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The impact of sex and gender on powerful/powerless language use and perceptions of credibility during an ongoing dyadic conversation

Makay, Donna Leigh, Ph.D.
The Ohio State University, 1992
THE IMPACT OF SEX AND GENDER ON POWERFUL/POWERLESS LANGUAGE USE AND
PERCEPTIONS OF CREDIBILITY DURING AN ONGOING DyADIC CONVERSATION

DISSERTATION

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

By

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The Ohio State University
1992

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Major Field: Communication
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CHAPTER 1
INTRODUCTION

The study of effective interpersonal communication can be traced back to almost all philosophical and scientific theorists who have been concerned with the nature of human relationships (Eisler, 1978). From the sophistic rhetors through Aristotle to present day, scholars have sought to codify the art of rhetoric in order to teach individuals how to obtain interaction goals. Present communication research stresses strategic uses of communication in order to obtain specific objectives (Spitzberg & Cupach, 1984). Whether the setting is public or interpersonal, power and control is a concern that is fundamental to the study of communication.

Central to unraveling the mystery of how perceptions of influence are created through the process of human communication is an understanding of the role of language in shaping the perception of power. Language is an abstract system of phonological, syntactic, semantic, and pragmatic rules (Bradac, Bowers & Courtright, 1979). Normal adult members of a language community acquire knowledge of these rules during childhood (Berger & Bradac, 1982). Linguistic knowledge and competent performance of this system, however, is not equivalent for each interlocutor. While the capability for language is present in most people, not all of us use language comparably. Many would argue that a major reason for this inequity is due to the learning gained through repeated social interactions (Spitzberg & Cupach, 1984).
Performed language has three functions in social interaction (Berger & Bradac, 1982). These functions are referential, instrumental, and expressive. Referential language indicates objects, events, actions or concepts which correspond to social and physical reality experienced by a speech community. The instrumental function of speech involves speech acts which are illocutionary and perlocutionary; it serves to get deeds accomplished (Searle, 1969). The expressive function of language conveys additional information to listeners, some intended and some not. It is this expressive function of language, which is often not consciously intended, that requires the attention of scholars.

Social psychologists have long shown an interest in investigating speech styles which impact upon this expressive function of language (Giles & Powesland, 1975). A recent line of inquiry that addresses the relatively subtle dimension of style is the research on powerful/powerless language. Scholars have uncovered a specific style of talk termed powerless talk (O’Barr, 1982) which diminishes perceptions of credibility, dynamism, trustworthiness, and attractiveness of the speaker (Erickson, Lind, Johnson & O’Barr, 1978). In traditional rhetorical study, these speaker qualities are consistently found to be crucial in the art of persuasion (Osborn & Osborn, 1991). Initially, the concept of a powerless language style was associated with women (Lakoff, 1975). In the 70's, a decade which stressed equal rights for women, literature emerged which looked for answers to remedy the unequal power distribution between men and women. Lakoff (1975) argued that women create a vicious circle in using a style of language which maintains their subordinant position. This subordinant language style was also observed in the courtroom, which attracted theorists to identify the specific effects of powerless language use by witnesses on jurors (Erickson, et al., 1978; O’Barr & Atkins, 1980; Warfel, 1984; Wright & Hosman, 1983). Powerless speech was
shown to affect perceptions of speaker competence such that the speaker's believability was called into question.

The literature on the style of powerless language continues to grow in an effort to understand the role this construct plays in impression formation. Because of the initial connection of this language style to Lakoff's portrayal of powerless "women's language", many scholars have attempted to show that powerless language is associated more with women than men (Bradac, Hemphill & Tardy, 1981; Erickson et al., 1978; Hosman & Wright, 1987; Lind & O'Barr, 1979; O'Barr, 1982; O'Barr & Atkins, 1980). The results have been inconsistent. Therefore, there are several aspects of the research tradition on powerful/powerless language that merit further consideration. One aspect is concerned with the way communication is operationalized in research while the other is directly related to the inconsistency in results pertinent to sex differences.

Studies in powerful/powerless language have typically relied on the use of researcher-prepared messages which include a powerful and powerless language condition that is either read by subjects or delivered by actors via tape recorder. Thus, subjects are typically presented with a monologue and then asked for their impressions of the speaker. Studies of this type operationalized powerless or powerful talk in this artificial manner in order to control for the incidence and frequency of powerless speech components. This was necessary in initial research to determine the role of isolated components of powerful/powerless talk in influencing impression formation. Once this information was determined, however, powerful/powerless language use and perceptions of conversational partners during an interaction to this language style was not examined. The artificial nature of much of the past research limits generalizability to actual interactions.

A second issue involving research design deals with data analysis. Recent
literature has called into question much of the research looking at sex differences within dyads on the grounds that scholars have inappropriately used the individual as the unit of analysis, thus violating assumptions of statistical independence (Dindia, 1987; Kenny & Kashi, 1991). Because of the interdependent nature of conversation, it is impossible to study one person in an interaction without looking at the effect of their partner. Kenny argues that this violation of the assumption of the independence of conversational partners may lead to an inaccurate interpretation of results.

