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PATTERNS OF VERBAL INTERRUPTION AMONG
WOMEN AND MEN IN GROUPS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
Carol Wylie Kennedy, B.S., M.S.

* * * * *

The Ohio State University
1979

Reading Committee
Herman J. Peters
Joseph J. Quaranta
John J. Makay

Approved By

Herman J. Peters
Faculty of Special Services
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VITA

May 25, 1945 . . . . Born - Sioux City, Iowa

1967 . . . . . . B.S., The Ohio State University
Columbus, Ohio

1967-1968 . . . . Staff Nurse, The Ohio State
University Hospitals, Columbus, Ohio

1968-1969 . . . . Teaching Assistant, School of
Nursing, The Ohio State University,
Columbus, Ohio

1970 . . . . . . M.S., The Ohio State University,
Columbus, Ohio

1970-present . . . . Instructor, School of Nursing,
The Ohio State University,
Columbus, Ohio

FIELDS OF STUDY

Major Field: Guidance and Counselor Education

Studies in Counselor Education.
Professor Herman J. Peters

Studies in Counseling Techniques.
Professor Joseph J. Quaranta

Studies in Interpersonal Communication.
Professor John J. Makay
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CHAPTER I

THE RESEARCH PROBLEM

Introduction

Central to our culture are relationships between the sexes. The nature of these relationships determines to a large extent the quality of families, friendships, work settings, communities, and society.

Relationships between women and men in our society are undergoing transition. In general, women and men are aware that adherence to rigid sex roles has restricted the human potential of both sexes; however, clear guidelines for change are not readily available, or often conflict with beliefs, attitudes, and assumptions about self and others.

The focus of this study was the nature of relationships between women and men in the world of work. These relationships were examined through the communication patterns which developed among the participants.

A variety of differences in communication between women and men have been suggested in the literature. These
differences primarily revolve around the stereotypic sex-role behaviors which portray men as dominant and women as submissive in interaction with one another. Most of the differences in communication are not empirically supported, and thus the aim of this study is to add to the body of knowledge available on patterned communication between women and men.

This study examined the phenomena of verbal interruption as an illustration of how relationships were defined among the women and men participating in this study. The interactional nature of the relationships was captured by examining not only the interruptions, but also the communication that preceded and followed an interruption.

The Problem

It was the purpose of this study to examine the patterns of verbal interruption among women and men of equally achieved status. In order to study this problem, the following questions were addressed:

1. What pre-interruption speeches are used by group members?
   a. What types of pre-interruption speeches precede an interruption?
   b. Are pre-interruption speeches significantly related to sex of speaker?
2. What interruption speeches are used by group members?
   a. What types of interruption speeches occur?
   b. Are interruption speeches significantly related to sex of speaker?
   c. Is the sex of the interruptive speaker significantly related to the sex of the interrupted person?

3. What post-interruption speeches are used by group members?
   a. What types of post-interruption speeches follow an interruption?
   b. Are post-interruption speeches significantly related to sex of speaker?
   c. Is the sex of the post-interruption speaker significantly related to the sex of the interrupter and person interrupted?

4. How do interruptions function within the communication of group members?
   a. Do interruptions confirm the interrupted speaker?
   b. Do interruptions reject the interrupted speaker?
   c. Do interruptions disconfirm the interrupted speaker?
5. Based on the patterns of interruption among the group members, what can be concluded about the types of relationships characteristic of women and men of equally achieved status?
   a. Are the relationships functionally symmetrical or complementary?
   b. Are the relationships dysfunctionally symmetrical or complementary?

A further purpose of the study was to derive implications from the described patterns of relationships among the sexes for society in general, and for the helping professions in particular.

**Significance of the Study**

This study was based on the assumption that socialization into sex-roles is reflected in the relationships between the sexes, particularly through their communication with one another. A discussion of the differential socialization of the sexes follows. This will demonstrate why and how the communication of men and women differ, how these differences are reflected in interactions between them, and how, then, the interactions may reinforce differences.

**The Importance of Sex Differences**

Although there are a number of obvious biological and some psychological differences between the sexes, the
available research does not find these differences to be sufficient foundation for the prevailing attitudes concerning the sex-role behaviors of women and men (Maccoby and Jacklin, 1974; Safilios-Rothschild, 1974; Weitzman, 1975).

There are characteristic stereotypic role differences between the sexes. Women are described as dependent, passive, fragile, nonaggressive, conforming, noncompetitive, interpersonally oriented, empathic, intuitive, subjective, and emotional. Males, on the other hand, are described as independent, aggressive, competitive, stoic, objective, task oriented, innovative, analytic, unemotional, and self-disciplined (Bardwick and Douvan, 1971). These role characteristics of "femaleness" and "maleness" reflect cultural attitudes and are perpetuated through a process of life-long socialization (Safilios-Rothschild, 1974, p. 8).

According to Bardwich and Douvan (1971) socialization into sex-roles occurs through two concurrent processes: 1) reinforcement and rewards for role behavior deemed appropriate, and 2) the narrowing of the range of acceptable behaviors for boys as they grow older. For example, boys are not allowed to be feminine or extremely masculine while girls are encouraged to be either extremely feminine or moderately masculine. It is suggested that as a result of this kind of socialization, males seek satisfaction and esteem from task accomplishment while females attain satisfaction and esteem from interpersonal relationships. The point
might also be made that the rigid role prescription for boys could provide the foundation for it being more difficult for boys to change roles than it is for girls.

The literature shows that the process of socializing children into stereotyped sex-roles begins at birth. The parents are the initial reinforcers, with other reinforcers being encountered as the child's social sphere widens. This reinforcement process continues throughout one's life (Cherry and Lewis, 1976; Cherry, 1975; Kagan, 1972; Jandt, 1976; Tennis, 1977; Lewis, 1972). Boys and girls are treated differentially by their teachers (Good, Sikes, and Brophy, 1973; Sprague, 1975). This differential treatment is also reflected in their textbooks and other reading materials (Burr, Dunn, and Farquhar, 1972; Sprague, 1975; Gershuny, 1974; Ward, 1974; Weiher, 1976). The mass media further reinforces and perpetuates differences between girls and boys, women and men (Bushy, 1975; Welch, Huston, Stein, Wright, and Plehal, 1979).

Another very powerful mode of socialization is the English language itself. Language serves to socialize children into sex-roles by differentially defining and treating the sexes, and through teaching children differential use of language (Lakoff, 1975). How and when words are used in interpersonal communication reflects and reinforces sex-role stereotypes.
Communication Patterns

Differences have been found in communications which reflect male and female roles in American society. It is interesting to note, however, that the empirically documented differences are much smaller than the perceived differences.

Investigations into these differences have included the study of 1) nonverbal communication, 2) self-disclosure, 3) amount of talk, 4) listening, 5) questioning, and 6) style of presentation. These differences occur in various combinations to create patterns of interaction. It was within this framework that this study was conducted.

Documented differences have been noted in the area of nonverbal communication between the sexes. Women are reported to do more smiling than men (Eakins and Eakins, 1978; Mackey, 1976; Rosenfeld, 1966). Most research indicates that females are touched by others more than males are (Henley, 1975; Eakins and Eakins, 1976), and that males have a more relaxed body posture and more expansive use of gestures than do females (Eakins and Eakins, 1978).

Although sexual intimacy is often associated with these behaviors (Montagu, 1971), the asymmetry between men and women relative to these nonverbal behaviors roughly parallels superiors and subordinates in status (Goffman, 1967). Eakins and Eakins (1978) and Henley (1975) explain that the differential socialization of the sexes leads to differential
access to status and power. The inequality in status has been offered as an explanation for why men may interrupt women more than women interrupt men.

Researchers have demonstrated that in keeping with their respective socialization, the communication of females serves a socio-emotional or expressive function, while the communication of males fulfills a task or instrumental role (Bales, 1950; Bernard, 1973). In an extensive review of the literature on communication in groups, Baird (1976) determined that studies consistently support this distinction. It could be that males may perceive the female emphasis on socio-emotional aspects of the group process as impeding task attainment, and may, therefore, ignore or interrupt these contributions, or males may simply not value the socio-emotional functions performed by females, or they may over-value these functions resulting in feelings of inferiority.

One of the most frequently researched differences in communication between the sexes is the concept of self-disclosure. Henley (1977) states that "personal information flows opposite the flow of authority" (p. 73). She further states that self-disclosure is related to power. "When one has access to information about another person, one has resources that the other does not have" (Henley and Freeman, 1975, p. 395). The research findings on this subject are inconsistent. Jourard (1964), Sermat and Smyth
(1973), Gitter and Black (1976), and Johnson and Hooper (1979) report that women self-disclose more than do men. Kohen (1975) found that females did not disclose more than males. Baird (1976) found inconsistent results in group studies. Doster (1976) controlled for sex-role identification in females during an interview session and found that females who identified primarily with their fathers rather than their mothers were more self-disclosing.

Relative to the amount of talk, the belief is that women talk more than men. The literature does not support this and, in fact, reveals that men talk more than women (Baird, 1976; Henley, 1977; Kramer, 1974b; Swacker, 1975). Borgatta and Stimson (1963) found no difference in total interaction time, although males did initiate more interactions. Being interrupted could be a consequence of high verbosity. Markel, Long, and Saine (1976) interestingly report that both women and men talk more when the partner is female. They acknowledge that in their study, subjects participated in a social task which might account for increased female communication.

Eakins and Eakins (1978) state that "listening is a stroking behavior, and the stroking role is often perceived as most appropriate for women" (p. 66). Bernard (1973) says women accomplish stroking by sometimes putting themselves in a subordinate position by asking questions and, in general, drawing men out to protect their dominance.
Bernard suggests women do this to prove they are not threats to men, and to "facilitate the conversation" (Thorne and Henley, 1975, p. 249). Asking questions certainly serves the purpose of increasing the verbalizations of the partner. Kramer (1974a) and Lakoff (1975) believe that questioning weakens women's words and, therefore, the position of the female speaker. Kramer (1974a) believes that in addition to asking more questions, women further communicate their subordinance by making statements using a questioning intonation. Assuming the subordinate role through a pattern of questioning behavior may play a part in stimulating males to discount female contributions.

The tag-question is another form of questioning which Lakoff (1975) believes to be used more by women. A tag-question is "thought of as a declarative statement without the assumption that the statement is to be believed by the addressee" (p. 16). An example of a tag-question is "sure is hot here, isn't it?" In discussing Lakoff's idea of the tag-question, Kramer (1974b) states that the tag-question is used when the speaker does not have full confidence in his or her statement. Instead of a firm declaration, the speaker asks for confirmation, and by being less decisive the speaker leaves himself an out. He or she is willing to be persuaded otherwise (Kramer, 1974, p. 70).

A tag-question could serve to confuse the listener in that the speaker appears to have completed a thought, but then
goes on to add the "tag." Not being certain of the correct ending could cause the listener to prematurely begin their turn at talking. While no empirical evidence is presented by Lakoff to support the assertion that women use more tag-questions than men, Siegler (1973) found that people believe the tag-question is a form of feminine speech. In a study conducted with British speaking subjects, Dubois and Crouch (1975) found the tag-question used only by men. Differences between American and British use of English may account for this finding, but to date, the sexes' differential use of questions, specifically the tag-question, is open to verification.

A number of authors suggest that females use more adjectives and adverbs (Lakoff, 1975; Kramer, 1974a), more intensive modifiers (Farb, 1973), and males use more forceful verbs (Barron, 1971; Gilley and Summers, 1970), slang terms (Kutner and Brogan, 1974), and swear words (Kramer, 1974b; Tyler, 1976). The effect is to cause female speech to appear trivial and frivolous, while male speech appears forceful and serious.

In a descriptive study of the language of men and women from Maine, Hartman (1976) found evidence that language does reflect women in a subservient place in society. Hartman found traditional language used by Maine women which was more "flowery," polite, tentative, and more
qualified than the language used by Maine men. The men spoke in absolutes, without qualifiers and with few tag-questions.

Henley (1977) states that it is the speech style of the subordinate that is flooded with hesitancy and self-doubt, qualifying phrases, and self-disparagement. An example would be, "I may not know anything about this and probably shouldn't say anything, but . . ." (Henley, 1977, p. 69). Kramer (1974b) believes that qualifiers added to declarative statements allow the speaker to avoid stating an opinion directly. An example she gives is the statement, "I kinda like this house." Both authors consider hesitant, qualified speech to be more typical of female speakers. Hirschman (1973) found no difference between men and women in the use of qualifiers like "maybe," "sort of," "I think," and "I guess."

A more detailed review of literature in the differential use of interruptions is presented in the next chapter.

Other Consequences of Sex-Role Differentiation

It is agreed that there are differences between the sexes. Difficulty arises when these differences are viewed as opposites, i.e., that which is feminine is the opposite of what is masculine and vice versa (Eakins and Eakins, 1978, p. 5). This particular belief prevents women and men
from flexibly participating in roles appropriate to the situation and keeps them locked into rigid role prescriptions. Language patterns reflect this, and, as discussed below, impact on other interpersonal dynamics.

Men are discouraged from participating in nurturant activities like child care, and are thwarted in career choices as evidenced by their reluctance to become secretaries or nurses because these are considered women's occupations (Eakins and Eakins, 1978, p. 9).

Until recently, sex-role differentiation has kept women from seriously participating in careers outside the home (Epstein, 1970b; Ruble and Higgins, 1976). When they do so, they encounter differential treatment (Rosen and Jerdee, 1974; Hennig and Jardim, 1978) and role conflict (Epstein, 1970a). Career success puts women in conflict with the expectation that they not compete with men, or at least that they not do better than men (Hoffman, 1979; Horner, 1969; Kimball, 1973; Monahan, Kuhn, and Shaver, 1974). The behaviors expected of a professional woman and those expected of feminine women can be mutually exclusive. Menikheim (1979) writes that the further women move from the stereotypical behaviors associated with sex-role status, the more one could expect to find evidence of conflict in their communication patterns with others.

As women increasingly participate in leadership positions in the work world, it is possible that they may become
more "masculine" in their communication styles. This could happen, in part, because males are the predominant leadership models available, and because, as Bardwick and Douvan (1971) state, the characteristics associated with masculinity are more highly valued in our society with the result that women consistently evaluate themselves as inferior.

Goldberg (1972) found that even when the facts do not give support to this belief, women will persist in downgrading the competence of other females. Hacker (1972) believes that this behavior occurs because women manifest the characteristics of a minority group described by Kurt Lewin as the "tendency to denigrate other members of the group, to accept the dominant groups stereotyped conceptions of them, and to indulge in 'mea culpa' breast-beating" (pp. 39-40). Without correction of the misconceptions, even by other women, the beliefs continue.

In a study with college students, it was determined that both sexes gave more frequent high evaluation of stereotypically masculine than feminine characteristics (Rosenkrantz, Vogel, Bee, Broverman and Broverman, 1968). In a later assessment of sex-role stereotypes, some of the above mentioned authors again found similar results with college students, and they concluded that college women tend to have more negative self-concepts than do college men (Broverman, Vogel, Broverman, Clarkson, and Rosenkrantz,
These findings are not necessarily reflective of other age groups. College students are at an age where sex differences are of considerable importance in their lives. Biologically, hormone secretions are great and socially they are at the point of mate selection, and marriage is of paramount concern. College students are weighing personal occupational aspirations against societal and parental expectations (Broverman, et al., 1972, p. 294).

