1</th>
<th>Discussion 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement</td>
<td>.33**</td>
<td>.40****</td>
</tr>
<tr>
<td>Disagreement</td>
<td>-.21**</td>
<td>-.33***</td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agreement</td>
<td>.18*</td>
<td>.29***</td>
</tr>
<tr>
<td>Disagreement</td>
<td>-.40****</td>
<td>-.51***</td>
</tr>
</tbody>
</table>

*Note. Correlation coefficients are on 62 degrees of freedom. Negative correlation coefficients indicate that a behavior reduced influence. Tests are one-tailed.*

*p < .10. **p < .05. ***p < .01. ****p < .001.*

### Other Questionnaire Items

**Manipulation check.** To check the effectiveness of the instruction that they influence their partners, subjects were asked to indicate how concerned they had been with convincing their partner that their ideas were the best. As these instructions were given only to persuader subjects and only during Discussion 2, no effects were expected for control subjects or for Discussion 1. As expected, effects were obtained only for Discussion 2. Persuaders indicated that they had been more concerned than non-persuaders with convincing their partner that their ideas were the best ($M = 7.36$ vs. $5.52$), $t(56) = 4.43$, $p < .001$.

**Liking the partner.** I found no main effects of composition or persuader for the extent to which subjects liked their partners. A main effect of subject's gender was found, $t(56) = 2.11$, $p < .05$. Women liked their partners more than men liked theirs ($M = 8.08$ vs. $7.55$). There was also a Sex of Persuader × Sex Composition interaction, $t(56) = 3.66$, $p = .01$. Contrasts revealed that in same-sex dyads, subjects liked each other more in female pairs, where the persuader was female, than in male pairs, where the persuader was male ($M = 8.25$ vs. $7.16$), $t(28) = 2.72$, $p < .05$. In mixed-sex groups, subjects liked each other more when the persuader was the male member of the pair ($M = 8.38$) than when the persuader was female ($M = 7.01$), $t(28) = 2.61$, $p < .05$. Perhaps subjects liked their partners more when their interaction involved high amounts of agreement and little disagreement. In same-sex pairs, this pattern was more pronounced in female pairs than in male pairs. In mixed-sex pairs, female persuaders increased their disagreements during Discussion 2, whereas male persuaders did not. This may have resulted in reduced liking when the woman was the persuader. In addition, subjects may have felt less comfortable with the woman in the...
Table 7
Beta Weights and Standardized Regression Coefficients From Path Models of Subjects’ Private and Public Influence

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Public influence: Discussion 1</th>
<th></th>
<th></th>
<th>Public influence: Discussion 2</th>
<th></th>
<th></th>
<th>Public influence: Discussion 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \beta )</td>
<td>( r )</td>
<td>( \beta )</td>
<td>( r )</td>
<td>( \beta )</td>
<td>( r )</td>
<td>( \beta )</td>
<td>( r )</td>
</tr>
<tr>
<td>Gender of subject</td>
<td>-0.06</td>
<td>-0.05</td>
<td>0.13</td>
<td>0.03</td>
<td>0.09</td>
<td>0.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex of partner</td>
<td>0.03</td>
<td>0.02</td>
<td>0.51</td>
<td>-0.12</td>
<td>-0.12</td>
<td>-0.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner’s agreements</td>
<td>0.01</td>
<td>0.13</td>
<td>0.07**</td>
<td>0.34**</td>
<td>0.01*</td>
<td>0.20*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner’s disagreements</td>
<td>-0.11**</td>
<td>-0.32**</td>
<td>-0.31**</td>
<td>-0.33**</td>
<td>-0.12***</td>
<td>-0.56***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. The residual degrees of freedom for the regression analyses are 59. Female subjects received a code of 1 and male subjects a code of 2. Negative beta weights and \( r \) statistics indicate that a behavior reduced influence. All tests are one-tailed. There were no gender differences in private influence during Discussion 1, so I did not examine that effect.

*\( p < .05 \). **\( p < .01 \). ***\( p < .001 \).

persuader role, as this may be perceived as a violation of traditional sex-role norms.

To determine whether liking of the partner was related to the partner’s behavior, the percentage of each of the partners’ behaviors was averaged over the two discussions and correlated with subjects’ liking of the partner. Again, partners were randomly assigned to one of two groups, the analyses were performed separately on each group, and the resulting correlation coefficients were averaged over the two groups. The extent to which subjects reported liking their partners was positively correlated with the partners’ percentage of agreements, \( r(62) = .34, p < .05 \), and positive social behaviors, \( r(62) = .25, p < .05 \), and negatively correlated with the partners’ task behaviors, \( r(62) = -.24, p < .05 \); questions, \( r(62) = -.23, p < .05 \); and disagreements, \( r(62) = -.36, p < .05 \).