The third difficulty with past research on powerful/powerless language is the use of biological sex as an independent variable. Past research on sex differences is fraught with inconsistent results. Many scholars feel the reason for these contradictory findings is that strict reliance on only one's biological make-up does not allow for the inclusion of the major factor of social learning which has been shown to also impact behavior (Bem, 1975; Spence, Helmreich & Stapp, 1975). They stress that both nature and nurture are important determinants of behavior. By focusing on biology alone, a great deal of variance is unaccounted for in communication. In order to address these inconsistencies regarding sex differences, research should utilize a design that includes both sex and psychological gender. Psychological gender is the membership to a sex category that is learned through social interaction as individual norms and attitudes appropriate for one's biological sex are constructed according to one's social community. Past communication research looking at psychological gender differences has had promising results in the area of communication.

Therefore, the purpose of this study is to investigate powerful/powerless speech in a natural language setting in order to determine if there is a relationship between speech style, psychological gender, sex, and perceptions of credibility by the interlocutor. Given past research which associates powerless talk with females, it may
be expected that feminine gender types will use more of the powerless language style than masculine gender types regardless of sex and that these individuals will be perceived as exhibiting less credibility than masculine gender types.

As we move into an era which fosters communication, the age of information, the need to understand how our language effects perceptions of competence and power escalates. During the Industrial Revolution, less than half of the population occupied jobs that moved them into a field which demanded communication skills. Today that has changed, with more and more women leaving their homes to join males in the work force in order to provide for their families. Roles in society have changed; social patterning leading to ascribed psychological gender has changed; demands on individuals to be powerful in communication situations have changed; but research has not kept pace with these changes and demands. This study provides an important contribution to knowledge by advancing understanding of both the use of powerful/powerless language in dyadic interactions and the effects of this language on perceptions of the speaker's credibility.

The following chapter presents a review of the literature on the development of the powerful/powerless language style, sex differences in powerful/powerless language and a statement of the research problem. Chapter three discusses the research method while chapter four explains the results. This study concludes with chapter five which provides a discussion of the findings and suggestions for future research.
CHAPTER II
LITERATURE REVIEW

The review of literature is presented in five main sections. The first section provides a framework for the study by looking at the history of the construct of powerful/powerless language. The evolution of the construct will be discussed along with relevant research on the components which comprise powerful/powerless language. The next section introduces two problematic research issues in past studies: the primary use of transcripts instead of natural language and the failure of the small number of studies which did use natural language to use the dyad rather than the individual as the unit of analysis. Design issues are followed by a discussion of the lack of consistent findings when looking for differences in the use of powerful/powerless language between males and females. The concept of psychological sex is then presented along with a review of communication research which demonstrates that it is a better predictor of communication behavior than biological sex. Finally, the problem for this study is introduced.

Powerless Language

In 1975 Robin Lakoff published a small book which looked at the role of discourse in shaping impressions of power. *Language and Woman's Place* was the genesis of a line of research which later came to be known as powerless language. In an effort to understand what creates impressions of dominance or tentativeness in speech,
researchers have identified specific language features which Lakoff advanced were components most often found in women's discourse and which create impressions of lack of power. This section will trace the development of these language features to the most recent research in this area which is now known as powerful/powerless language.

The main thesis in *Language and Woman's Place* is that women tend to use linguistic features which relegate them to a trivial position which results in inequity between the sexes. Lakoff signifies this practice by stating:

> It will be found that the overall effect of 'women's language' - meaning both language restricted in use to women and language descriptive of women alone - is this: it submerges a woman's personal identity, by denying her the means of expressing herself strongly, on the one hand, and encouraging expressions that suggest triviality in subject matter and uncertainty about it; and, when a women is being discussed, by treating her as an object - sexual or otherwise - but never a serious person with individual views. Of course, other forms of behavior in this society have the same purpose; but the phenomena seem especially clear linguistically.

(p. 7)

Thus, women deny themselves access to power by adopting specific features of language which produce a climate of inequity. Stressing the reflexivity of language, Lakoff identifies several components of powerless language which serve to reify the socially defined position of women (see table 1).
### Powerless Language According to Lakoff

<table>
<thead>
<tr>
<th>Powerless Component</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>lexical items</td>
<td>color choice, expletives, empty adjectives</td>
</tr>
<tr>
<td>tag questions</td>
<td>a declaration taking the form of an interrogative; rising intonational patterns in a declarative answer</td>
</tr>
<tr>
<td>polite speech</td>
<td>euphemistic word choices</td>
</tr>
<tr>
<td>hedges</td>
<td>Words which indicate uncertainty, such as you know, well, kind of</td>
</tr>
<tr>
<td>the intensive &quot;so&quot;</td>
<td></td>
</tr>
<tr>
<td>hypercorrect grammar</td>
<td>Men tend to drop the &quot;g&quot; off the end of words ending in &quot;ing&quot; whereas women do not; not using the word ain't.</td>
</tr>
<tr>
<td>superpolite forms</td>
<td>The use of euphemistic language</td>
</tr>
<tr>
<td>women do not tell or get jokes</td>
<td></td>
</tr>
<tr>
<td>tendency to speak in italics</td>
<td>exaggerated intonational patterns in order to enhance or draw attention to what is being said.</td>
</tr>
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She states that the use of these features of language is not exclusively limited to women, but that women use these features more than men.
Having identified these language differences between males and females, Lakoff paved the way for future research. Her contribution to the understanding of language was significant. However, her work was based on introspection which led to untested hypotheses. The research that followed attempted to examine Lakoff's observations systematically by providing the necessary controls of the laboratory situation.