A study of clinicians of both sexes reveals that behaviors and characteristics judged healthy for an adult, sex unspecified, resembled behaviors judged healthy for men, but differed from behaviors judged healthy for women (Broverman, Broverman, Clarkson, Rosenkrantz, and Vogel, 1970). This research points to the strong prescriptive function of stereotypes and to the implication that women will have difficulty accepting sex-role stereotypes. The female dilemma seems to be: "Can I be both a successful woman and a successful person?" (Malbin and Waehrer, 1972, p. 129).

A variety of research studies support the conclusion that women who conform to the traditional feminine role fare less well psychologically than women who do not demonstrate as much conformity (Bart, 1973; Bernard, 1971a, 1971b; Chesler, 1971; Gump, 1972; Hjelle and Butterfield, 1974; Ohlbaum, 1971; Weitzman, 1975).
Some literature indicates that females have increasing psychological problems as they advance in age, and males experience more psychological problems in the earlier years (Lynn, 1972; Safilios-Rothschild, 1974). Adolescent boys who successfully fit the masculinity stereotype apparently have better psychological adjustment than boys who do not (Connell and Johnson, 1970); however, in adulthood, high masculinity correlates with poor psychological adjustment (Mussen, 1961; Harford, Willis, and Deabler, 1972).

There is some research available that indicates that a more androgynous posture toward sex-roles is desired by both women and men (Tavris, 1977; Spence, Helmrick, and Strapp, 1975), and that people who transcend the expected sex-role stereotypes seem to experience more self-acceptance and better self-esteem than those who do not (Doyle, 1975; Richmond and Mason, 1972). Being able to surpass stereotypic behaviors in exchange for a flexible mode of being is consistent with Maslow's (1971) description of the characteristics of the psychologically healthy adult.

It appears that both males and females pay a high price emotionally when they attempt to exist within the prescribed behaviors dictated by their sex-role stereotypes; however, they are rewarded for behavior that conforms to societal standards.

In summary, it is generally agreed that the sexes are socialized into sex-roles in different ways. It is assumed
that these differences are reflected in the communication
used by and between the sexes. The literature in this area
is filled with speculation and inconsistent research find­
ings.

This study more thoroughly examined one aspect of
communication, i.e., the phenomena of interruption, to
identify more specifically the dynamics of male and female
interaction.

**Definition of Terms**

The following are general terms used throughout the
study:

**Achieved Status:** an attained position with rights, obliga­
tions, and prestige. For purposes of this study achieved
status refers to the equal and responsible participation
expected of university graduate students within groups.

**Pattern:** refers to a nonrandom arrangement of verbal com­
munication behavior involving at least two people who have
a mutual influence on one another (Hawes, 1973).

**Utterance:** refers to one speaker's verbal turn at talking
(Speier, 1973, p. 76). An utterance may be composed of a
sentence, clause, phrase, or lexical item (Litton-Hawes,
1977, p. 7).

**Symmetrical:** relationships characterized by equality and
the minimization of difference (Watzlawick, Beavin, and
Jackson, 1967).

**Complementary:** relationships characterized by inequality
and maximization of difference (Watzlawick, et al., 1967).

**Confirmation:** a response from the second speaker which
indicates approval or acceptance of the first speaker's
communication (Watzlawick, et al., 1967).
Rejection: a response from the second speaker which indicates disagreement with the first speaker's communication (Watzlawick, et al., 1967).

Disconfirmation: a response from the second speaker which does not relate specifically to the first speaker's communication (Watzlawick, et al., 1967).

Simultaneous Speech: more than one speaker talking at the same time (Zimmerman and West, 1975).

Interruption: simultaneous speech by the second speaker which occurs prior to a possible transition place in the first speaker's utterance (Zimmerman and West, 1975). Overlaps are considered errors in transition between speakers, but are not classified as interruptions in this study.

Reinforcements: instances of minimal response interspersed through the current speaker's ongoing utterance, such as "um hmm," "uh huh," and "yeah" (Zimmerman and West, 1975). These are not considered interruptions and are viewed as reinforcements for continued talk of the current speaker. These reinforcements connote active listening.

Turn: a turn consists of the temporal duration of an utterance and of the right and obligation to speak which is advocated to a particular speaker. A turn may be obtained through 1) the current speaker selects the next speaker, 2) the next speaker self-selects, or 3) the current speaker continues (Sack, Schegloff, and Jefferson, 1974).

The following are terms found in the category system:

Pre-interruption Speech: the speech which is interrupted.

The following are categories of pre-interruption speech:

Assertion: any speech in the declarative or imperative form.

Question: any speech with an interrogative form. This category includes questions which extend the discussion as well as the deferent forms frequently attributed to females, i.e., the declarative statement with question intonation.
Diverse Speech: prolonged speech or speech expressing three or more different ideas in one turn.

Information: a speech which might acknowledge a preceding speech, but predominately gives or seeks an opinion, suggestion, idea, or fact.

Support: a speech which seeks or gives agreement, acceptance or approval. Support does not substantively add to an idea.

Non-support: a speech which expresses challenge, disagreement, or rejection. Non-support might acknowledge a preceding speech, e.g., "Yeah, but . . . ."

Hesitancy or Self-doubt: a speech reflecting uncertainty of the speaker, or speech filled with stuttering, or utterances like "ahh," "well," or "I mean," at the point of being interrupted. (One disfluency does not qualify as hesitancy.)

The following are categories of interruption speech which function as a confirmation:

Clarification: an attempt to better understand the first speaker's communication. Clarification does not add substantively to the first speaker's speech.

Agreement: speech which demonstrates agreement, support, concurrence, compliance, or understanding and can be demonstrated through further development or elaboration of the first speaker's idea.

The following category of interruption speech functions as a rejection:

Disagreement: speech which demonstrates rejection, disagreement, challenge, or contradiction of the first speaker's communication.

The following are categories of interruption speech which function as a disconfirmation:

Tangentialization: a speech which 1) reflects awareness of the first speaker's statement, and 2) in some way makes light of or minimizes the intent of the first speaker's message.
Subject Change: a speech which 1) reflects no awareness of the first speaker's statement, and 2) has no theme in common with the first message, and/or is a substantial change of topic.

Post-interruption Speech: the speech immediately following the termination of an interruption.

The following are categories of post-interruption speech:

Keeps Going: the interrupted person continues speech while being interrupted and maintains own idea or theme.

Reintroduces: the interrupted person pauses or breaks speech, allowing for the interruption, then continues with previous idea after being interrupted.

Cooperation: The interrupted person further develops, acknowledges, or agrees with the interrupter's idea. The interrupted person may pause to allow the interruption or may continue talking simultaneously but change theme after the interruption.

Re-interrupt: the interrupted speaker regains the turn by interruption of the second speaker.

Loses Turn: a different speaker from the first speaker is the third speaker.

Other: a category used to classify all utterances not appropriate to the other categories. This will apply to interruptions, as well as the pre- and post-interruption categories. Incidences of simultaneous talk would fall into this category.

Limitations

The study was limited to a focus on patterns of verbal interruptions among 35 female and male graduate students attending The Ohio State University. The subjects were all volunteers. They represented the young or middle adult years in age. In total, 16 white males, one black male, 16 white females, and two black females participated in the study.
The subjects were members of six groups which had previously been established for program or course work at the University. The groups gave permission to have one hour of their regular group meeting videotaped for purposes of this research. To control for the effect of differential status in the groups, the program director or course instructor for each group did not meet with the group for the videotaped session. Several of the groups had met previously without their leaders, but this was, nevertheless, considered an unusual event for the groups.

The content and process of the group interaction were consistent with the purposes of the programs or courses within which the groups were operating; however, the groups met for videotaping purposes in an unfamiliar environment and the subjects were aware that they were being videotaped. This raises the problem of reactivity since the subjects may have behaved somewhat differently when they were aware of being observed (Nofsinger, 1977, p. 15). Even though the communication behaviors may have been different under observation, they were, nevertheless, genuine behaviors which should not have differed from their reactions to any outside observation (Nofsinger, 1977, p. 16). Data obtained from the first half hour and the second half hour of group time were examined by frequency and percentage and type of speech behavior as a check for possible group change in interruption behavior over time.
The use of videotape equipment presented some technological limitations. In the process of transcribing the data from the videotapes, a procedure used because transcripts are easier to study than the original tapes, some data were unintelligible and therefore unable to be transcribed. Where this occurred blank spaces were placed in parentheses to indicate something was heard, but not understood. A word placed in parentheses meant that the word sounded like what was written.

A category system was specifically developed for this research and was used to code the data. The category system was limited to identifying types of interruptions, pre-interruption speech, and post-interruption speech. The speeches used in this study were three turn sequences including and surrounding an interruption. The consequence of this is that speech not involved in an interruption sequence was not recorded. Therefore, a particular speech could be categorized as a change of subject from the immediately preceding speech, but, in fact, could be related to a speech produced earlier by another member. Overall, however, it was assumed that the larger pattern of communication behavior could be captured in the use of the three turn sequence.

The category system was further limited by the theoretical constructs used in its development. The pre-interruption categories were designed to reflect types of
communication behaviors found in the group process literature, as well as communication behaviors frequently attributed to one sex or the other. The post-interruption categories were designed to further explore the interactional process of interruption. The exploratory nature of the study was made operational by including open-ended sections in the category system to identify dynamics previously not described.

The study focused on verbal interruptions; however, nonverbal behaviors of intonation, pause, silence, and emphasis were used in the transcribing of the data to assist in capturing the intent of the speech. The phenomena of interruption as defined by this study did not provide for examination of other types of verbal or nonverbal behaviors, such as laughter, gesture, posture, or patterns of eye contact which could also function to disrupt the turn of the speaker.

The identification and transcription of interruptive sequences was done using two persons to assure as much accuracy as possible. After an interrater reliability of at least .80 on all categories was obtained by three trained judges, the data were coded separately by the researcher and a second person trained in the technique. Where differences were found they were negotiated after discussion of the context or review of the videotapes.
Organization of the Remainder of the Study

Chapter II is a review of the literature underlying the theoretical framework of this study. Chapter III describes the method used to conduct the study, and Chapter IV reports the findings. Chapter V contains conclusions, implications, and recommendations for further study.
CHAPTER II

REVIEW OF LITERATURE

Introduction

The review of literature is presented in two sections. The first section speaks to the function of communication in interpersonal relationships and provides a framework for defining the nature of relationships. The second section examines the literature and research pertinent to the phenomena of interruptions.

The Function of Communication in Interpersonal Relationships

The function of communication in interpersonal relationships addresses directly the focus of this study on sex-role determined interaction. Interpersonal communication is our primary vehicle for sharing meaning in human activity (Makay and Gaw, 1975). It is through communication with one another that identity is confirmed (Villard and Whipple, 1976). Ruesch (1957) postulates that communication with self and others is imperative if the individual wishes to survive and stay healthy (p. 45).
When two people communicate they are exchanging information and defining the nature of the relationship between them (Hawes, 1973). Several authors suggest that relationships are defined by two operations: the content, which refers to the information aspect of the message, and the relationship, which is the command for how the message is to be taken (Ruesch and Bateson, 1951; Watzlawick, Beavin, and Jackson, 1967). The command gives meaning to the relationship by asserting one or several of the following: "This is how I see myself ... this is how I see you ... this is how I see you seeing me ..." (Watzlawick, et al., 1967, p. 52). Laing (1969) maintains that through the perceived responses of others, one maintains or modifies his or her identity. The verbal message is considered synonymous with the content while the metacommunication, or communication about the communication, is synonymous with the relationship operation. There is clear evidence that the process of communication influences self-perception and self-expression.

Watzlawick, et al. (1967) describe relationships as either symmetrical or complementary. Symmetrical relationships are based on equality and minimization of difference, while complementary relationships are based on the maximization of difference. A value judgment of good or bad is not implied with the terms symmetry and complementarity,
in that both must be present in healthy relationships, although in mutual alternation or operate in different areas (Watzlawick, et al., 1967, p. 107).

An important point to consider on the development of interactional patterns is the conflict between what is cause and what is effect. In fact, neither of these terms is exactly applicable because of the circular nature of ongoing interactions (Watzlawick, et al., 1967, p. 96). One person does not impose a relationship on the other, but rather each behaves in a manner which presupposes, while at the same time providing reasons for, the behavior of the other (Watzlawick, et al., 1967, p. 69).

It is not uncommon to find that person A reacts defensively because A feels threatened by B, but at the same time B sees A's behavior as the cause of the perceived threatening behavior. The phenomena of interruption could be conceptualized in a similar light. The person being interrupted may engage in a certain type of communicative behavior, i.e., deferent questioning, because they have been interrupted, yet the interrupting person interrupts because the first speaker seems uncertain of his or her position.

Both symmetrical and complementary relationships can be healthy and functional, or unhealthy and dysfunctional. Which way the relationship is defined depends on B's response to A's definition of self. Once A asserts "This is how I see myself in relation to you in this situation," B
can respond in one of three ways to A's self-definition. B can respond with confirmation, rejection, or disconfirmation (Watzlawick, et al., 1967). Table 1 illustrates the association.

<table>
<thead>
<tr>
<th>TABLE 1</th>
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<tr>
<td>CHARACTERISTICS OF TYPES OF RELATIONSHIPS</td>
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<tr>
<th>Type of Relationship</th>
<th>Relationship Characteristics</th>
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<tr>
<td><strong>Functional</strong></td>
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<tr>
<td>Symmetry</td>
<td>Confirmation</td>
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<tr>
<td>Complementarity</td>
<td>Confirmation</td>
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<tr>
<td><strong>Dysfunctional</strong></td>
<td></td>
</tr>
<tr>
<td>Symmetry</td>
<td>Rejection</td>
</tr>
<tr>
<td>Complementarity</td>
<td>Disconfirmation</td>
</tr>
</tbody>
</table>

Functionally, symmetrical and complementary relationships are characterized by B's acceptance of A's definition of self. A is confirmed by B. When B acknowledges A in a satisfactory manner he expresses "in word, gesture or action the following idea: I fully understand; I appreciate what you say; I get it" (Ruesch, 1957, p. 37). Through their research with families, Watzlawick, et al. (1967) have determined that confirmation of another is probably the greatest single factor ensuring mental development and stability (p. 84).
The existentialist, Martin Buber (1957) writes "that a society may be termed human in the measure to which its members confirm one another . . ." (p. 101). Laing (1969) writes that modes of confirmation vary from a smile, a touch, or a verbalization, but all are relevant and in direct response to the evocatory act.

Symmetrical relationships can become dysfunctional when they become characterized by escalating competitiveness. This is illustrated through quarrels and arguments with resultant rejection. This could be a potential problem in the evolving relationships between women and men. In response to A's presentation of self, B rejects the definition and in effect says, "You are wrong." Rejection, . . . no matter how painful, presupposes at least limited recognition of what is being rejected and, therefore, does not necessarily negate the reality of A's view of self (Watzlawick, et al., 1967, p. 85). A rejection can even be confirmatory as when a therapist refuses to accept a client's negative self-definition. It is conceivable that an interruption could function to reject the content of the speaker, but not reject the person. For example, a rejecting interruption with confirmatory character could look like this: "Now wait, I don't like you putting yourself down."