Discussion

The major findings of this study are, first, that gender differences in interaction style are larger in same-sex than in mixed-sex groups. These effects, which are equivalent to sex-of-partner effects, demonstrate that subjects’ behavior is affected by their partners’ gender. Second, the findings extend those of Piliavin and Martin (1978), who reported that men disagree more with men than with women, and that women are more dramatic with women than with men. These results reveal that both men and women show a variety of less sex-stereotyped behaviors when interacting with those of the opposite gender. Third, this study, which is the first to examine actual behavior rather than to rely on self-reports, found no differences between men and women in influence strategy. When attempting to be influential, both men and women showed a decrease in stereotypically feminine behavior and agreements and an increase in stereotypically masculine behavior, task contributions, and disagreements, even though these changes are associated with reduced influence. Fourth, and perhaps most important, the ANCOVAS and path analyses both provide evidence that gender differences in influenceability can be linked to differential treatment of men and women by their partners. The gender of the subject alone did not directly predict influenceability. The behavior that partners exhibited when interacting with male subjects was less influential than that they showed when interacting with female partners. These behavioral differences mediated the gender-of-subject effect on influenceability.

Relation of Influence to Behaviors in the Groups

The primary objective of this study was to establish links between influence and behavior in groups, and furthermore, to determine whether these variables were affected by the sex composition of the groups. As predicted, subjects’ ability to influence their partners was associated with their exhibiting a high amount of agreements and a low amount of disagreements. Although it has been suggested that this pattern of behavior would

Table 8
Beta Weights and Standardized Regression Coefficients From Path Models of Partners’ Agreements and Disagreements

| Predictor variable | Discussion 1 | | | Discussion 2 | | | |
|-------------------|-------------|---|---|-------------|---|---|-------------|---|---|
|                   | \( \beta \) | \( r \) | \( \beta \) | \( r \) | \( \beta \) | \( r \) | \( \beta \) | \( r \) |
| Gender of subject | -1.45       | -0.08 | 0.98** | 0.29** | -0.73** | -0.29** | 0.21* | 0.27* |
| Sex of partner    | 1.12        | 0.06  | -0.04 | -0.01 | -2.54   | -0.13  | 0.12   | 0.03  |

Note. The residual degrees of freedom for the regression analyses are 61. Female subjects received a code of 1 and male subjects a code of 2. Negative beta weights indicate that a behavior was exhibited more by female subjects than by male subjects. Tests are one-tailed.

*\( p < .05 \). **\( p < .01 \).
be particularly beneficial to women (Meeker & Weitzel-O’Neill, 1977), these results indicate that exhibiting these stereotypically feminine behaviors benefits both sexes equally.

Contrary to prediction, the amount of task contributions provided by subjects had no effect on how influential they were. Because in past research group members who exhibit a high amount of task behavior have been judged to be leaders (Bales, 1950; Berger et al., 1980; Stein & Heller, 1979), the absence of such an effect in this study may be due to the consistently high amount of task behavior exhibited by all subjects. On the average, more than 50% of the total contributions were task oriented, even for the less task-oriented members of each pair. In general, members of two-person groups may find it difficult not to make some task contributions. They are burdened, to some extent, with keeping the conversation going. As group size increases, so do inequalities among members in making task contributions (Bales & Borgatta, 1955). In larger groups, with greater variability in the amount of task behavior, it is likely that a positive correlation would be found between task contributions and influence.

I predicted that subjects would be more influential when exhibiting high amounts of positive social behavior because such behavior conveys a group orientation (Meeker & Weitzel-O’Neill, 1977). In fact, subjects liked their partners more when they exhibited positive social behaviors and agreements. However, only one positive social behavior—agreement—was related to influence; the other such behaviors were not. Why would influence be enhanced by the amount of agreements but not by other types of positive social behavior?

One possible explanation is that agreements are intrinsically linked to task behaviors, whereas other positive social behaviors are not. That is, when subjects express agreement it is with each other’s ideas. Other positive social behaviors, such as relieving group tension or providing emotional support, are unrelated to task contributions or, often, even to the topic of discussion. Ridgeway (1981) demonstrated that nonconformity enhances influence only when it is in some way related to a task contribution. Perhaps, for positive social behaviors to increase influence they must also be linked to task contributions.