One context where the use of powerful or powerless language can be crucial is the courtroom. Lawyers have long been aware that their case often hinges not only on their performance but also on whether or not the witnesses who testify for their client are perceived as believable. Research in persuasion demonstrated that perceptions of attractiveness and credibility impact upon the acceptance of a message (Hovland, Janis & Kelley, 1953; Kelley, 1972; Kelman, 1958). To improve one's ability to relate attractiveness and credibility to an audience, then, it is not uncommon for members of the legal profession to coach witnesses in how to present their evidence to the court by using a specific, direct language style (O'Barr & Atkins, 1980).

Thus, O'Barr (1982) and his colleagues were interested in how components of communication behavior affected perceptions of perceived power and whether or not these features were, as Lakoff initially suggested, primarily used by women. With his colleagues he engaged in a 30-month study of language in the courtroom context which included both ethnographic and experimental studies. The team observed 10 weeks of courtroom testimony in Durham North Carolina. Nonverbal expressions and other data which could not be audiotaped were accounted for by taking notes during the courtroom hearings. These researchers found a correlation between language use and the perceived credibility, competence, and intelligence of witnesses. Four styles of speech emerged which appeared to affect the decision of jurors: powerful/powerless speech, hypercorrect forms of speech, simultaneous speech by witnesses and lawyers, narrative
versus fragmented testimony.

All of these speech styles reflect the power of language form over content to influence juror's decisions. In particular, O'Barr's powerful/powerless speech showed a striking similarity to Lakoff's "womans' speech" (see table 2). The difference, however, was that Lakoff had not directly transcribed specific instances of talk in order to identify "woman's speech". She had instead relied upon introspection. O'Barr was able to confirm the existence of the speech style she had labelled as "women's speech".

Table 2

**Powerless Language According to O'Barr**

<table>
<thead>
<tr>
<th>Powerless Component</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>intensifiers</td>
<td>forms of speech which increase an assertion</td>
</tr>
<tr>
<td>hedges</td>
<td>forms of speech which reduce an assertion</td>
</tr>
<tr>
<td>hesitation forms</td>
<td>pause fillers and meaningless particles of speech</td>
</tr>
<tr>
<td>witness asks lawyers question</td>
<td>rising intonation in declarative context</td>
</tr>
<tr>
<td>gestures</td>
<td>spoken indications of direction</td>
</tr>
<tr>
<td>polite forms</td>
<td>please, thank you</td>
</tr>
<tr>
<td>use of sir</td>
<td></td>
</tr>
<tr>
<td>direct quotations</td>
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Once these speech styles were identified in the audiotapes of actual courtroom testimony, O'Barr constructed an experimental design using edited versions of original
testimony in which the roles of witnesses and lawyers were played by actors in order to ascertain the effect of powerful/powerless language upon a listener. A total of four videotapes were constructed for each testimony: two powerful versions and two powerless versions were created for each biological sex. The verbal stimulus testimony was identified by listening to tapes from different trials in order to identify one witness who used an excessive amount of powerless features. This testimony was originally given by a female witness. Actors then removed any names, dates, and so forth from the text of the testimony and it was reproduced by a male and a female. During this stage, experimenters judged that the powerless testimony given by a male was not psychologically and linguistically representative of a male testimony. Therefore, some of the powerless speech forms were removed so that they would appear appropriate for the style and stereotypical expectations of a male speaker (O'Barr & Atkins, 1980).

Erickson et al. (1978) argue that both powerless versions were designed for "functional equivalence" (p. 272). Powerful versions of testimony were constructed by deleting powerless speech components. Mock jurors were then asked to listen to these testimonies and answer a questionnaire to assess their reactions to the speaker. Results demonstrated that powerful witnesses were believed more, and seen as more competent and intelligent. O'Barr (1982) concluded, however, that powerless variables are not specifically female traits but that they correlate with social power: i.e., social class, educational background, and perhaps even courtroom experience. Those who hold a lower social power tended to use powerless language.

Studies followed to confirm the impact of the use of powerful/powerless speech on the listener. Many of these studies continued to use the courtroom context. For example, Parkinson found that prosecutors who win cases use more powerful language features than prosecutors who lose cases (Danet, 1980). Lind & O'Barr (1979) found
that witnesses who used powerless speech were perceived as less competent, less attractive, less trustworthy, and less dynamic than those who used a powerful style. Bradac, Hemphill, and Tardy (1981) found similar results. In addition, other researchers have demonstrated that powerful speech is more competent than powerless speech in both the courtroom context and also in a simulated budget hearing and job interview (Erickson, et al., 1978; O'Barr & Atkins, 1980; Warfel, 1984; Wright & Hosman, 1983).