From a psychological viewpoint, dysfunctional complementary male-female relationships present the most serious
problem because they are characterized by disconfirmation, which, at its core, negates the reality of A as a source of self-definition (Watzlawick, et al., 1967, p. 86). Disconfirmation says, "You do not exist." Laing (1969) equates this with the failure to recognize a person as agent. "The attribution of agency to human beings is one way we distinguish people from things . . ." (Laing, 1969, p. 84). Disconfirmation can be accomplished through a variety of communicative acts such as, minimal responses, subject switches, misunderstanding, tangentializations, imperviousness, and even by not returning a smile.

Interruptions can obviously demonstrate imperviousness of the speaker through subject switches and misunderstanding. Interruptions can also be a form of a tangential reply. In this instance B takes cognizance of A's intention to communicate but disregards the content of the statement, counters with an incidental side remark, and, in effect, deprives A of the pleasure of being understood (Ruesch, 1957, p. 55).

**Interruptions**

The phenomena of interruption has been established in communication research. It has been documented to be one of many examples of dysfunctional communication. Interrupting one's partner is viewed as evidence of "communication dominance" because the activities lessen the
communicative role of another (Markel, Long, and Saine, 1976, p. 356). In addition to a display of dominance, interruptions serve the function of exercising control in face-to-face interactions (West and Zimmerman, 1977, p. 524).

It should be noted that although a speaker may make a dominant move, like interrupting another, for dominance to be established in the relationship, the dominant move must be accepted, or confirmed, by the interrupted person (Courtright, Millar, and Rogers-Millar, 1979; Rogers-Millar and Millar, 1979). Most of the research dealing with interruptions has failed to take this transactional view into account. This writer's study attempted to do so.

In a well-known study of jury deliberations, where there is an expectation of equal and responsible participation in the group work, Strodtbeck, James, and Hawkins (1973) found that men in contrast to women, and persons of higher status compared to lower status, had higher participation, influence, satisfaction, and perceived competence for the jury task.

Swacker (1975) asked 17 males and 17 females to look at pictures and describe them—taking as much time as they would like. Males were found to speak longer than females.

In a comparison study of same sex and mixed sex subjects, Borgatta and Stimson (1963) concluded that the total amount of interaction was not significantly different between the sexes, but males were found to initiate more interaction.
In a comprehensive review of research investigating sex differences in group communication behaviors since 1950, Baird (1976) concluded that males used more words and talked more often. More significant to this study, he also found that in mixed groups, males interrupted females more frequently than females interrupted males. These same results were found in a separate review of the literature by Kramer (1974b).

In a study using 28 college subjects, in dyadic interaction, who were partially or wholly concealed from their partners, Argyle, Lalljee, and Cook (1968) found that with reduced visibility, males talked more, and females less in male-female pairs and, further, that males demonstrated more incidences of interruption than did females.

Shaw and Sadler (1965) compared the interactions of six pairs of married, dating, and unaffiliated couples and found interruptions were much less frequent for married couples. This may be explained on the basis of familiarity and established patterns between intimate partners. It speaks also to the fact that communication patterns will be indicative of the total relationship. This is one study which found that in all interactions the women interrupted their partners more frequently than did men. The researchers, however, noted only the number of simultaneous speeches and did not differentiate agreeing and reinforcing comments from other types of interruptions. The present study
will differentiate the types of simultaneous speech and will include only those defined as occurring prior to a possible transition place in the other speaker's turn.

Three studies speak to the degree of intimacy and sex-role stereotyping between communicating partners. Kramer (1975) studied stereotypes of male and female speech behavior and found stereotypes have more impact on initial interactions. Kramer concludes that stereotypes are used to organize unfamiliar situations. Shaw and Sadler (1965) and Heiss (1962) found that the more traditional pattern of males taking the lead in the task area and females leading in giving suggestions and support is more common in less intimate groups.

The groups studied as a part of this writer's research will have had prior interactions together and, therefore, it will be assumed that the situation is not a totally ambiguous one for the participants. A more detailed examination of the level of familiarity will have been accomplished at the time of data analysis.

In a descriptive analysis of turn-taking in two interactions, Duncan (1972) noted a very low rate of interruption as long as the speaker was moving his hands. The cessation of certain hand gesticulations apparently signals the end of a turn to the next speaker.

Eakins and Eakins (1978) reporting on informal observations of their classes, suggest that many women have
difficulty getting and keeping the attention of the group. They speculate that when women's voices are less powerful, they might experience a harder time getting the floor and keeping it through interruptions (p. 66). These authors also report that in group situations women frequently do not feel heard by men and that their ideas are not noticed by the group. This examination of post-interruption attitude speaks indirectly to the post-interruption aspect of this study.

An interesting study on interruptions was conducted by Zimmerman and West (1975). These researchers tape recorded data from 10 male-male, 10 female-female, and 10 female-male conversations in such neutral places as coffee shops, drug stores, and other public places around a university. They found that in same-sex conversations the overlaps and interruptions were fairly evenly distributed among the speakers, but in male-female conversations, the males were responsible for 96 percent of all interruptions while females accounted for the remaining four percent. The interruptions were clustered in just a few of the same sex conversations, but were evenly scattered across female-male pairs. Regarding their results, the researchers write: "if interruptions are viewed as violations of a speaker's rights, continual or frequent interruptions might be viewed as disregard for a speaker, or for what a speaker has to say" (p. 116). In their study, none of the women verbally
complained about being interrupted, while one male did protest an interruption in reclaiming the turn just lost.

In a study done in a university faculty meeting of unreported composition, Eakins and Eakins (1978) found that the men averaged a greater number of interruptions per meeting than did the women. As evidence that status plays a large part in interruption behavior, they noted that the woman who was most frequently interrupted did not have a Ph.D., while the male least interrupted was the departmental chairman.

In a later study of five interactions between parents and children in a physician's office, West and Zimmerman (1977) found strong similarities in the pattern of interruption between male-female interchange and those observed in parent-child interactions. They speculate that, like children, "females have restricted rights to speak and may be ignored or interrupted at will" (p. 525). They go even further and posit that, at least some of the time, women's turn at talk is expendable and women are treated conversationally as nonpersons (p. 525).

The researchers noticed that children were interrupted when creating a disturbance in the office and they suggest a parallel in male-female interaction, i.e., perhaps "men interrupt women in situations where women's verbal or nonverbal behavior is somehow problematic ..." (p. 527).
The examination of the pre-post pattern of interruption behavior is pointed to by research. In their study, Zimmerman and West (1975) found conversational lapses to be exhibited more by females in male-female conversation following interruption, overlap, and delayed minimal response (p. 116). These devices apparently disorganize the construction of a conversation topic and contribute to the females sense of not being heard.

Whereas interruptions occur prior to a possible transition place in the speaker's utterance, overlaps occur on or about the final word of the speaker and are errors in transition, but not actual violations of the speaker's turn. An example from Eakins and Eakins illustrates the difference.

**Interruption**
A: Today I met
B: [Oh, I can't talk--Gotta run!]

**Overlap**
A: I didn't know you knew Bob.
B: [Oh yeah, I met him at Richards'.]

Other items interspersed through a current speaker's ongoing utterance are "um humm," "uh huh," and "yeah." These are not seen as interrupting the current speaker (Schegloff, 1972), but rather serve a facilitating function.
in topic development. In a small study of six dyadic conversations, Hirschman (1973) found females used a much higher percentage of "um humm" than did males, and, in fact, each female used more than all the males together.

Most of the research reports that males interrupt females more than they are interrupted by females. The variables of differential status and social role, however, are rarely controlled. Secondly, it is not always clear how interruptions are being defined. The function of interruptions in communication among women and men needs further examination.

There is virtually nothing reported on the nature of the interrupted utterance itself. Several writers suggest various reasons why women tend to be interrupted and why males do the interrupting. These reasons refer to the lower volume of women's speech, deferent, self-deprecating presentations, and the dominant submissive role relationships between men and women. The available literature indicates that when women are interrupted they exhibit noticeable silences, and do not make efforts to regain the speaking turn, thereby perpetuating the pattern. This writer's research was designed to explore the verbal responses of the interactants following an interruption.

The current research indicates a need for closer examination of the phenomena of interruption and points out
the need to place interruptions in a broader interactional context, and thus the need to study pre- and post-interruption behavior becomes clear.

Summary

This chapter addressed the function of communication in interpersonal relationships and provided the framework for examining the phenomena of interruption among women and men.

The framework from Watzlawick, et al. (1967) was presented. This framework posits that relationships are either symmetrical or complementary in nature. Relationships are functional if characterized by confirmation and dysfunctional if characterized by rejection or disconfirmation.

A review of the literature on interruption behavior revealed some inconsistencies; however, it was found that males generally interrupted females more than they are interrupted by females. Little has been written on the type of interrupted speech or the speech behavior of the person subsequent to an interruption.

The concern of this writer's study was with A's presentation of self, such that B responds with an interruption, and A's subsequent response to being interrupted. When posed within the framework of socialization and human development, specifically between women and men, this literature takes on added meaning.
The communication behaviors enacted between men and women reflect conscious and unconscious assumptions (Lerner, 1976). It is imperative that the helping professional recognize, make explicit, and understand these assumptions and the resultant behaviors. Research on the function of communication in this process needs to be expanded and specific tools for better understanding the dynamics need to be developed.

This chapter presented a review of literature. Chapter III will describe the methodology used in the completion of the study.
CHAPTER III

METHODS FOR STUDY

Introduction
The purpose of this study was to examine the patterns of verbal interruption in the communication among women and men of equally achieved status. This chapter presents the setting for the study, the sample, and the methods for data collection and analysis.

Setting
The study was conducted on The Ohio State University campus, a major comprehensive University in the State of Ohio. The Ohio State University offers degree programs in a wide variety of disciplines, including baccalaureate and graduate programs in the liberal arts and sciences, in agriculture, in the various professional areas, and in the health sciences.

The subjects were students representing the Graduate School, the College of Administrative Science, the College of Agriculture and Home Economics, the College of the Arts
and Sciences, and the College of Education. Within these colleges, the students were affiliated with the department of business administration, history, communication, home economics education, home economics family relations, genetics, guidance counselor education, and education.

Sample

The subjects who participated in this study were all graduate students at The Ohio State University. They were obtained on a volunteer basis from intact groups previously established within courses or for program purposes.

Criteria satisfied in order for groups to be included in this study were: 1) the groups had to have met as a group prior to participation in the study, 2) the nature of the groups had to be such that each group member participated equally and responsibly in the work of their respective group, 3) groups needed were composed of approximately equal number of men and women, and 4) for any group with an identified leader of different status, that leader was not present for the particular group discussion under investigation.

To obtain groups which met these criteria, professors and staff coordinators were contacted and permission was obtained to speak to classes or in staff meetings to obtain willing participants. Students were informed of the general purpose of the research and were informed about the time and
place for videotaping. Names of students were obtained and were checked against the criteria established on this study.

Data concerning the characteristics of the subjects by groups are seen in Table 2. In total, subjects from six different groups volunteered for participation in this study. Two of the groups were from graduate seminar courses in Guidance and Counseling and had met together in a larger group for seven weeks. One group was the teaching assistant staff for an undergraduate course in Communication, and three groups were advisors for freshman students in University College. The last four groups had each been meeting together for nine months. Each of the groups agreed to have one hour of their regular, ongoing group work videotaped with the understanding that the investigator was interested in examining the communication patterns of groups at work. Signed consent for participation in the study was obtained from each subject in keeping with the requirements of the Human Subjects Review Committee.

Data were collected from 35 subjects, each of whom participated in one of the six groups. Group size varied from four to nine members. The composition by sex of all the groups was approximately equal with a total of 17 males and 18 females participating. One group had nine members, composed of five males and four females; one group had seven members, composed of four females and three males; one group had six members, composed of three females and three males;
TABLE 2

CHARACTERISTICS OF SUBJECTS BY GROUP

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
<th>Group 5</th>
<th>Group 6</th>
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<td>M  F</td>
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<td>3  3</td>
<td>3  4</td>
<td>3  2</td>
<td>2  2</td>
<td>1  3</td>
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<td>0  1</td>
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<td>0  1</td>
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<tr>
<td>Masters</td>
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<td>1  0</td>
<td>2  1</td>
<td>0  0</td>
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</table>
Another group had five members, composed of three males and two females; and two groups had four members each, one of which had two females and two males, the other had three females and one male. The last group was originally intended to have three females and two males; however, one of the males did not appear for the videotaping session.

The subjects ranged in age from 23 to 46. Specifically, 10 subjects were in the age range of 21 to 25; 14 subjects ranged in age from 26 to 30; eight subjects fell in the 31 to 35 age group; and one subject each was found in the ranges from 36 to 40; 41 to 45; and over 45.

All subjects had previous work experience, ranging from one to 20 years. Specifically, 13 subjects had from one to three years of experience; six had from four to six years experience; 10 had from seven to nine years experience; four had from 10 to 12 years experience; and two had 13 or more years of work experience.

**Methods of Data Collection**

The data for this study were 255 transcribed utterances surrounding and constituting the phenomena of interruption in actual conversation between women and men who participated in group discussions. The utterance was chosen as the basic unit of study in order to capture
clauses, phrases, and lexical items which do not satisfy the grammatical criteria of "sentence" (Litton-Hawes, 1977, p. 7).

The groups who participated in the study all met on campus in a seminar room which was adjacent to a windowed room equipped for videotaping purposes. Microphones were arranged on the tables in front of the subjects, but the videotape equipment and the investigator were in the adjacent room during the group discussions. The videotaping was handled in this manner in an attempt to be as unobtrusive to the groups as possible.

Videotapes of the groups provided an account of the communication among group members. Videotapes provided a more accurate means of identifying speakers than was possible with audiotapes. Transcripts were produced by using a modified version of the transcription system developed by Jefferson (Sacks, Schegloff, and Jefferson, 1974). This system provided a method of capturing intonation, pauses, overlaps, interruptions, and length of silence. (See Appendix A) The reliability of the transcripts was ascertained by having two people involved in the transcription of data.

The procedure used by the persons transcribing the data was to listen to the group discussion until an episode of simultaneous talk was heard. The videotape would then be stopped and replayed until an incidence of
interrupted speech was located. The interrupted speech, the interruption, and the post-interruption speech would then be recorded.

Sacks, Schegloff, and Jefferson (1974) have developed a turn-taking model which suggests that speech exchange systems in general are organized to ensure that 1) one party speaks at a time and 2) speaker change recurs. A turn is constructed by the speaker out of "unit-types" which can consist of single words, phrases, clauses, or sentences. Each speaker upon being allocated a turn, has an initial right to produce one such unit. In general, the end of a unit-type is a possible transition place, and the transfer of a turn from one speaker to another properly occurs at that place (Sacks, et al., 1974). In order to anticipate the end of a speaker's unit, the listener must actively listen to know when to begin the next turn. When turns are being exchanged properly, there is usually little or no gap between turns and very little overlapping of speaker's utterances (Sacks, et al., 1974).