Although I made no predictions concerning the effect of asking questions on influence, the results indicate that the more questions subjects asked their partners, the less influential they were. There are two possible explanations for this effect. First, subjects who ask many questions may convey a lack of confidence in themselves and a lack of knowledge of the topic. Second, these subjects may be questioning the task contributions of their partners and thereby indirectly expressing disagreement. In either case, asking questions would probably lead to a reduction in influence.

**Gender Differences in Influence Strategies**

Contrary to prediction, women did not use stereotypically feminine behavior to induce influence. Rather, when attempting to be influential both men and women increased their use of stereotypically masculine behavior, in the form of task behaviors and disagreements, and decreased their use of stereotypically feminine behavior, in the form of agreements. In addition, subjects increased disagreements only when interacting with male partners.

These results indicate that the men and women did not actually differ in influence strategy. Because the gender difference in strategy has been predicated on the existence of power differences between men and women (Johnson, 1976), the absence of a gender difference in this study may have been due to the lack of a difference in power between the sexes.

There are several possible explanations for the gender differences in influence strategy found in previous research. First, other studies have relied on self-reports, which may not accurately reflect subjects’ actual behavior. Second, subjects in previous research were asked how they gain compliance from their marriage or dating partners. Perhaps men and women differ in that context but not when attempting to persuade a stranger, as in the present study.

Because subjects in this study were not told how to go about influencing their partners, the changes observed in their behavior during Discussion 2 probably reflect their commonsense approach to influencing others. In attempting to influence their female partners, neither male nor female persuaders increased their use of disagreement, as they did with male partners. Perhaps subjects felt a more direct and forceful approach would be more effective with men, as men are expected to use direct and aggressive language when trying to be influential (Burgoon, Dillard, & Doran, 1983). This difference in the treatment of men and women may have unfortunate consequences in real-life settings. For example, in classrooms teachers are more likely to provide criticism to male than to female students (Sadker & Sadker, 1985). This may make it more difficult for female students to accurately assess the quality of their opinions and ideas.

**Effect of Sex Composition on Behavior and Influence**

The most important finding of this study is that the gender of the partner was a determinant of interaction patterns, and as revealed by the ANCOVA and path analyses, the different interaction shown by subjects to their male and female partners led to the gender difference in influenceability. Gender-of-partner effects (the interaction between gender of subject and sex composition of the dyads) were found for task behaviors, agreements, disagreements, and positive social behaviors. Gender differences were found in public and private influence, but these differences were mediated by the agreements and disagreements shown by the partners. The gender differences in public and private influenceability were probably not due to the greater receptivity of women but rather to the use of a more aggressive and direct influence strategy when interacting with men than with women.

Subjects specifically instructed to influence their male partners disagreed more than those instructed to influence their female partners. Even when subjects were not attempting to be influential, they exhibited a higher percentage of disagreements with men and agreements with women. Because influence was found to be positively associated with agreements and negatively associated with disagreements, subjects, regardless of gender, used an interaction style that was stereotypically masculine although less influential when interacting with men. If this pat-
tern of behavior occurs in real-life settings, it may contribute to the stereotype that women are more easily influenced than men.

Individuals probably enter conformity settings and other group settings with strong expectancies about gender that affect their behavior (Deaux & Major, 1987; Eagly, 1983). As a consequence, they may exhibit a greater amount of feminine behavior when interacting with women and masculine behavior when interacting with men. For example, individuals engage in less self-disclosure (Cozby, 1973), are somewhat more aggressive (Eagly & Steffan, 1986), and are more dominant, businesslike, and unpleasant with men than with women (Hall & Braunwald, 1981).

Subjects entering conformity settings are likely to expect men to use more direct (Haas, 1979) and aggressive (Burgoon & Stewart, 1975) influence strategies and may therefore be more competitive and resistant to influence themselves. On the other hand, because subjects would expect interactions with women to be more friendly and social, they may be less inclined to be competitive and may be more open to influence. These expectancies may be invoked even before subjects begin interacting. Once they are invoked they may, in fact, be self-fulfilling and lead to stereotypical gender differences in influence, particularly when subjects are placed in same-sex groups, as under those conditions male and female subjects would be expecting completely different behaviors from other group members. Because most social influence research involves same-sex groups (Eagly, 1978), it is possible that the gender differences in influence found in past research have not been due to the greater receptivity of women to influence but rather to the greater receptivity of subjects interacting with women.

References