With continued focus, by 1983 the powerful/powerless speech construct came under some attack. Wright II and Hosman (1983) found that male and female witnesses who used a large number of intensifiers created different perceptions of attractiveness. A female who uses a high number of intensifiers is perceived as more attractive than a male using the same number of intensifiers. In addition, while findings to date had been consistent in demonstrating the negative effects of using powerless language, Bradac and Mulac (1984) argued that the linguistic features included in the molar construct (see Table 2) may not be equally contributing to the impression formation process. Since the intensifiers are included in the construct of powerless speech, using a high number of intensifiers should create the same impression as using a large number of qualifiers and hesitations. This, however, was not the case which brought the role of each component into question. In two studies Bradac and Mulac (1984) studied the effect of seven powerful/powerless components. They confirmed that respondents could discriminate between five different levels of linguistic power perceived with the use of each component such that a hierarchy of powerful/powerless variables could be formed from the most to the least powerful: powerful talk (i.e. direct phrases) and polite talk, intensifiers, dietic phrases, hedges and tags, and the hesitation message type. Thus, polite linguistic forms and intensifiers were actually seen to differ from hesitations in
the rating of perceived power. At this point, research on the construct turned to a more focused look at each component. Studies emerged which looked at various combinations of O'Barr's original powerless style components (Hosman, 1987; Hosman & Siltanen, 1988; Johnson, 1985). While scholars discussed the effect of using powerless talk as a construct, they studied this discursive style as various combinations of components. Therefore, it is helpful to look at the literature discussing the previous research of each component separately. The following section discusses the components of powerful/powerless talk. The component will first be defined along with the function it serves in the construct of powerful/powerless talk followed by research which has looked at this component either in isolation or in combination with other components.

**Qualifiers and cognitive disclaimers.** George Lakoff (1972) uses the term hedge to refer to predicate modifiers that can either intensify or deintensify the meaning of a word. However, in most powerful/powerless research qualifiers include all words or phrases which limit or moderate the force of a statement, thereby connoting uncertainty and softening the statement. In previous research, the term hedge has denoted some types of qualifiers. Hewitt and Stokes (1975) argue that hedging operates by signifying the tentative character of a statement which in turn connotes uncertainty because there is minimal commitment on the part of the interlocutor. Qualifiers operate by creating the perception that speakers are less direct and immediate (Conville, 1975). Qualifiers in the form of individual words are expressions like "I had a relatively productive day today", whereas a phrase that would moderate the force of a statement is "For the most part, I enjoyed the party".

Another phrase which is similar to a qualifier and is also included in this category is the cognitive disclaimer. There are two views regarding the function of the cognitive
disclaimer. Symbolic interactionists see the disclaimer as a positive act which

demonstrates that the actor is in control of the message by assuming responsibility in
communication (Hewitt & Stokes, 1975). Those who study powerful/powerless talk
generally see the disclaimer as creating the negative impression of powerlessness by
creating the impression of lack of credibility (Bradley, 1981; Lakoff, 1975).

Therefore, it is necessary to limit the types of disclaimers in this study to those which
appear to act in concert with qualifiers. Cognitive disclaimers which appear to serve
the same purpose as qualifiers but take the form of phrases which precede the statement
are usually connected to the statement they modify with "but" (Bradley, 1981; Hewitt &
Stokes, 1975). While Hewitt and Stokes identify five types of disclaimers, only the
cognitive disclaimer and hedging disclaimer specifically connote uncertainty. The
following phrase is an example: "Of course, this isn't my area of expertise, but...."

Cognitive disclaimers "anticipate doubts that may be expressed concerning the speaker's
capacity to recognize adequately the empirical facts of the situation in which he finds
himself" (p.5).

Johnson (1985) included disclaimers along with qualifiers and hedges in a study
which assessed the impact of these powerless linguistic features upon financial award
decisions and credibility in a simulated budget hearing. He found that witnesses who do
not use these powerless features receive higher financial awards and are perceived as
more credible. Similarly, Baumann (1979) used the term "qualifying prefatory
statements" to signify the cognitive and hedging disclaimer phrases. While she found no
difference in the use of these phrases between sexes, she did indicate that limited sample
size and role equity exhibited in her procedure could account for these limited findings.

In addition, Bell, Zahn & Hopper (1984) found that disclaimers had to be used often in
order for the negative effect reported by others (Baumann, 1979; Lakoff, 1975) to be
observed.

Some studies indicate that the powerless linguistic features of qualifiers and
disclaimers are typically used by women (Eakins & Eakins, 1976; Key, 1975; Lakoff,
1974). Hartman (1976) studied twenty eight men and women born in Maine at the
beginning of the twentieth century using transcripts of taped interviews. She found
women to use more qualifiers than men. In another study, subjects who were asked to
describe what they saw in a picture also responded differently depending upon their
biological sex; males gave the impression of being certain in their descriptions while
women tended to use qualifying expressions one half of the time (Swacker, 1975). In
two out of three settings examined by Crosby and Nyquist, females used hedges and other
components of the female register more than men (1977). In small decision-making
groups, women who used qualifiers and disclaimers were perceived less positively and as
less influential than those who spoke directly (Bradley, 1981). Others, however,
could not support differences according to biological sex when looking at qualifiers.
Erickson and her colleagues (1978) conducted a study in the courtroom context and
found that powerless language appeared to be correlated with status, such that persons of
low status regardless of sex tended to use more powerless language including hedges than
persons of high status. Hedges were found to connote powerlessness, regardless of the
speaker's sex (Hosman & Siltanen, 1988).