Turn order and turn size are determined by those talking. Turn-taking occurs in three ways: 1) the current speaker selects the next speaker, 2) the next speaker self-selects, or 3) the current speaker continues (Sacks, et al., 1974). The person who obtains the floor first is considered to have obtained the turn. Some errors in transition occur
in group situations such as two speakers starting to speak at the same time. As has been discussed there is also the quick introduction of facilitating remarks like "um humm" during a speaker's turn and, occasionally, a speaker will start a new turn on or close to the last word of the current speaker. These were not the focus of this study. Rather, the focus was the intrusion deep into the speaker's turn or the interruption.

The turn-taking model proposed by Sacks, et al., has furnished a general approach for the examination of interactions in this study. Focusing on the three turn sequence including and surrounding the interruption allowed an investigation of one way in which group participants defined their relationships to one another.

The process used in this study for defining relationships among participants implies a transactional view of interaction. Individual messages are important, but become meaningful only in terms of previous messages by other members. The study also employs a relational approach in the analysis of the messages, in that it focuses on how the messages should be taken, more than on the content of the messages (Courtright, Millar, and Rogers-Millar, 1979, p. 179).
Instruments

A category system (See Appendix B) was developed for this project to code interruptions and pre- and post-interruption speeches. Poole and Folger suggest three generic approaches to the study of interaction:

The experienced view takes interaction as a product of observable message and situational effects on the interaction. It is not concerned with participants' interpretations of interaction and focuses on observer-defined variables as determinants of the course of interaction. The experiencing mode views interaction as the product of a socially-defined interaction situation. It is concerned with the common interpretive scheme which the participants in the interaction develop or bring with them and focuses on relational variables, consensually-defined by the participants, as determinants of the course of interaction. The experiencer view . . . is concerned with the unique interpretative schemes used by each participant and focuses on participants' perceptions of others' utterances and of the interaction situation as determinants of the course of interaction (Poole and Folger, 1978, p. 8).

The theoretical approach used in the development of the category system for this study was the experienced perspective as described by Poole and Folger (1979).

Validity

In their discussion of category systems, Lazarsfeld and Barton (1969), state that category systems are used to systematically and rationally reduce a set of complex attributes that characterizes an observable event to a simpler set of attributes which is more manageable. In Lazarsfeld and Barton's view a category system is valid if
it meets two conditions: 1) the categories adequately capture the phenomenon under investigation, and 2) the category system must not confound or obscure dimensions of the phenomenon which are important to explaining or understanding it. The question of validity for category systems is "Does the category system give an adequate, undistorted picture of what is happening in the interaction?"

In the experienced approach to interaction, it is necessary for a coding scheme to possess face validity. Face validity is established when it seems to the investigator and other knowledgeable observers that the coding scheme 1) accurately embodies the assumptions of the investigator's theory and 2) is logically correct with clearly defined categories (Poole and Folger, 1978, p. 12). Face validity for this category system was evolved to the research form in four stages: 1) initial conceptualization, 2) dialogue with advisers and colleagues, 3) a pilot study, and 4) a series of discussions with persons involved in establishing the interrater reliability of the category system.

Pre-interruption Categories

The pre-interruption categories were developed by attempting to combine facilitative communication behaviors previously reported in the group process and family interaction literature (Bales, 1950; Mark, 1971; Rogers and
Farace, 1975) with behaviors reported to be more typical of one sex or the other. For example, the categories of Support and Question were reported to be more typical of females, whereas speeches appropriate to the category of Information were reported to be more typical of task oriented male behavior.

In part, an attempt was made to try to ascertain whether or not a particular speech form was actually used more by one or the other sex, and secondly, to try to determine whether or not certain speech forms might stimulate an interruption.

Because there was an interest in questioning behavior which described the way a speech was delivered, as well as categories like Support which described the function of a communication, it became clear that categories were not necessarily mutually exclusive. This necessitated a dual code for the pre-interruption speech. Coders were asked to code each pre-interruption speech twice: 1) once for structure, i.e., Assertion, Question, or Diverse Speech, and 2) once for function, i.e., Information, Support, Non-support, or Hesitancy or Self-doubt. Coders were permitted to describe structure and/or function with an Other category which was designed to allow the coding of speech not appropriate to the other categories. Determining speech forms appropriate to the Assertion or Question categories
was a relatively objective process. Greater subjectivity was involved in determining what was Diverse Speech because this category required that coders determine whether or not a speech was unusually long or contained three or more different ideas.

**Interruption Categories**

The interruption categories were developed out of the theoretical framework proposed by Watzlawick, Beavin, and Jackson (1967). They indicate that relationships are defined and maintained through communication and that all communication serves to confirm, reject, or disconfirm another. At first glance the concept of an interruption as a violation of another speaker's turn seemed to preclude an interruption functioning in a confirmatory manner.

A pilot study was conducted to determine the usefulness of the category system. The pilot study was conducted using a group of male and female senior level students in nursing who were participating in a growth group as a partial requirement for a course in psychiatric-mental health nursing. The group was led by two co-facilitators, one male and one female. This group was audiotaped ten times over a three-month period of time. Although the quality of the audiotapes was poor, it was clear that interruptions were not just functioning as rejections and disconfirmations.
It was noted that the male facilitator frequently interrupted group members in what was an attempt to better understand the message. This behavior seemed more appropriate to the concept of confirmation.

As a result of the findings of the pilot study and in an attempt to validate the theoretical framework, the interruption categories of Clarification and Agreement were developed to represent the concept of confirmation. For purposes of this study the Agreement category included speech which further developed the first speaker's idea.

The category of Disagreement represented the theoretical concept of rejection. Since the groups to be studied were task groups it was anticipated that the therapeutic technique of rejecting a negative self-presentation of another would probably not occur frequently. This category was not developed as a separate item but was included in the one item representing rejection.

In keeping with the theoretical considerations embodied in the concept of disconfirmation, the categories of Tangentialization and Subject Change were developed. On the possibility that the categories did not adequately represent the theory or that the theory was in some way incomplete, the category of Other was included as an interruption category. Each interruption was coded only once. Coding of the interruption speeches produced the widest range of interrater reliability.
Post-interruption Categories

The post-interruption categories of Keeps Going, Reintroduces, Cooperates, and Re-interrupts were designed to primarily reflect the behavior of the interrupted speaker. Consideration was given to including a category called Silence, but it seemed unreasonable to expect unusually long pauses or silences in a group situation. There was an initial interest in whether or not the interrupted person would object to being interrupted, but the literature and pilot study indicated this was a very unlikely event and thus this category was omitted in the final category system. Loses Turn was developed to allow for the fact that the interrupted person might not regain the turn at all. The category Other in the post-interruption section was designed to capture any speech not appropriate to the already described categories, e.g., a change of subject or an objection to being interrupted. Each post-interruption speech was coded only once. Coding the post-interruption speeches was a relatively objective process calling for little inference on the part of raters.

Reliability

Interrater reliability was established by calculating the percent-agreement score (Festinger and Katz, 1953, p. 411) among three trained judges who independently coded ten randomly selected examples from the transcribed data.
The reliability for the pre-interruption categories was .86 for structure and function, .82 for the interruption categories, and .93 for the post-interruption categories.

One source of rater disagreement undoubtedly stemmed from the fact that entire speeches, no matter how long, were used in this study. Raters were asked to try to determine the predominant theme or intent of any speech which might seem to be able to be coded in more than one way. A second source of rater disagreement could have resulted from the fact that judges coded only transcribed segments of data without seeing the videotape or having access to other context clues.

The actual coding of the data was performed independently by the investigator and a second person trained in the technique. Differences were negotiated through discussion of the data or review of the videotape. Prior to the final coding of the data, it was determined that the reliability between the investigator and the second coder was equal to the reliability obtained between any pair of the trained judges.

**Analysis**

Because the assumptions for parametric techniques were not met, nonparametric statistical analyses were employed. The model for a nonparametric statistical test is one which does not specify conditions about the parameters of the
population from which the sample was drawn (Siegel, 1956, p. 31). With nonparametric tests, it is assumed that the observations are independent and that the variables under study have underlying continuity, but these assumptions are fewer and much weaker than those associated with parametric tests (Siegel, 1956, p. 31). The data in this study were represented by nominal measures which are appropriate for nonparametric techniques.

Although more than one observation was taken from each subject, there was a strong rationale supported by previous communication research for assuming that these observations were independent of one another. First, each observation was contextually independent in at least three ways: 1) no one person participated in a predictable pattern of interaction with any other group member, 2) the character of speech used by any one subject was varied, and 3) the subject matter for each interruption sequence was varied. Secondly, the coding of one speech behavior was in no way influenced by the coding of any other speech behavior and each speech was coded in only one category. The data were coded independently by two raters to minimize rater bias. Thirdly, the nature of group interaction creates a situation wherein multiple stimuli are available to each participant. This ensures that each speech produced over time by any one person will be the product of a different context. Having provided a rationale for the use
of nonparametric tests, percentage distributions and the chi-square statistical techniques were selected for the analysis of data. The minimum acceptable level of statistical significance was .05.

Prior to the analysis of data pertaining to the research questions, a chi-square was done using the first half hour and the second half hour of time in each group to determine the quantitative differences in patterns of interruption across all groups. A chi-square was then performed by category and group half-time to determine qualitative differences in patterns of interruption across groups. Chi-squares were then accomplished by category and group to determine qualitative differences among groups.

The analyses for the research questions proposed in this study were conducted as follows: in questions one, two, and three, percentage distributions were done for pre-interruption, interruption, and post-interruption speeches to determine the types of speech behaviors used. Chi-squares were performed for each group to determine differences in quality and quantity of interruption sequences by sex. A percentage distribution was computed to determine the interruption patterns among group members by sex, and a chi-square was performed to determine differences in patterns of interruption.
After first collapsing interruption categories along theoretical lines, questions four and five were analyzed by performing a chi-square to determine differences by sex. Percentage distributions were also performed to determine the most frequent types of interruption sequences.

The findings of this study are presented in Chapter IV.
CHAPTER IV

FINDINGS

This chapter presents the findings of the study. It is divided into three sections. Section one presents selected demographic characteristics of the groups in this study. Section two presents data pertinent to research questions one, two, and three of this study, and section three presents data relative to questions four and five.

The data are presented in tables and described as they relate to the questions posed. Following the description of each table, there is a discussion of selected aspects of the data.

Selected Demographic Characteristics

This section presents a quantitative analysis of the number of interruption sequences by first half hour and second half hour of group time, and a qualitative analysis of categories of interruption behavior by half-time and by group.
To ascertain quantitative differences in interruption sequences among the six groups participating in this study, group time was divided in half and interruption sequences were identified accordingly. Data concerning the 255 interruption sequences by group half-time are presented in Table 3.

No significant difference was obtained. The data reveal a consistent pattern across groups. In every group, nearly twice as many interruption sequences occurred in the second half hour of group time as occurred in the first half hour.

The largest proportion (31.4 percent) of the interruption sequences occurred in Group B, and the smallest proportion (8.2 percent) occurred in Group A. Group D produced 27.1 percent of the interruption sequences, while Groups C, E, and F produced 11.4 percent, 10.2 percent, and 11.7 percent respectively.

Groups A and C had the shortest histories, having met as part of graduate seminars for seven weeks. These two groups also had the largest number of group members, nine and seven respectively. Groups B, D, E, and F had all worked together for an academic year and were conceivably more familiar with one another than were the members of groups A and C. Groups B and D had six and five members respectively, while Groups E and F each contained four members.
TABLE 3
CHI-SQUARE OF INTERRUPTION SEQUENCES
BY GROUP HALF-TIME

<table>
<thead>
<tr>
<th>Group</th>
<th>Half-time</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>First</td>
<td>Second</td>
<td>Total</td>
</tr>
<tr>
<td></td>
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<td>B</td>
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<tr>
<td>C</td>
<td>6</td>
<td>6.9</td>
<td>23</td>
</tr>
<tr>
<td>D</td>
<td>26</td>
<td>29.9</td>
<td>43</td>
</tr>
<tr>
<td>E</td>
<td>9</td>
<td>10.3</td>
<td>17</td>
</tr>
<tr>
<td>F</td>
<td>10</td>
<td>11.5</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>100.0</td>
<td>168</td>
</tr>
</tbody>
</table>

\(X^2 = 3.44; 5\) d.f., \(p < .50\)

Note: Total number of subjects was 35, distributed as follows: A=9, B=6, C=7, D=5, E=4, F=4. Groups A and C had met together for seven weeks; groups B, D, E, and F had met together for nine months.
It could be that with increased familiarity and a group size from five to six members, maximum interaction among members occurs and results in increased interruptions. This premise is partly supported by the group process literature. Yalom (1975) writes that the ideal size for a small group is approximately seven, with an acceptable range of 5-10 members. On the topic of group consensus, Hare (1953) found that as the size of the discussion group increased from 5-12 members, the degree of consensus resulting from the discussion decreases. In another study, member-to-member exchange markedly reduced when the group had nine members (Castore, 1962).

Subject reactivity to a new situation might explain why there were fewer interruption sequences in the first half hour of each group. Amount of group history is apparently not a factor since the same results were obtained from all groups.

An alternative explanation is that as the topic under discussion developed, group members became more engaged in the conversation. This conclusion would be consistent with the research on group process reported in the literature which indicates that, in general, groups go through stages. The first stage is one of orientation in which the group is characterized by acceptance and approval. The second stage is one of conflict characterized by dominance, control, and
power (Yalom, 1975, p. 306). The groups in this study may have been in the orientation stage for the first half hour of their meetings.

In order to examine the qualitative differences among groups, the categories were examined by group half-time and by group.

Data concerning the categories of pre-interruption structure and function, interruption, and post-interruption speech by group half-time are presented in Table 4. No significant differences were obtained in any of these categories of speech behavior.

The number of interruption sequences increased with group time, but there was no difference in the quality of these behaviors as the groups moved through time. The size of the group and the familiarity of members with one another apparently influences the amount, but not the kind of interruption sequences.

The distribution of categories by groups is presented in Table 5. Due to the fact that the distribution of data resulted in numerous small or empty cells, chi-square analysis was not performed. The differences referred to among groups in this part are not statistically significant.

In the pre-interruption structure categories, it can be seen that Group C produced more speeches appropriate to
<table>
<thead>
<tr>
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<th>Half-time</th>
<th></th>
<th></th>
<th></th>
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<td>Second</td>
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</tr>
<tr>
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<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Assertion</td>
<td>76</td>
<td>87.4</td>
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<td>4.6</td>
<td>13</td>
<td>7.7</td>
</tr>
<tr>
<td>Diverse Speech</td>
<td>6</td>
<td>6.9</td>
<td>13</td>
<td>7.7</td>
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<tr>
<td>Other</td>
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<tr>
<td>Total</td>
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<td>168</td>
<td>100.0</td>
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</tbody>
</table>

\[ \chi^2 = 1.21; \text{3 d.f., } p < .75 \]

<table>
<thead>
<tr>
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<td></td>
<td>First</td>
<td>Second</td>
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</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Information</td>
<td>70</td>
<td>80.5</td>
<td>132</td>
<td>78.6</td>
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<tr>
<td>Support</td>
<td>5</td>
<td>5.7</td>
<td>11</td>
<td>6.5</td>
</tr>
<tr>
<td>Nonsupport</td>
<td>9</td>
<td>10.3</td>
<td>16</td>
<td>9.5</td>
</tr>
<tr>
<td>Hesitancy</td>
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<td>3.4</td>
<td>9</td>
<td>5.4</td>
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\[ \chi^2 = .57; \text{3 d.f., } p < .90 \]
### TABLE 4 (continued)

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<th>Interruption</th>
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<td>Second</td>
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</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
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<tr>
<td>Clarification</td>
<td>12</td>
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<tr>
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<td>44.8</td>
<td>58</td>
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<tr>
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<td>Subject Change</td>
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<td>16.1</td>
<td>46</td>
<td>27.4</td>
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<td><strong>Total</strong></td>
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<td>168</td>
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\[X^2 = 5.93; 4 \text{ d.f.}, p < .20\]

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<th>Post-interruption</th>
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<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
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<tr>
<td>Keeps Going</td>
<td>14</td>
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<td>Reintroduce</td>
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<td>Cooperation</td>
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<td>32.2</td>
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<td>23.8</td>
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<td>9</td>
<td>5.4</td>
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<td>Loses Turn</td>
<td>31</td>
<td>35.6</td>
<td>72</td>
<td>42.9</td>
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<td>Other</td>
<td>6</td>
<td>6.9</td>
<td>8</td>
<td>4.8</td>
<td>14</td>
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<tr>
<td><strong>Total</strong></td>
<td>87</td>
<td>100.0</td>
<td>168</td>
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<td>255</td>
</tr>
</tbody>
</table>

\[X^2 = 6.66; 5 \text{ d.f.}, p < .25\]
TABLE 5
DISTRIBUTION OF CATEGORIES BY GROUP

<table>
<thead>
<tr>
<th>Pre-interruption</th>
<th>Group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>Total</th>
<th>N %</th>
<th>N %</th>
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<tbody>
<tr>
<td>Assertion</td>
<td></td>
<td>17</td>
<td>81</td>
<td>74</td>
<td>92</td>
<td>16</td>
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<td>2</td>
<td>7</td>
<td>4</td>
<td>6</td>
<td>4</td>
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<tr>
<td>Diverse Speech</td>
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<td>14</td>
<td>2</td>
<td>3</td>
<td>11</td>
<td>38</td>
<td>2</td>
<td>3</td>
<td>1</td>
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<tr>
<td>Other</td>
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<td>0</td>
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<td>Total</td>
<td></td>
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<td>100</td>
<td>80</td>
<td>100</td>
<td>29</td>
<td>100</td>
<td>69</td>
<td>100</td>
<td>26</td>
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TABLE 5 (continued)

<table>
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<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>Total</td>
</tr>
<tr>
<td>Function</td>
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<td>%</td>
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<td>%</td>
<td>N</td>
<td>%</td>
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<td>86</td>
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<td>7</td>
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<td>Nonsupport</td>
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<td>Hesitancy</td>
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</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Clarification</td>
<td>2</td>
<td>9%</td>
<td>6</td>
<td>8%</td>
<td>2</td>
<td>7%</td>
<td>10</td>
</tr>
<tr>
<td>Agreement</td>
<td>12</td>
<td>57%</td>
<td>28</td>
<td>35%</td>
<td>10</td>
<td>35%</td>
<td>25</td>
</tr>
<tr>
<td>Disagreement</td>
<td>3</td>
<td>14%</td>
<td>18</td>
<td>22%</td>
<td>5</td>
<td>17%</td>
<td>11</td>
</tr>
<tr>
<td>Tangentialization</td>
<td>2</td>
<td>10%</td>
<td>7</td>
<td>9%</td>
<td>1</td>
<td>3%</td>
<td>9</td>
</tr>
<tr>
<td>Subject Change</td>
<td>2</td>
<td>10%</td>
<td>21</td>
<td>26%</td>
<td>11</td>
<td>38%</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100%</td>
<td>80</td>
<td>100%</td>
<td>29</td>
<td>100%</td>
<td>69</td>
</tr>
<tr>
<td>Post-interruption</td>
<td>A</td>
<td></td>
<td></td>
<td>B</td>
<td></td>
<td></td>
<td>C</td>
</tr>
<tr>
<td>Keeps Going</td>
<td>2</td>
<td>10</td>
<td>16</td>
<td>20</td>
<td>1</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Reintroduce</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>11</td>
<td>9</td>
<td>31</td>
<td>6</td>
</tr>
<tr>
<td>Cooperation</td>
<td>8</td>
<td>38</td>
<td>16</td>
<td>20</td>
<td>8</td>
<td>28</td>
<td>17</td>
</tr>
<tr>
<td>Re-interrupt</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Loses Turn</td>
<td>8</td>
<td>38</td>
<td>32</td>
<td>40</td>
<td>9</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>100</td>
<td>80</td>
<td>100</td>
<td>29</td>
<td>100</td>
<td>69</td>
</tr>
</tbody>
</table>
the category of Diverse Speech and fewer speeches appropriate to the category of Assertion than the other groups. Group E tended to produce more speeches in the Question category.

The pre-interruption function categories are relatively consistent across groups, except that Group A produced no Support speeches, and Group C produced no Non-support speeches. There were no Hesitancy speeches produced by Group D.

The interruption categories reveal no demonstrable differences among the groups. Group A engaged in more Agreement speeches and fewer Subject Change speeches than the other groups. Groups E and F had more Clarification speeches and less Agreement speeches than the other four groups.

Examination of the post-interruption categories demonstrate that members of Group C did not produce as many speeches in the category Keeps Going as was produced by the other groups, but they did produce more speeches in the category of Reintroduce. Group F members never produced Reintroduce speeches, and members of Groups A, E, and F never Re-interrupted; however, the proportion of Re-interruptions was small across all groups.

Across all categories there was a very small proportion of speech behaviors coded as Other. Coders
classified less than one percent of the pre-interruption structure speeches as Other, and did not use this category for pre-interruption function or interruption speeches. Post-interruption speeches were coded 5.5 percent of the time in the Other category.

The fact that Group E produced more speeches in the pre-interruption Question category may be explained by the nature of the task for their particular meeting. Group E was to revise a form, so members frequently raised questions about items contained on the form.

The interruption categories of Clarification and Agreement represent the same theoretical concept, therefore, even though Groups E and F produced more Clarification and less Agreement than the other groups, conceptually they are similar to the other groups.

The infrequent use of Other in coding the pre-interruption structure speeches deserves special attention because these categories were designed to define the speeches which were not completed. Either coders were reluctant to use the Other category or the structure of an utterance reveals itself early in the speech. The fact that all interruption speeches were categorized speaks to the validity of the theory that all communication can be identified as functioning to confirm, reject, or disconfirm another.
Of the 14 post-interruption speeches coded as Other, 12 of these were simultaneous starts by several group members and the nature of the talk was not determined. Two of the speeches in the Other category were instances of the pre-interruption speaker changing the subject once the turn was regained.

This first section presented selected demographic characteristics of the groups in this study. The groups varied in the amount of group history, the size of group, and in the number of interruption sequences occurring in each group.

The groups were significantly consistent in that approximately two-thirds of the interruption sequences occurred in the second half hour of group time. However, no significant differences were obtained by categories and group half-time.

Overall the groups were found to be similar in their proportional use of pre-interruption structure and function speeches, interruption speeches, and post-interruption speeches. The nature of the data precluded statistical analysis of these findings.

**Interruption Sequences**

This section is divided into four parts. The first subsection presents data and discussion designed to answer the first research question in this study, the second and
third subsections deal with the second and third research questions respectively. Subsection four presents a discussion of interruption patterns by sex of speaker.

**Pre-interruption Speech**

This subsection presents the types of pre-interruption speech engaged in by participants and the relationships of these behaviors to the sex of the speaker. The specific research question is:

1. What pre-interruption speeches are used by group members?
   
   a. What types of pre-interruption speeches precede an interruption?
   
   b. Are pre-interruption speeches significantly related to sex of speaker?

The distribution of combined structure and function pre-interruption categories by sex is presented in Table 6. No significant difference between the sexes and their use of pre-interruption speeches was observed.

Table 6 reveals that both sexes were most frequently interrupted (67.1 percent of the time) when they engaged in speeches appropriate to the Assertion category, and when the speeches provided Information. Assertion-Non-support speeches comprised the second largest category (9 percent) of the pre-interruption speeches for both sexes.
TABLE 6
CHI-SQUARE OF PRE-INTERRUPTION CATEGORIES BY SEX

<table>
<thead>
<tr>
<th>Pre-interruption Categories</th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Assertion-Information</td>
<td>71</td>
<td>72.4</td>
<td>100</td>
<td>63.7</td>
<td>171</td>
<td>67.1</td>
</tr>
<tr>
<td>Assertion-Support</td>
<td>3</td>
<td>3.1</td>
<td>12</td>
<td>7.6</td>
<td>15</td>
<td>5.9</td>
</tr>
<tr>
<td>Assertion-Nonsupport</td>
<td>11</td>
<td>11.2</td>
<td>12</td>
<td>7.6</td>
<td>23</td>
<td>9.0</td>
</tr>
<tr>
<td>Assertion-Hesitant</td>
<td>1</td>
<td>1.0</td>
<td>7</td>
<td>4.4</td>
<td>8</td>
<td>3.1</td>
</tr>
<tr>
<td>Question-Information</td>
<td>6</td>
<td>6.1</td>
<td>9</td>
<td>5.7</td>
<td>15</td>
<td>5.9</td>
</tr>
<tr>
<td>Question-Support</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>0.6</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Question-Non-support</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>0.6</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Diverse-Information</td>
<td>4</td>
<td>4.1</td>
<td>12</td>
<td>7.6</td>
<td>16</td>
<td>6.3</td>
</tr>
<tr>
<td>Diverse-Hesitant</td>
<td>2</td>
<td>2.0</td>
<td>1</td>
<td>0.6</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Other-Nonsupport</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>0.6</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Other-Hesitant</td>
<td>0</td>
<td>0.0</td>
<td>1</td>
<td>0.6</td>
<td>1</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>100.0</td>
<td>157</td>
<td>100.0</td>
<td>255</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\[ x^2 = 10.81; 10 \text{ d.f.}, p < .40 \]
Examination of the data reveals that, overall, males were interrupted 98 times and females were interrupted 157 times. A chi-square analysis revealed this to be a significant difference, $X^2 = 10.21; 1 \text{ d.f.}, p < .01$.

All groups in the study were task groups. Consistent with the accomplishment of a task is the provision of ideas, facts, suggestions, or opinions; thus the high proportion of speeches coded in Assertion-Information categories can be explained.

Finding no difference between the sexes and types of pre-interruption speech is not consistent with the available literature. Previous research found that in task groups, men will predominately attend to the task while women attend to the socioemotional component of the work. The findings of this study reveal that women and men proportionately participate in similar types of speech behavior.

It appears that in this study, with equal status and high levels of education, women and men are more similar in speech style than was previously reported. They are apparently adopting each others stereotypic type of speech. Not only did the women produce statements coded as Information and Non-support, but the men produced speeches coded as Question and Support.
An alternative explanation for finding no difference in types of pre-interruption speech is that the videotaping situation or the task influenced the linguistic output of the group members, producing sex neutral utterances. This would support the premise proposed by other researchers that speech styles may not be invariant (Menzel and Tyler, 1977; Tyler, 1976).

The finding that women were interrupted significantly more than men is consistent with previous research findings; however, later examination of data places this finding in proper perspective.

**Interruption Speech**

This subsection presents data and discussion relative to the types of interruption speeches engaged in by participants and the relationship of these speeches to the sex of the interrupter. It also presents data relative to the relationship between the sex of the interrupted speaker and the sex of the interrupter. The specific research question is:

2. What interruption speeches are used by group members?
   a. What types of interruption speeches occur?
   b. Are interruption speeches significantly related to sex of speaker?
   c. Is the sex of the interruptive speaker significantly related to the sex of the interrupted person?
Data concerning distribution of interruption categories by sex are presented in Table 7. The data reveal no significant difference between males and females and the types of interruption speeches. Consistent with the findings in the previous subsection on pre-interruption speech, sex of speaker does not influence the type of interruption speeches found in this study.

**TABLE 7**

**CHI-SQUARE OF INTERRUPTION CATEGORIES BY SEX**

<table>
<thead>
<tr>
<th>Interruption Categories</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Clarification</td>
<td>12</td>
<td>12.2</td>
<td>16</td>
</tr>
<tr>
<td>Agreement</td>
<td>39</td>
<td>39.8</td>
<td>58</td>
</tr>
<tr>
<td>Disagreement</td>
<td>17</td>
<td>17.3</td>
<td>32</td>
</tr>
<tr>
<td>Tangentialization</td>
<td>9</td>
<td>9.2</td>
<td>12</td>
</tr>
<tr>
<td>Subject Change</td>
<td>21</td>
<td>21.4</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td>98</td>
<td>100.0</td>
<td>157</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 1.12; \ 4 \text{ d.f.}, \ p < .85 \]

Table 7 reveals that 11 percent of the interruptions function to clarify the speech of the previous speaker, 38 percent agree with the speaker, and 19.2 percent disagree
with the speaker. Tangentialization accounted for 8.2 percent of the interruptions, and Subject Changes accounted for 23.5 percent.

Examination of the data indicates that females did the interrupting 157 times, whereas males interrupted others 98 times. A chi-square analysis revealed this to be a significant difference, $X^2 = 10.21; 1 \text{ d.f.}, p < .01$.

Agreements occupy a high proportion of the interruption categories. This may have been because of the way the Agreement category was operationally defined. Agreements allowed for development of the interrupter's idea as long as there was acknowledgment of the interrupted person's speech, and as long as there was no change of topic.

Contrary to the majority of findings reported in the literature, females in this study did most of the interrupting. If dominance is associated with interruption behavior, then the dominance of the females participating in this study may account for these findings. In a recent article regarding the communicative behavior of husbands and wives, Courtright, Millar, and Rogers-Millar (1979) reported that the wife's dominance score was more strongly associated with interruptions than was the husband's (p. 184).

Female graduate students may be more dominant than male graduate students. Because women have traditionally not pursued graduate degrees, those that do so may be more
dominant in their relationships than their male counterparts. More research is needed to examine communication differences between female and male graduate students.

In keeping with research question two, the sex of the interrupter was analyzed according to the sex of the person interrupted. Data from Group F was not included in this analysis because there was only one male present in that group. As a result, male-male frequencies were not possible in Group F.

Table 3 reveals that there was a significant relationship between the sex of the interrupter and the sex of the person interrupted. Examination of the data demonstrates that males interrupted each other 26 times, and were expected to interrupt each other 33.6 times. Males interrupted females 53 times, and were expected to interrupt females 45.4 times. Females interrupted males 65 times, and were expected to interrupt males 57.4 times. Females interrupted females 70 times, and were expected to interrupt each other 77.6 times.