Generally, studies showed that subjects perceived witnesses using hedges as less
attractive and less credible than witnesses who did not use hedges (Lind & O'Barr, 1979;
Wright II & Hosman, 1983). O'Barr (1982) found that hedges used in conjunction with
other powerless features produced negative evaluations of authoritativeness. In general,
while hedges, qualifiers, and cognitive disclaimers could not always be correlated with
biological sex, those individuals who use them are perceived as less powerful than those
Tag questions and intonation. Another component of language which is often correlated with powerless speech is tag questions. A tag is a combination of a statement and a question which conveys no specific information. Lakoff (1973) states, "A tag question, being intermediate between [an outright statement and a yes-no question], is used when the speaker is stating a claim, but lacks full confidence in the truth of that claim" (p. 54). A strong assertion might be "Today is the day for everything to hit", a tag would modify the assertion: "Today is the day for everything to hit, isn't it?". It can be a way of avoiding a strong statement or forcing agreement with one's assertion (Kollock, Blumstein & Schwartz, 1985).

Newcombe and Arnkoff (1979) confirmed Lakoff's prediction that tags negatively affect the perception of the assertiveness of the speaker. Tag questions have most often been investigated along the lines of biological sex differences. While Baumann (1976) found men to use about the same number of tag questions as women in a classroom setting, in several studies, women have been found to use more tags than men (Dubois & Crouch, 1975; Eakins & Eakins, 1978; Fishman, 1980; Key, 1975; Kramer, 1973; Lapadat & Seesahai, 1977; Siegler & Siegler, 1976). In looking at tag questions it is helpful to also look at intonation or speech melody. Lakoff (1974) includes both intonation and politeness as components of women's powerless speech. Tags and certain forms of intonation can serve the same purpose, to soften the force of a statement while accomplishing affiliative interaction goals. In effect, they are politeness strategies. While it is agreed that intonation is used to create illocutionary force and certain other aspects of attitude, it may also be socially patterned and differentiated according to sex (McConnell-Ginet, 1983). "Given a sociocultural system in which women and men are
in different social networks and positions and in which their behavior is differently evaluated, we might predict that intonational usage would be an important constituent of sex-differentiated 'styles' of speaking" (p. 70). Lakoff argued that women's use of a rising intonational pattern in the declarative form creates the impression of powerlessness. This sentiment is echoed in the popular expression "It's not what you say, but how you say it that counts", or "don't use that tone of voice with me!". For example, in response to the question, "When are we leaving for the theater?", Lakoff argued that a man might reply "Six o'clock" while a woman may use a rising intonation, responding with "Six o'clock?". Lakoff's suggestions were supported by Brend (1971) who argued that certain intonational patterns are used mostly by women. It appears that women have more speech melody or vocal variety while men are more monotone (Bennet & Weinberg, 1979; Fichtelius, Johansson & Nordin, 1980; Key, 1972; McConnell-Ginet, 1983). Bennet and Weinberg (1979) supported this when they found that monotonicity negatively affected perception of females but had an enhancing effect on the perception of males. In fact, men have been judged to be more effeminate when they used a wider variation of pitch (Terango, 1966).

While speech melody appears to differ according to biological sex, it is the high-rise as a variation of pitch which is problematic because it conveys non-finality or incompleteness which could connote tentativeness and uncertainty (Ladd, 1978). In investigating the use of the high-rise intonational pattern, Edelsky (1979) found that the high-rise was rated as being a feminine characteristic even though in practice the most frequently used contour by both sexes was the falling terminal contour. This finding was not supported by Newcombe and Arknoff (1978) who found no differences between men and women in the use of rising intonation in a declarative sentence in a study in which pairs of unacquainted undergraduates were taped while talking about
topics of general interest.

Tag questions and intonation have been found to create impressions of lack of power (Bradac & Mulac, 1984; O'Barr & Atkins, 1980). However, their correlation to biological sex has yielded mixed results. There are fewer studies dealing with rising intonation in declarative sentences than other linguistic indices of powerless speech. However, the literature points to the import of speech melody in perceptions which aid in listener interpretation. Therefore, the role of these variables in the creation of impressions of lack of power is generally accepted.

Nonfluencies. Studies on nonfluencies originate from the work of psychologists as they attempted to correlate observable linguistic patterns with psychological states (Mahl, 1959; Traeger, 1958). In a content analysis of patient's speech, Mahl (1959) developed eight categories of nonfluencies which indicated anxiety and other expressions of emotion. Current research is patterned after some of these initial efforts (Camden & Verba, 1986; Levin & Silverman, 1965; Martin & Craig, 1983). Some use the term "hesitation phenomena" as a synonym for "nonfluency" or "disfluency", and include zero segregates (pauses), vocal segregates (sounds such as ah, er, uh-huh ), repetitions, corrections, and slips of the tongue (Levin & Silverman, 1965). Verbal fillers are words or phrases which are often used to fill pauses in conversation, such as "like", "right", "okay", "well" and "you know". "You know", like other vocalized pauses, has also been termed a speech disfluency (Mulac & Sherman, 1974).