A post hoc analysis of the data revealed that both comparisons were significant at the .05 level. In other words, there were fewer same sex interruptions than expected, and there were more cross-sex interruptions than expected.
TABLE 8

CHI-SQUARE OF SEX OF PRE-INTERRUPTER
BY SEX OF INTERRUPTER

<table>
<thead>
<tr>
<th>Sex of Pre-interrupter</th>
<th>Sex of Interrupter</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>33.6</td>
<td>26</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>-7.6</td>
<td></td>
<td>7.6</td>
</tr>
<tr>
<td>Female</td>
<td>45.4</td>
<td>53</td>
<td>77.6</td>
</tr>
<tr>
<td></td>
<td>7.6</td>
<td></td>
<td>-7.6</td>
</tr>
<tr>
<td></td>
<td>79</td>
<td>135</td>
<td>214</td>
</tr>
</tbody>
</table>

\[ x^2 = 4.14; 1 \text{ d.f., } p < .05 \]

Note: In each cell observed frequency is on the right; expected frequency is in upper left corner; observed minus expected frequency is in lower left corner.

Note: Yates' correction for continuity was performed to correct 1 d.f.
Because there were significant differences in the sex of the interrupter according to the sex of the person interrupted, the analysis was extended to determine if different types of interruptions were used by the sexes when interrupting one another.

Data concerning the distribution of categories of interruption by sex of the person interrupted and sex of the interrupter are presented in Table 9. No significant difference was obtained.

The majority of available literature is supported by the finding in this study that males interrupt females more than they interrupt one another. In this study, females also interrupted females more than males, but they interrupted males more than statistically expected.

It is interesting that statistically more interruptions occurred between the sexes than within the sexes. This perhaps speaks to more between sex conflict than within sex conflict. In an extensive case study of male response to female control in an organization, Bormann, Pratt, and Putnam (1978) found one mode of male response to be withdrawal. The males in this study may have withdrawn from the group discussion in that their participation was quantitatively less than the females. Further research in this area of male-female communication is needed.
TABLE 9

CHI-SQUARE OF SEX OF PRE-INTERRUPTER AND SEX OF INTERRUPTER BY INTERRUPTION CATEGORY

<table>
<thead>
<tr>
<th>Sex of Pre-interrupter and Interrupter</th>
<th>Clarification</th>
<th>Agreement</th>
<th>Disagreement</th>
<th>Tangentialization</th>
<th>Subject Change</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>MM</td>
<td>7</td>
<td>25.0</td>
<td>9</td>
<td>9.3</td>
<td>4</td>
<td>8.2</td>
</tr>
<tr>
<td>MF</td>
<td>10</td>
<td>35.7</td>
<td>21</td>
<td>21.6</td>
<td>15</td>
<td>30.6</td>
</tr>
<tr>
<td>FM</td>
<td>5</td>
<td>17.9</td>
<td>30</td>
<td>30.9</td>
<td>13</td>
<td>26.5</td>
</tr>
<tr>
<td>FF</td>
<td>6</td>
<td>21.4</td>
<td>37</td>
<td>38.2</td>
<td>17</td>
<td>34.7</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>100.0</td>
<td>97</td>
<td>100.0</td>
<td>49</td>
<td>100.0</td>
</tr>
</tbody>
</table>

$X^2 = 12.85; 12$ d.f., $p < .38$
Despite the finding in this section that males and females interrupted each other more across sexes, there were, nevertheless, no differences in the kinds of interruption speeches used when interrupting same sex or opposite sex partners. Thus evidence suggests that there are quantitative differences in interruptions between females and males, but no qualitative differences.

Post-interruption Speech

This subsection presents data and discussion pertinent to the third research question in this study. It presents the types of post-interruption speech engaged in by the participants and the relationship of these behaviors to the sex of the post-interruption speaker. Overall patterns of interruption will be examined, and, finally, data will be presented which depicts the sex of the pre-interruption and interruption speakers by sex of post-interruption speaker. The specific research question is:

3. What post-interruption speeches are used by group members?

a. What type of post-interruption speeches follow an interruption?

b. Are post-interruption speeches significantly related to sex of speaker?

c. Is the sex of the post-interruption speaker significantly related to the sex of the interrupter and person interrupted?
Data concerning the post-interruption categories by sex are presented in Table 10. Again, no significant differences were obtained between males and females and the types of post-interruption speech.

**TABLE 10**

**CHI-SQUARE OF POST-INTERRUPTION CATEGORIES BY SEX**

<table>
<thead>
<tr>
<th>Post-interruption Categories</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Keeps Going</td>
<td>11</td>
<td>12.1</td>
<td>23</td>
</tr>
<tr>
<td>Reintroduce</td>
<td>12</td>
<td>13.2</td>
<td>14</td>
</tr>
<tr>
<td>Cooperation</td>
<td>23</td>
<td>25.3</td>
<td>44</td>
</tr>
<tr>
<td>Re-interrupt</td>
<td>4</td>
<td>4.4</td>
<td>6</td>
</tr>
<tr>
<td>Loses Turn</td>
<td>41</td>
<td>45.1</td>
<td>62</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>91</strong></td>
<td><strong>100.0</strong></td>
<td><strong>149</strong></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 1.74; \text{ 4 d.f., } p < .75 \]

*Note:* The category of Other and the Group column have been removed.

Table 10 reveals that the interrupted speaker lost the turn 42.9 percent of the time. When the interrupted speaker regained the turn, the speaker Cooperated, i.e., responded
to the idea presented by the interrupting speaker 27.9 percent of the time. The turn was regained 14.2 percent of the time by the interrupted speaker continuing to talk longer than the interrupter. Interrupted speakers Reintroduced their ideas 10.8 percent of the time and Re-interrupted only 4.2 percent of the time.

Examination of the data demonstrates that females were the post-interruption speakers 149 times, and males 91 times. A chi-square analysis reveals this to be a significant difference, \( X^2 = 11.28; 1 \text{ d.f.}, p < .001 \).

In keeping with the fact that females were interrupted more and did more interrupting, they also were the post-interruption speakers more often. These findings speak to the overall amount of talk produced by females in this study and to a level of female participation not frequently reported in the literature.

There were no verbal objections to being interrupted by any of the participants. The combined categories of Keeps Going and Reintroduces (25 percent) indicate that the interrupted speaker resisted, although somewhat politely, the loss of turn. This seems to indicate that the pre-interruption speakers did wish to finish their turns and indirectly points to the disruptive effect of interruptions on group discussion.
The fact that speakers cooperated with the interrupter in almost equal proportions to wanting to complete their turn may be evidence of the ability of persons who have worked together to anticipate each other's ideas.

An alternative possibility is that interruptions are perceived as very disruptive and speeches coded as Cooperation serve to reduce anxiety or to prevent further disruption.

**Interruption Patterns**

This subsection presents interruption patterns. Pre-interruption, interruption, and post-interruption speeches by sex were sequenced to obtain these patterns.

The distribution of interruption patterns by sex is presented in Table 11. The most common pattern was that 24.9 percent of the time, a female was the pre-interruption speaker, interrupted by a female, and followed post-interruptively by a female. The least common pattern, (4.9 percent), was produced by a male being interrupted by a male, followed post-interruptively by a female.

A male interrupted by a female, followed by a male, comprised 20 percent of the patterns, and a female interrupted by a male, followed by a female, comprised 17.3 percent of the patterns.

Males interrupted each other proportionately fewer times (11.6 percent) than females interrupted each other
(13.1 percent). Males interrupted females 23.5 percent of the time, whereas, females interrupted males 28.9 percent of the time.

**TABLE 11**

DISTRIBUTION OF INTERRUPTION PATTERNS BY SEX

<table>
<thead>
<tr>
<th>Pattern</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMM</td>
<td>15</td>
<td>6.7</td>
</tr>
<tr>
<td>MMF</td>
<td>11</td>
<td>4.9</td>
</tr>
<tr>
<td>MFM</td>
<td>45</td>
<td>20.0</td>
</tr>
<tr>
<td>MFF</td>
<td>20</td>
<td>8.9</td>
</tr>
<tr>
<td>FMM</td>
<td>14</td>
<td>6.2</td>
</tr>
<tr>
<td>FMF</td>
<td>39</td>
<td>17.3</td>
</tr>
<tr>
<td>FFM</td>
<td>14</td>
<td>6.2</td>
</tr>
<tr>
<td>FFF</td>
<td>56</td>
<td>24.9</td>
</tr>
<tr>
<td>Total</td>
<td>255</td>
<td>100.0</td>
</tr>
</tbody>
</table>

To determine if the sex of the person interrupted and the sex of the interrupter were significantly related to the sex of the post-interruption speaker, a chi-square analysis was performed. Data from Group F was not used as male-male-male (MMM) interactions were not possible since
only one male participated in this group. The data in Table 12 reveals that there was a significant difference at the .001 level of confidence.

TABLE 12

CHI-SQUARE OF SEX OF PRE-INTERRUPTION AND INTERRUPTION SPEAKERS BY SEX OF POST-INTERRUPTION SPEAKER

<table>
<thead>
<tr>
<th>Sex of Pre-interruption and interruption Speakers</th>
<th>Post-interruption Speaker</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>N</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>N</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>N</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>MM</td>
<td>15</td>
<td>17.0</td>
<td>11</td>
<td>8.7</td>
</tr>
<tr>
<td>MF</td>
<td>45</td>
<td>51.1</td>
<td>20</td>
<td>15.9</td>
</tr>
<tr>
<td>FM</td>
<td>14</td>
<td>15.9</td>
<td>32</td>
<td>31.0</td>
</tr>
<tr>
<td>FF</td>
<td>14</td>
<td>15.9</td>
<td>56</td>
<td>44.4</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>100.0</td>
<td>126</td>
<td>100.0</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 41.60; 3 \text{ d.f., } p < .001. \]

Note: Percentages connected by a dashed underline do not differ significantly at an alpha level of .05.

Males were the post-interruption speakers 15 times following a male-male (MM) pattern, 45 times following a male-female (MF) pattern, 14 times following a female-male (FM) pattern, and 14 times following a female-female (FF) pattern.
Females were the post-interruption speakers 11 times following a MM pattern, 20 times following a MF pattern, 39 times following a FM pattern, and 56 times following a FF pattern.

Computation of the chi-square revealed that males were expected to be the post-interruption speaker in the MM pattern 10.7 times, in the MF pattern 26.7 times, in the FM pattern 21.7 times, and in the FF pattern 28.7 times. Females were expected to be the post-interruption speaker in the MM pattern 15.3 times, in the MF pattern 38.3 times, in the FM pattern 31.3 times, and in the FF pattern 41.3 times.

The data were subjected to a post hoc analysis which revealed that the significant differences occurred in the male-female (MF) and female-female (FF) comparisons. In both instances the sex of the pre-interruption speaker was the same as the sex of the post-interruption speaker more frequently than expected by chance.

In keeping with previous findings in this section, the all female pattern (FFF) was significant due to the overall amount of task produced by females, and the male-female-male (MFM) pattern is significant because of the already mentioned fact that about 55 percent of the time, the interrupted speaker regains the turn.

This section presented data concerned with the first three research questions. The findings are summarized below.
Females were interrupted more, did more interrupting, and were the follow-up speakers significantly more often than were males.

No significant differences were obtained between males and females and the types of pre-interruption, interruption, or post-interruption speech produced.

The predominant type of pre-interruption speech was coded as an Assertion which provided Information. The predominant type of interruption was coded as an Agreement. The post-interruption turn was regained almost 55 percent of the time by the pre-interruption speaker who primarily produced Cooperation speeches in response to the interrupter.

A significant difference was found when the sex of the pre-interruption speaker was compared to the sex of the interrupter. More cross-sex interruptions and fewer same sex interruptions were found than expected by chance. While there were quantitative differences in interruption sequences, there were no qualifiable differences.

The third section of this chapter presents data and discussion concerning research questions four and five. Question four examines the function of interruptions in the communication between women and men of equally achieved status, and question five examines the nature of the relationships established between these same women and men.
The Functions of Interruptions

Research question four is as follows:

4. How do interruptions function within the communication of group members?
   a. Do interruptions confirm the interrupted speaker?
   b. Do interruptions reject the interrupted speaker?
   c. Do interruptions disconfirm the interrupted speaker?

In order to examine the functions of interruptions in this study, the interruption categories were collapsed along theoretical lines to determine whether interruptions served to confirm, reject, or disconfirm the interrupted speaker. The categories of Clarification and Agreement are identified as kinds of confirmation; Disagreement is identified as a kind of rejection; and Tangentialization and Subject Change are identified as kinds of disconfirmation.

Data concerning the type of interruption by sex of interrupter are presented in Table 13. As indicated by the data, no significant differences were found between males and females relative to the type of interruptions produced. Overall, 49 percent of the interruptions served to confirm the speaker, 19.2 percent served to reject the speaker, and 31.8 percent of the interruption served to disconfirm the speaker.
# TABLE 13

**TYPE OF INTERRUPTION BY SEX OF INTERRUPTER**

<table>
<thead>
<tr>
<th>Type of Interruption</th>
<th>Sex of Interrupter</th>
<th></th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Confirmation</td>
<td>51</td>
<td>52.0</td>
<td>74</td>
<td>47.1</td>
<td>125</td>
</tr>
<tr>
<td>Rejection</td>
<td>17</td>
<td>17.3</td>
<td>32</td>
<td>20.4</td>
<td>49</td>
</tr>
<tr>
<td>Disconfirmation</td>
<td>30</td>
<td>30.6</td>
<td>51</td>
<td>32.5</td>
<td>81</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>98</td>
<td>100.0</td>
<td>157</td>
<td>100.0</td>
<td>255</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 0.65; \text{ 2 d.f., } p < .70 \]

Approximately 50 percent of the interruptions analyzed in this study functioned in such a manner as to indicate to the pre-interruption speaker that they were understood and accepted. Theoretically these confirmation interruptions function to increase the self-esteem of the speaker.

Roughly 20 percent of the interruptions functioned as rejections which communicate the message that the interrupter disagrees with the idea presented by the speaker. Although the message is in essence rejected, the pre-interruption speaker is still viewed as an agent of self-definition. In these cases, the pre-interruption speaker, in essence, did not exist for the interrupter.
Nature of Relationships

Question five speaks to the nature of the relationships developed by the subjects in this study. The question is as follows:

5. Based on the patterns of interruption among the group members, what can be concluded about the types of relationships characteristic of women and men of equally achieved status?

   a. Are the relationships functionally symmetrical or complementary?

   b. Are the relationships dysfunctionally symmetrical or complementary?

The functions of interruptions are intricately tied to the nature of the relationships established between the interactants in this study. The interruption makes a statement about how the interrupter defines the relationship. Whether or not this definition was accepted by the interrupted speaker was determined through reexamination of the post-interruption behaviors.

The definition of a symmetrical relationship is one characterized by the minimization of differences. A complementary relationship is characterized by the maximization of differences (Watzlawick, Beavin, and Jackson, 1967).

No significant differences were found between females and males in the production of types of pre-interruption speeches. More importantly, for this study, no significant differences were found in the production of types of interruption speeches between the males and females. Because no
significant sex differences were detected in these areas of speech behavior, it would appear that the women and men of equally achieved status in this study have developed symmetrical relationships.

Symmetrical relationships can be functional or dysfunctional. The 49 percent of the interruptions characterized as confirmations are considered to be functionally symmetrical. Fifty-one percent of the interruptions represented dysfunctional symmetry as evidenced by the fact that 19.2 percent of the interruptions were characterized as rejections, and 31.8 percent of the interruptions were characterized as disconfirmations.

Because there were no significant differences between the sexes in post-interruption speeches, it would appear that the males and females responded similarly to the definitions of the relationships proposed by the interrupter.

How the interrupter's definition of the relationship was received was determined through reexamination of the post-interruption presented in Table 10. The data reveal that the interrupted person accepted the definition of the relationship 27.9 percent of the time as evidenced by the proportion of speeches coded as Cooperation. The definition of the relationship proposed by the interrupter was resisted 29.2 percent of the time as evidenced by combining the
proportions of speeches coded as Keeps Going, Reintroduces, and Re-interrupts. The interrupted speaker lost the turn 42.9 percent of the time.

To further understand how the interrupter's message was received, the most common patterns of interruption are presented in Table 14. Examination of the data reveals that the interrupted person produced speeches coded as Keeps Going four percent of the time, Cooperates 16 percent of the time, and Loses Turn 28 percent of the time.

Table 14 reveals that 12 percent of the turns lost occur after an interruption that functioned to confirm the speaker. This could indicate that the interrupted person is satisfied that the interrupter has sufficiently completed the thought and, therefore, does not feel the need to further add to the conversation. These patterns involving lost turns seem to reflect the interrupted person's acceptance of how the relationship has been defined by the interrupter.

To illustrate these phenomena, an example is presented from the data:

Female 3: Yeah # but most of the kids have finished their issues message by the time

Male 1: [Yeah # the message has already been given]

Female 1: Yeah (you're right)
<table>
<thead>
<tr>
<th>Pattern</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assertion-Information-Confirm-Keeps Going</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Assertion-Information-Confirm-Cooperate</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Assertion-Information-Confirm-Loses Turn</td>
<td>31</td>
<td>12</td>
</tr>
<tr>
<td>Assertion-Information-Reject-Loses Turn</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Assertion-Information-Disconfirm-Cooperate</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Assertion-Information-Disconfirm-Loses Turn</td>
<td>29</td>
<td>11</td>
</tr>
<tr>
<td>All Other Patterns</td>
<td>134</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>255</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: All Other Patterns had a frequency of less than 10.

Further acceptance seems to be evident by the fact that five percent of the turns are lost, preceded by rejections and 11 percent of the turns are lost preceded by a disconfirmation. In these cases the interruptions served to discourage the interrupted person such that they did not respond and thus accepted the definition of the relationship offered by the interrupter.

The following example is presented to illustrate an interruption which functioned as a rejection resulting in loss of turn:
Female 1: Oh! You get a lot of s
Male 5: [Depends on what you mean by that ( )]
Male 2: There are a lot of rewards # a lot of rewards.

An example of an interruption which functioned as a disconfirmation follows:

Male 3: But let's not forget
Male 2: [For one thing I think they should lengthen it for one thing]
Female 2: Lengthen it?

Further examination of Table 14 substantiates the fact that confirmations apparently did function to encourage the interrupted speaker in that four percent of the speeches coded as Keeps Going and 10 percent of the speeches coded as Cooperation were preceded by confirmations.

The pattern of six percent of the speeches coded as Cooperation being preceded by a disconfirmation is not as readily explained. Disconfirmations were comprised of the categories of Tangentialization and Subject Change. In the case of a tangential interruption, the pre-interruption speaker apparently repairs the interruption by responding to the interrupter as seen in the following example:
Female 2: What was so funny is that this becomes like a catch twenty-two # it's real satirical

Male 1: [Did you see the movie the other night?

Female 2: Was it on T.V.?

In the case of an interruption which changes the subject, the speaker apparently views the topic change as useful as in the following example:

Female 2: I wondered about it for a long time too I remember when I came here I always thought am I doing a good job

Female 1: [Now last year we did these]

Female 2: Yeah

Subject changes also stimulated speeches coded as Cooperation when they disrupted the conversation to a severe degree. The following example illustrates the point:

Female 1: I don't think it's fair to everyone that's not here # not fair to her no # or to us

Male 2: [So what time are they serving lunch?] (1.99)

Female 1: Yeah # don't we get any food?

This section presented data concerned with the fourth and fifth research questions. The findings are summarized below.

Interruption categories were collapsed along theoretical lines. The results indicated that 49 percent of the
interruptions functioned as confirmation, 19.2 percent functioned as rejections, and 31.8 percent functioned as disconfirmations. Further, it was determined that there was no significant difference between males and females in the production of types of interruption. It was therefore concluded that the relationships were symmetrical in nature.

More specifically it was determined that 40 percent of the interruptions suggested functionally symmetrical relationships and 51 percent suggested dysfunctionally symmetrical relationships. Females and males both accepted the definitions of the relationships as offered by the interrupter 27.9 percent of the time, resisted the definition 29.2 percent of the time, and lost their turns 42.9 percent of the time.

Examples of the most common patterns of interruption were presented to provide a more complete understanding of lost turns and other common responses to being interrupted.

This chapter presented the findings of this study. Chapter V will present the summary, the conclusions, and the recommendations.
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter is divided into three sections. The first section presents a summary of the research project. The second section discusses conclusions drawn from the study, and the third section presents recommendations for further study.

Summary

This section summarizes the research problem, the procedures employed in data collection and analyses, and the findings.

The primary purpose of this study was to examine the patterns of interruption among women and men of equally achieved status. Secondly, it was the purpose of this study to examine the implications of these data relative to the nature of the relationships developed between the sexes. Specifically, the study was designed to add to the body of knowledge on differential styles of communication used by
women and men, and to examine the nature of the work relationships developed by women and men as evidenced by their communication with one another.

The relationships analyzed were those of graduate students who were participants in intact groups from courses or programs at The Ohio State University. The groups were obtained through arrangements with faculty and staff coordinators. Subjects in the study were expected to continue to participate equally and responsibly in the work of the group in which they were members. Where formal leaders had been a part of the group structure, they did not participate in the discussions used in the study in an effort to control for equal status of group members.

In all, 17 males and 18 females from six different groups volunteered for participation in this study. The subjects tended to be from the helping professions although five major colleges were represented by the participants. Group size ranged from four to nine members, and in all but one group, the distribution of males and females was approximately equal. The ages of the subjects ranged from 23 to 46, and all subjects had previous employment experience. Each group agreed to have approximately an hour of one of their regular group meetings videotaped.

A category system was developed to identify pre-interruption, interruption, and post-interruption speech behavior, and was used to code the data. Pre-interruption
speech refers to the speech that was interrupted. The categories of pre-interruption speech were developed by the researcher in consultation with faculty in counseling and communications. They reflect speech styles reported in the literature to differ between women and men and those commonly used in the analysis of group interaction. These categories revealed the types of speech which were likely to be interrupted. The pre-interruption speeches were divided into a) the structure categories of Assertion, Question, and Diverse Speech, and into b) the function categories of Information, Support, Non-support, and Hesitancy or Self-doubt.

Interruption speech refers to simultaneous talk by a second speaker which occurs prior to a possible transition place in the speech of the interrupted person. The interruption categories were developed from the theoretical framework proposed by Watzlawick, Beavin, and Jackson (1967) which posits that all communication serves to confirm, reject, or disconfirm another. For the purposes of this study, the categories of interruption were Clarification, Agreement, Disagreement, Tangentialization, and Subject Change. Depending on the similarities or differences in these types of interruption behavior, relationships were characterized as functionally symmetrical or complementary, or dysfunctionally symmetrical or complementary.
Post-interruption speech refers to the speech immediately following an interruption. These categories were developed in order to provide a more complete understanding of the interactional nature of interruptions. The post-interruption speeches were categorized as Keeps Going, Reintroduces, Cooperation, Re-interrupts, and Loses Turn.

The investigator and a second person trained in transcription techniques transcribed the data from the videotapes. The data were obtained by playing the videotapes until an episode of simultaneous talk was heard. When such an episode was heard, the videotape was stopped and replayed until an interruption was isolated. The speech preceding the interruption, the interruption, and the speech following the interruption were then transcribed. A total of 255 interruption sequences were transcribed.

Three trained judges established an interrater reliability of at least .80 for the three areas of the category system prior to the data being coded. The coding of the data was done independently by the investigator and a second person trained in the technique. The reliability between the investigator and the second coder was equal to the reliability obtained between any pair of the trained judges.
The data in the study were represented by nominal measures. Percentage distribution and the chi-square statistical techniques were selected for the analysis of the data.

The findings related to each of the investigative areas are summarized in the following discussion. A description of the similarities and differences among the groups is presented first. Next, the pre-interruption, interruption, and post-interruption behaviors are summarized. Finally, a discussion of the relationships developed by the group participants, as evidenced by their communication pattern is presented.

**Selected Demographic Characteristics**

The six groups which participated in this study differed in size, in group history, and in the number of interruption sequences produced by each group.

No significant differences were found among groups in the number of interruption sequences produced when first half hour and second half hour of the group time were compared. All groups exhibited a pattern of approximately doubling the number of interruption sequences in the second half hour of group time. Similarly no significant differences were detected in the kinds of speech behavior used when the first half hour was compared with the second half
hour. In other words, the period of group time, earlier or later in the hour, made a difference only in terms of the amount of interrupting, but not in terms of the kind of interruption that occurred in the groups.

Due to insufficient sample size in several cells, statistical analysis of the categories by group was not attempted. However, examination of the data revealed strong similarities among the six groups in the proportional use of pre-interruption, interruption, and post-interruption speeches.

**Interruption Sequences**

The summary of interruption sequences speaks to research questions one, two, and three of this study. These questions deal with the kinds of pre-interruption, interruption, and post-interruption speeches, and the relationship of these speeches to the sex of the speaker.

Contrary to some of the results found in the literature, this study found that females were interrupted more, did more interrupting, and were the follow-up speakers significantly more often than were the males.

No significant differences were obtained between females and males in the production of types of pre-interruption, interruption, and post-interruption speeches. None of the common stereotypical types of pre-interruption speech were associated with either males or females. Both
sexes predominantly produced Assertions which provided Information, and both sexes raised Questions in equal proportions. No difference was found in the use of Support or Nonsupport statements. The most common type of interruption was an Agreement. When the interrupted speaker regained the turn, Cooperation was the most typical post-interruption response. The turn was lost to a new speaker following an interruption about 45 percent of the time.

Females interrupted males and males interrupted females significantly more often than expected by chance. Conversely, same sex interruptions occurred less frequently than expected. No significant differences, however, were found in the types of interruption speech produced, regardless of the sex of the interrupter or the sex of the person interrupted.

In general, the data regarding the first three research questions indicate that with highly educated subjects of equally achieved status, there are no differences in the types of speech behavior produced. Further, the females exhibited more communication dominance than the males as evidenced by significantly more overall involvement in the interruption sequences.
Nature of the Relationships

The last two research questions were designed to determine the function of the interruptions and, consequently, the nature of the relationships developed between men and women in this study.

When the categories of interruption were collapsed using confirmation, rejection, and disconfirmation, it was determined that about 50 percent of the interruptions functioned to confirm the interrupted person. About 30 percent of the interruptions were disconfirmations, and about 20 percent were rejections. No significant difference was found between and among males and females and the production of types of interruptions. Since there was a minimum of difference in types of speech behaviors, the relationships were determined to be symmetrical in nature. The interruptions characterized by confirmations were evidence of functional symmetry, whereas the interruptions characterized by rejections and disconfirmations were evidence of dysfunctional symmetry. Therefore, 50 percent of the interactions were functionally symmetrical, and 50 percent of the interactions were dysfunctionally symmetrical.

Of the 57 percent of the times that the interrupted speaker immediately regained the turn, he or she demonstrated cooperation with the interrupter's topic one-half of the time indicating an active acceptance of the
definition of the proposed relationship as demonstrated by the number of speeches coded as Keeps Going, Reintroduces, and Re-interrupts. The definition of the relationship was passively accepted about 43 percent of the time when the turn was lost immediately following the interruption of a new speaker.

Conclusions

This section presents the major conclusions drawn from the study.

Consistent with previously reported research findings on group process conflict behavior, the task groups in this study followed a pattern of interruption sequences increasing as the time of the discussion progressed.

The first conclusion reached from this study is that interruption behavior does represent a kind of group behavior reflective of the working phase of the group process. Fewer interruptions are evident in the early part of the group discussion when orientation and acceptance behavior are common. Later in the group, when the members are resolving the task, rather than becoming oriented to one another, interruptions are apparently a more acceptable part of relating. At least, the focus on the task seems to lessen the sensitivity of one member to another.

Secondly, it is concluded that since the kinds of interruption sequences did not change over time, a random
sample of any time segment of a group's interaction would result in essentially the same findings regarding the type of speech behavior obtained from analysis of the entire interaction. It would seem that once a group pattern is set, the type of speech behavior is maintained. This speaks to the importance of establishing desirable patterns of interaction early in the life of a group, and to differentiating between the kind and the number of interaction patterns.

Since groups establish patterns, so too, must individuals. It seems reasonable to conclude that the interruption behaviors engaged in by each person are probably an accurate sample of the kinds of interaction behaviors generally engaged in by the person. Individual behavior may vary in amount, but probably does not vary substantively in kind.

The third conclusion reached in this study is that equal status, high levels of education, and/or the work situation may be factors which create more participation on the part of women, and/or conversely, create a certain amount of withdrawal from participation on the part of men. The subjects in this study were highly educated, involved in work, and equal in status. Under these circumstances, the female subjects demonstrated significantly more pre-interruption, interruption, and post-interruption speech behaviors than did the males.
In a case study of an organization, Bormann, Pratt, and Putnam (1973) found that one male response to female domination was withdrawal. They believed that the withdrawal could be a response to a stereotypic double bind situation experienced by the males. They explain that, on the one hand, males could not deny the leadership of females without also being chauvinistic and experiencing the force of societal disapproval. On the other hand, to accept female leadership leaves the male with a decreased sense of masculinity since, traditionally, the male self-esteem is intimately related to career success. As long as stereotypic role relationships are valued, the double bind situation creates a no win result for both males and females.

Tresemer and Pleck (1974) found that men responded to women who become more instrumental and task-oriented with resistance. The resistance stems from frustration of traditional male emotional dependence on women (p. 72). It appeared as though the males who participated in the present research study may have developed a different type of interaction with their female partners. Rather than depend on the females to satisfy the socioemotional task of the group, the male members seemed to depend on the females to carry out the task work of the groups.

Male withdrawal from participation could be viewed as a means of reducing competitiveness between the sexes.
Studies of successful women (Diamond, 1979; Hennig and Jardim, 1978) reveal that these women generally adopt male attitudes because they believe that the way to succeed in a male's world is to act like men. In order to overcome skepticism about women's participation in leadership positions, the women in this study may have overcompensated and be doing more of what they perceived men to have been doing.

The fourth conclusion is drawn from the finding that there were no significant differences between males and females and the types of speech behavior used. Therefore, equal status, high levels of education, and/or the work situation in young and middle age adults may be factors which create similar types of speech behavior in men and women.