In psychology, hesitations have long been considered as verbal markers of anxiety (Johnson, 1985). Silent pauses are identified as times during which cognitive activity, such as abstraction, planning, and selection, are occurring (Goldman-Eisler, 1961). Filled pauses reflect anxiety and have also been shown to reflect low self-esteem in
males (Frances, 1979). They are generally interpreted as indicative of difficulty in the encoding process (Diese, 1984). Others, however, have found that hesitations in the form of "uh" are actually devices used by people as they negotiate distance, closeness, and intimacy (Jefferson, 1974). The amount of hesitations used in speech appears to be a function of time; the greater the length of an utterance, the greater the number of both filled and unfilled pauses (Goldman-Eisler, 1961).

Much of the research on powerful/powerless language includes hesitation forms as a powerless feature (Bradac et al., 1981; Conley, O'Barr & Lind, 1978; Erickson et al., 1978; Lind & O'Barr, 1979). Most of the literature treats nonfluencies as a group of variables which create negative perceptions. Nonfluencies have been shown to affect perceptions of competence and dynamism (McCroskey & Mehrley, 1969; Miller & Hewgill, 1964; Sereno & Hawkins, 1967). The use of repetitions and vocalized pauses also lowers perceptions of sincerity (Lay & Burton, 1968). O'Barr (1982) considered powerless talk to be a function of status, such that nonprofessionals were more likely to use hesitations and other powerless features than those with greater status within the community. Hosman and Wright II (1987) determined that messages with small numbers of hedges and hesitations were perceived as authoritative and attractive.

As with other powerful/powerless components, nonfluencies are often studied to determine differences according to biological sex. The filled pause "you know" has typically been found to be used more by women than men (Crosby & Nyquist, 1977 Studies 1 and 2; Fishman, 1980; Hirshman, 1975; Lakoff, 1975; Ostman, 1981), although, that has not always been the case. Holmes (1986) found no difference in the distribution of occurrences of "you know" by men or women, but did find that this filled pause appears to serve different functions for each sex. Men use it to convey certainty while women use it to convey uncertainty. This finding echoes an earlier statement by
Reik (1954) who said that "men and women speak different languages even when they use the same words" (p. 15).

Studies which examine other types of nonfluencies also show mixed results regarding the impact of sex. Martin and Craig (1983) looked at three types of nonfluencies in same-sex and mixed-sex dyads. They found that the number of unfinished sentences, filler words and false starts was dependent on the composition of the dyad, not the individual sex of the speaker. Male dyads used the most nonfluencies. In other studies, however, the sex of the partner did not matter; males used more filled pauses than women (Duncan & Fiske, 1977; Hall, 1984; LaFrance & Carmen, 1980). In a storytelling task performed by fifth graders, boys who tended to have an exhibitionist personality type were more likely to use deliberate hesitations than nonexhibitionist boys or girls. Both males and females produced more false starts when talking to someone of their own biological sex than in talking to someone of the opposite sex (Martin & Craig, 1982). Women have been found to use more vocalized pauses (Hartman, 1979) and fillers (Hirshman, 1975) than men. Aires (1987) argues that this does not necessarily signify uncertainty or tentativeness, but rather support, involvement and connection to the conversational partner.

In summary, it seems that nonfluencies are one of the most frequently used powerless language features and that when they are used, they create impressions which are generally negative. Nonfluencies affect perceptions of authoritiveness, attractiveness, competence, dynamism, and character. They are not, however, consistently found to be used most often by females.

**Intensifiers.** O'Barr (1980) identified the importance of intensifiers in his research on language used in the courtroom. In analyzing the transcripts of actual
courtroom testimony, he noticed that forms of speech which appeared to increase the force of an assertion also affected juror’s perceptions of witness credibility; i.e., persuasibility and trustworthiness. For example, the witness Mrs. W used a large number of intensifiers in her testimony in a trial involving the death of a neighbor in an automobile accident, using the phrases "very close friends" and "quite ill" (p. 97). High status witnesses, such as parole officers, physicians and other professionals, used intensifiers less than low status witnesses. In recreating these testimonies in a laboratory setting, he found that witnesses were considered to be less trustworthy when they used this linguistic variable. Of the powerless variables identified by O'Barr, intensifiers were the second most frequently used by witnesses.

While O'Barr and his colleagues treated intensifiers as a powerless speech variable, others debated the function of this linguistic element. McEwen and Greenberg (1970) argued that intensifiers are actually perceived as powerful, not powerless. Wright and Hosman (1983) found that a female witness who used a large number of intensifiers was judged as being particularly attractive. Bradac and Mulac (1984) attempted to avoid the conflict by using a hierarchical structure of powerless language features and in the process also determined that intensifiers were powerful rather than powerless features. This is not surprising given that previous research determined that intensive adverbs, such as "very", magnified the impact of verbs (Cliff, 1959). Hosman (1987), found two message types were perceived to be authoritative: those which included a large number of intensifiers and few hesitations and hedges, and those which included few intensifiers, hedges, and hesitations. Later research showed that when intensifiers were the only powerless linguistic variable present, they were perceived as powerful. Similarly, when few are used in conjunction with a small number of other powerless linguistic variables, they were also perceived as powerful.
However, using intensifiers appeared to damage impressions of sociability (Hosman & Siltanen, 1988), particularly for high status speakers.