The belief that male and female speech parallels the stereotype of male and female behavior is unfounded under the circumstances of this research project. This may be because the behavior of men and women at work is expected to be the same or at least similar. Key (1972) believes that context is the crucial factor in detecting linguistic differences. She believes that linguistic behavior will vary the most when speakers are enacting a sexual role. An androgynous posture may be crucial to a successful work environment.
Finding no difference in type of speech behavior produced by the sexes makes questionable the belief that there are speech styles particular to one or the other sex, which are apt to stimulate an interruption. It seems reasonable to deduce that when the subjects in this study are interrupted, it is not because they are using a particular type of speech. Other factors are undoubtedly interacting to produce interruption behavior. A number of these are presented under recommendations for future research.

If the phenomena of interruption is typical of the entire interaction, then a fifth conclusion can be reached that about half of all interactions promote feelings of high worth and about half promote feelings of lesser worth. Almost half of the interruptions between the males and females in this study functioned as confirmations, 20 percent functioned as rejections, and the remaining 30 percent functioned as disconfirmations. These findings speak to the quality of life in the world of work for these men and women. Whether or not these findings are reflective of other situations is unknown. If one of the goals of higher education is to enhance the quality of human life, then it seems reasonable to conclude that the university work environment may be more ideal than others. If this is true, it is not encouraging that the best work environment we are able to create would be rewarding only half the time.
Finally, it is concluded that, since no significant differences were detected in the kinds of pre-interruption, interruption, and post-interruption speech behaviors, the relationships developed among the subjects in this study were symmetrical in nature. Although the females quantitatively participated in more interruption sequences, the nature of the participation was not significantly different from the males' participation.

Symmetrical relationships are characterized by the minimization of differences and can become dysfunctional when competition escalates. There may be some uneasiness between the sexes in that they significantly interrupted each other more than expected. This uneasiness might be explained by the unfamiliarity of the equal status situation, perhaps sexual attraction, loss of separateness and thus sexual identity, or some other tension producing phenomena such as age, personality variables, appearance, or experience.

**Recommendations**

The first part of this section presents recommendations for the content areas of guidance and counseling and human communication. This chapter will be concluded with recommendations for further research.
Recommendations for Content Areas

The subject of communication between the sexes continues to need clarification and specification as indicated by the conflicting reports available in the literature on the subject. Specifically, it is increasingly clear that when differences in communication behavior between women and men are discussed, the nature of the population should be given careful consideration.

This study found no difference in types of speech used in interruption sequences by the female and male subjects, who were primarily young adults, highly educated, in a work environment, and knowingly participating in a research project. Differences may or may not be present under circumstances of different age and educational level, in different types of work, in situations which increase rather than diminish the sex roles of the participants, in situations where the distribution of the sexes is unequal, and where the status of the interactants is unequal.

The findings of this study support the idea of androgyny presented in the literature which posits that behaviors may be more a product of psychological sex rather than biological gender (Bem, 1974; Bem and Lenney, 1976). Increasing research focusing on the concept of androgyny is being produced in both the areas of counseling and communication. Examples of such research are the projects by
Eman and Morse (1978) and Spence, Helmreich, and Strapp (1975). It is recommended that research emphasizing the concept of androgyny be continued.

Equally important to the areas of counseling and communication is the necessity of examining the function of communication rather than simply the content. The available literature implies, for example, that interruptions serve a completely negative purpose in interactions. The findings from this study do not totally support this belief. This study found that there are different types of interruptions, and that the majority functioned to confirm another speaker. Without examination of the function of communication behaviors, it is quite possible that erroneous conclusions could be reached.

More consideration should be given to examining the nature of work relationships between women and men. The findings in this study revealed that high, equal status males and females produced symmetrical relationships. However, the fact that these subjects interrupted opposite sex partners significantly more than they interrupted same sex partners is perhaps indicative of the escalating competitiveness characteristic of some symmetrical relationships.

Training programs designed to prepare future professionals might reinforce in trainees the potentially destructive outcomes of rejecting and particularly disconfirming
one's communication partner. Special attention could be paid to these behaviors during supervision of student interactions, e.g., in seminar sessions, during counseling practicum experience, and during student-teacher experiences.

The way professionals interact with others has implications for the quality of professional relationships as well as for the quality of personal relationships. The more relationships can be characterized by confirmation, the more psychologically healthy they will be.

Further, given the fact that there are still fewer women than men on graduate faculties and participating in graduate training programs, careful consideration should be given to including models of interaction that traditionally have been excluded from the male value system, e.g., collaboration models. Cooperation rather than competition, which is the result of dysfunctional symmetry, will provide maximum productivity when males and females are working together (Kjervik, 1979).

Recommendations for Further Research

For researchers interested in conducting research which would involve the use of the category system developed for this project, several recommendations are suggested.
It is recommended that to improve the interrater reliability, the interruption categories could be collapsed along theoretical lines. The result would be three types of interruptions—confirmation, rejection, and disconfirmation. With fewer categories that were conceptually more distinct, coders would undoubtedly be in more agreement with one another.

In the post-interruption categories, virtually the same task is accomplished when the speakers produce speeches coded as Keeps Going or Reintroduces. Reintroduction of a topic is simply a more polite form of continuing to speak. Again, by reducing the number of categories, post-interruption reliability could be slightly improved.

Several recommendations are proposed to improve the validity of the category system. First, it is recommended that the pre-interruption function category of Information might profitably be subdivided. Future researchers might be interested in differentiating between speeches which give opinion or suggestion, and those speeches which give facts. A division of the Information category along these lines would discriminate more finely between those types of communication behaviors reported to be more characteristic of females and those reported to be more characteristic of males.

The second recommendation speaks to two changes for improving the validity of the interruption categories. One
is that consideration should be given to removing the category of Clarification and instead coding the speeches appropriate to that category as Other. The category of Clarification, as presently defined, is not actually an indication of confirmation in the strictest sense of the word. Clarification was categorized as a confirmation in this study because it approaches confirmation more closely than it does rejection or disconfirmation.

The other is that in the interruption categories, Agreement might be divided to distinguish between those speeches which simply agree with the interrupted speaker, and those that agree with the interrupted speaker but go further and add to the idea being discussed. This suggestion speaks to the issue of how much the focus of the conversation changes when the interrupting speaker adds his or her own ideas.

It is recommended that for a more complete understanding of the interruption process, post-interruption category of Loses Turn be made more explicit. In this research, this category merely provided the information that the pre-interruption speaker was not the speaker following the interruption. No means was provided for indicating what type of speech behavior was used by the post-interruption speaker. It would be useful to know whether
the new post-interruption speaker reintroduced an idea, cooperated with, or re-interrupted the interrupting speaker.

It is recommended that future researchers limit, in some way, the length of the speeches for coding purposes. For purposes of this research project, the entire speech was coded. The sentence or groups of sentences may be too gross a form to use if researchers are attempting to distinguish between male and female types of speech. Consideration should be given to the trade-off between reliability and validity should researchers decide to pursue this last recommendation.

It is recommended that future research in this area may be undertaken at a micro level, i.e., the level of word use rather than entire sentence production. The presentation of the problem for this project spoke to this issue by suggesting that women use more adverbs and adjectives, more flowery language, fewer verbs, and less swear words. Differences in language style between women and men may be evident at the level of individual word choice.

It is recommended that further research on small group process be conducted on the phenomena of simultaneous talk. In this study simultaneous talk was coded as an Other type of speech. This resulted in the loss of some data. It is commonly assumed that most periods of simultaneous talk are not profitable times for groups. No one
person can be understood and, as a result, response to a specific theme may be more difficult. Investigation into the types of behaviors which stimulate simultaneous talk, who gains the floor following an episode of simultaneous talk, and the function of simultaneous talk could be profitable.

It is recommended that more sophisticated electronic equipment be used when recording interactions, especially group conversations. More sensitive equipment would enable the researchers to decipher exactly what is said by each speaker when simultaneous speech does occur. More sophisticated electronic equipment could provide voice patterns for each speaker with the possibility of determining the emotional state of the speaker. This possibility would allow researchers to more completely examine the complex nature of interactions by permitting better judgments about the intended meaning of the spoken message.

This study focused on the phenomena of verbal interruption. It is apparent that other behaviors, particularly nonverbal behaviors, also function to interrupt a speaker. In view of the amount of time and effort put into group discussions in virtually every type of organization, it is recommended that further research be conducted on the function of other communication behaviors that effect
interpersonal interaction. Nonverbal areas which need fur­
ther investigation are the behaviors of eye contact, laugh­
ter, intonation, gesture, posture, and silences.

It is recommended that this study be replicated using
different populations under different circumstances. In
particular, it would be useful to know if the findings of
this study would be similar if the subjects who partici­
pated in this study were to interact with persons of higher
or lower status. It would be useful to know if the find­
ings would be similar with subjects of different ages with
different educational backgrounds, participating in differ­
ent situations.

To investigate the possibility that speech styles
vary with situation, it would be useful to determine if
this study's results would be duplicated when highly edu­
cated, equal status subjects were interacting socially
rather than at work. Future research on language differ­
ences between men and women might also be more profitably
conducted in sex specific situations, i.e., situations
typically thought of as feminine or masculine, or in situ­
ations where those in attendance are all male or all female.

It is recommended that research on the character­
istics of female and male graduate students, and research
on the similarities and differences between male and female
professionals be conducted. Differences might be explained
by the fact that there are still fewer women in graduate schools and occupying careers, and these women may have over-learned their lessons from male role models.

It is recommended that research be conducted using the entire group interaction. It is possible that in this study women did more talking, but only in the interruption sequences. Transcripts of the entire group process would reveal this. These transcripts of the entire group process would also allow the researcher to examine speech behaviors more thoroughly, i.e., perhaps every time a question was raised, the speaker was interrupted, whereas only part of all assertions were interrupted. The longer range individual reaction could be examined, and a more complete pattern of a person's interactions could be identified.
APPENDIX A

METHOD FOR TRANSCRIBING DATA

1. Record speaker using predetermined code for speaker.
2. Record verbalizations as they are spoken.
3. Note significant nonverbal behaviors.

Transcribing Conventions

(x) Indicates a hitch or stutter.

[ ] Brackets indicate the overlaps or interruptions. Overlapping talk will be placed directly under the talk it overlaps.

:: Colons indicate the immediately prior syllable is prolonged.

= Equal sign indicates that no time lapses between utterances "latched" by the marks.

Underscoring represents heavier emphasis.

(?) (!), (,), (.) Punctuation marks are used for intonation, not grammar.

(word) Single parentheses with words in them indicate that something was heard, but the transcriber is not sure what it was.
(  ) Single parentheses without words indicates that something was said but not caught by the transcriber.

((softly))) Double parentheses enclose "description," not transcribed utterances.

(#) Indicates a pause of one second or less.

(1.2) Numbers enclosed in parentheses indicate the seconds and tenths of seconds ensuing between speaker's turns, or internal to speaker's turn.

(°) The degree sign indicates the talk it precedes is low in volume.
APPENDIX B

CATEGORY SYSTEM

Pre-interruption Speech
(Code each pre-interruption speech twice: 1) once for structure, i.e., 1, 2, 3, or 8, and 2) again for function, i.e., 4, 5, 6, 7, or 8)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assertion - any speech in the declarative or imperative form, e.g., &quot;It's important for us to cover the entire agenda.&quot;</td>
</tr>
<tr>
<td>2</td>
<td>Question - any speech with interrogative form, e.g., &quot;Where do we begin?&quot;</td>
</tr>
<tr>
<td>3</td>
<td>Diverse speech - this category includes speech which is prolonged or speech where the speaker expresses three or more different ideas.</td>
</tr>
<tr>
<td>4</td>
<td>Information - a speech which predominately gives or seeks an opinion, suggestion, idea, or fact, e.g., &quot;I think we should start at the beginning and consider each item.&quot; Information might be preceded by acknowledgment of a preceding speech.</td>
</tr>
<tr>
<td>5</td>
<td>Support - a speech which seeks or gives agreement, acceptance, or approval, e.g., &quot;Yeah, your idea makes sense.&quot; Support does not substantively add to an idea.</td>
</tr>
</tbody>
</table>
6 Nonsupport - a speech which expresses challenge, disagreement, or rejection, e.g., "I don't like the way this situation is being handled." Nonsupport might acknowledge a preceding speech, e.g., "Yeah, but . . . ."

7 Hesitancy or self-doubt - a speech reflecting uncertainty of the speaker, e.g., "I don't know much about this but, . . . ." or speech filled with stuttering, or utterances like "ahh," "well," or "I mean," at the point of being interrupted. (One disfluency does not qualify as hesitancy.)

8 Other - any speech not appropriate to the above categories.

**Interruption Speech**
(Code each interruption speech only once)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clarification - an attempt to better understand the first speaker's communication, e.g., &quot;What do you mean?&quot; Clarification does not add substantively to the first speaker's speech.</td>
</tr>
<tr>
<td>2</td>
<td>Agreement - speech which demonstrates agreement, support, concurrence, compliance, or understanding and can be demonstrated through further development or elaboration of the first speaker's idea, e.g., &quot;You're right, our meetings are very business like,&quot; in response to &quot;Things are really different now.&quot;</td>
</tr>
<tr>
<td>3</td>
<td>Disagreement - speech which demonstrates rejection, disagreement, challenge, or contradiction of the first speaker's communication, e.g., &quot;I don't like that idea,&quot; or &quot;Yes, but that's not all there is to the problem.&quot;</td>
</tr>
<tr>
<td>4</td>
<td>Tangentialization - a speech which 1) reflects awareness of the first speaker's statement, and 2) in some way makes light of or minimizes the intent of the first speaker's message, e.g., &quot;Fine, except the typing is terrible,&quot; in response to &quot;What do you think of the rough draft I presented to the committee?&quot;</td>
</tr>
</tbody>
</table>
Subject Change - a speech which 1) reflects no awareness of the first speaker's statement, and 2) has no theme in common with the first message and/or is a substantial change of topic, e.g., "Where are the reports to be filed?" in response to "Someone forgot to start the coffee."

Other - any speech not appropriate to the above categories.

Post-interruption Speech
(Code each post-interruption speech only once)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Keeps Going - the interrupted person continues speech while being interrupted and maintains own idea or theme.</td>
</tr>
<tr>
<td>2</td>
<td>Reintroduces - the interrupted person pauses or breaks speech, allowing for the interruption, then continues with previous idea after being interrupted.</td>
</tr>
<tr>
<td>3</td>
<td>Cooperates - the interrupted person further develops, acknowledges, agrees, or responds to the interrupter's idea. The interrupted person may pause to allow the interruption or may continue talking simultaneously but change theme after the interruption.</td>
</tr>
<tr>
<td>4</td>
<td>Re-interrupt - the interrupted speaker regains the turn by interruption of the second speaker.</td>
</tr>
<tr>
<td>5</td>
<td>Loses Turn - a different speaker from the first speaker is the third speaker and may obtain the turn through 2, 3, or 4 above. The interrupter is a different speaker from the first and can therefore be the third speaker.</td>
</tr>
<tr>
<td>6</td>
<td>Other - any speech not appropriate to the above categories.</td>
</tr>
</tbody>
</table>
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