Robin Lakoff (1974) included the intensive "so" in her study of women's language. Like O'Barr, she considered this particular word to be powerless.

Here we have an attempt to hedge on one's strong feeling's, as though to say: I feel strongly about this - but I dare not make it clear how strong.

To say, "I like him very much," would be to say precisely that you like him to a great extent. To say, "I like him so much" weasels on that intensity: again, a device you'd use if you felt it unseemly to show you had strong emotions, or to make strong assertions, but felt you had to say something along those lines anyway (pp.54-55).

It would seem in this case that the use of the intensifier "so" has an effect similar to hedges and qualifiers in that it moderates the force of the statement, thereby connoting uncertainty. Other research has also shown that both adults and children of differing ages correlate "so" with women (Edelsky, 1976; Key, 1972). In groups with mixed sex, women used fewer intensifiers than in same sex groups but still used five times as many intensifiers as men (McMillan, Clifton, McGrath & Gale, 1977).

The findings are mixed regarding whether the use of intensifiers results in generating impressions of power or lack of power. The majority of recent studies show that in the context of other powerless language features, intensifiers do not produce significant evaluative consequences (Bradac, Bowers, & Courtright, 1979; Hosman, 1987; Hosman & Siltanen, 1988).

Powerful/powerless language as a construct does appear to affect perception of the speaker. In reviewing individual components of the powerless construct, previous studies show inconsistent results regarding the role of each variable in the construct.
Studies (Bradac & Mulac, 1984) argue that one limitation of current research is due to the research method employed which does not use natural language occurring in an interaction. Therefore, in the next section these methodological issues will be addressed.

**Research Issues**

To date the research on powerful/powerless language shows that this linguistic style will affect one's assessment of an individual's credibility, competence, and even dynamism. These conclusions are derived from prior research designs which maintained strict control over the message by constructing it in advance. In order to control for the quantity of powerless linguistic variables presented to raters, messages were artificially created in designs which examined the components of powerful/powerless talk simultaneously. Many studies required subjects to judge speech which was either taped or presented in a written form. Taped versions were sometimes derived from actual speech, but were then enhanced with added qualifiers, hesitations, and so forth in order to create a treatment which was termed powerless (O'Barr, 1982). Initially this design was deemed necessary in order to determine if the powerful/powerless language variable did in fact create impressions of credibility, dynamism and attractiveness. However, these artificial constructions do not accurately explain what happens when people use powerful/powerless language in conversation. For example, while Edelsky (1979) found that a rising intonation was typically rated as a feminine characteristic. However, in an interactive design, Newcombe and Arknoff (1978) could not find that women used this intonational pattern more than men. Attempting to analyze perceptions of language while ignoring the interactive component of conversation may not lead to greater predictability. Also, the failure to engage in
natural language studies may not result in realistic findings which may explain some of the conflicting results found with the components of the powerful/powerless language construct. Current artificial laboratory designs lack two important aspects which impact this language style: dyadic interdependence and natural language construction.

**Dyadic interdependence.** Interactants are often influenced by the communication behaviors of their partners which result in an interdependence between members of the dyad. Consistent with systems theory, several studies have concluded that a dyad produces communication behaviors which are greater than the sum of their individual participants (Dindia, 1987; Giles, Mulac, Bradac & Johnson, 1987; Patterson, 1984). For example, the convergence of language was specifically demonstrated in a recent study of linguistic components of involvement in interaction where the conversation of high and low-involved persons resulted in talk which differed from either a high involved person talking with a high-involved partner or a low-involved individual in a dyad conversing with another low-involved person (Cegala, 1989; Villaume & Cegala, 1988). Mulac and his colleagues have shown that the make-up of the dyad influenced interactant's use of psychological gender-discriminating language effects (Mulac, Wiemann, Widenmann & Gibson, 1988). In addition, the make-up of the dyad has been shown to effect several components of the powerful/powerless construct when studied individually. Lieberman (1967) found that when a female respondent was interacting with a female interviewer, a rise-fall-rise intonational contour was used rather than the more common falling terminal contour. Martin and Craig (1983) looked at three types of nonfluencies in same-sex and mixed-sex dyads. They found that the number of unfinished sentences, filler words and false starts was dependent on the composition of the dyad, not the individual sex of the speaker. In groups with mixed sex, women used
fewer intensifiers than in same sex groups but still used five times as many intensifiers as men (McMillan, Clifton, McGrath & Gale, 1977).

Thus, it appears that the use of powerful/powerless language may be at least somewhat dependent upon the communication partner. Reducing talk to a written transcript does not capture these important elements of natural conversation. Conversational language use is not a static phenomenon. It changes with one's partner, interaction goals, and situation. This has been demonstrated by Mulace et al. (1988) who use speech accommodation theory as support for the view that participants tend to converge their speech styles in cooperative interactions. They argue that "in the majority of recent investigations, there is general agreement that people adjust, verbally and nonverbally, in order to mirror the behavior of others they like, whom they wish to have like them, or whom they see as rewarding them in some way" (p. 318). The interdependent nature of dyadic communication is particularly evident in studies which look at the synchronized nature of conversational exchange (Argyle, 1967; Jaffe & Feldstein, 1970; Kendon, 1967; Trimboli & Walker, 1983; Walker, 1982). Both verbal and nonverbal synchrony has been analyzed, demonstrating the convergence of communication behaviors. It seems likely, then, that dyadic interdependence will affect the use of powerful/powerless talk and thereby also affect the resulting impressions created by that use. Transcripts have no way to capture this communication phenomenon.

Natural language. Just as the conversational partner is a crucial component in a study of language perception, the construct validity in language research is seriously jeopardized when language is not permitted to be constructed by the interactant. A striking example of this occurred with O'Barr's seminal study in which he abstracted
original courtroom testimony and modified it by adding or deleting powerless linguistic features (O'Barr & Atkins, 1980). Recall that the verbal stimulus testimony for this study was identified by listening to tapes from different trials in order to identify one witness who used an excessive amount of powerless features. This testimony was originally given by a female witness. Actors then removed any names, dates, and so forth from the text of the testimony and it was reproduced by a male and a female. To this point, naturally occurring language was obtained in a specific context. However, during the next stage, experimenters determined that the powerless testimony given by the male was not psychologically and linguistically representative of a male testimony. Therefore, some of the powerless speech forms were removed so that they would appear appropriate for the style and stereotypical expectations of a male speaker (O'Barr & Atkins, 1980). At this point, language was constructed for a specific research goal. It was no longer naturally occurring discourse. Erickson et al.(1978) argued that both powerless versions were designed for "functional equivalence" (p. 272). However, there was no statistical examination reported to demonstrate that functional equivalence. Research became further removed from naturally occurring language when powerful versions of testimony were constructed by deleting powerless speech variables rather than by identifying talk that had few or no occurrences of powerless components.

In much of the research on powerful/powerless language, messages are constructed to include a number of powerless language components which are then either read or listened to via audiotape by the respondent who is asked to make judgments regarding impressions created by this talk. Bradac and his colleagues, for example, developed messages which were constructed to include or exclude powerless styles and then were transcribed (Bradac et al., 1981; Bradac & Mulac, 1984; Erickson et al. 1978; O'Barr, 1982; Wright II & Hosman, 1983). In these studies context was
artificially created by telling subjects that they would be reading sentences which were taken from a specific situation, such as a hypothetical job interview. The inference of what happens when an individual uses powerless language is based on the assumption that the contrived talk is representative of real talk, however, this assumption has already been challenged (Bell, Zahn & Hopper, 1984). Research on disclaimers indicates that when messages are constructed in the powerless condition by adding an unnaturally high number of powerless components, then the results may be due to the "hammer effect" (Bell, Zahn & Hopper, 1984). Small numbers of disclaimers did not affect subject's impressions of the speaker, but the greater the number of disclaimers, the less competence, certainty and character the speaker was felt to exhibit. The question left unanswered in this research is do people actually use large numbers of disclaimers? If not, then a subject's response of lack of competence may come from a recognition that this enhanced talk is not typical rather than that it is not powerful.

Clearly, it is not possible to understand language differences or the effects of language style upon perception when this language occurs in the abstract and when an arbitrary number of a specific language components appear in a contrived, written format. It is impossible to understand powerful or powerless communication in the absence of face-to-face communication. When language is constructed for a research goal, not an interaction goal, the impressions of listeners may not be legitimate.

Not only should language in general not be exclusively studied in the absence of interaction but the issue of the impression of power created through the use of language necessitates an interactive design as well.

Power as a dynamic concept emerges within patterns of communication over time and space, and cannot be located as a property of the individual. Rather, power becomes the negotiated product of a
mutually constituted and mutually administered interaction system. From this standpoint, any assessment of power must take the details of interaction - for example, sequential and other complex relationships among utterances - into account (Treichler et al., 1984, pp. 63-64).

While the research on a powerful/powerless language style is only one aspect of the larger issue of negotiated power, the style itself cannot be fully understood by abstracting it artificially from the interactional system. We have gained an understanding of the knowledge people have about powerful/powerless language and the role of specific components. However, we have little understanding about how people use or perceive this language style in an interaction. The inconsistencies present in past powerful/powerless research may be the result of current research designs. It is evident that at this point, research needs to continue with interaction-based designs in order to advance our understanding in the use of and perceptions created during the use of powerful/powerless language.

**Sex Differences in Powerful/powerless Language**

In looking at the history of powerful/powerless communication, it was Robin Lakoff who activated this line of research with her discussion of a specific style of language used by women. She had observed but not tested "women's language". O'Barr initially concurred that this style was the subject of many trial handbooks, and yet when he attempted to identify it in research, he could find no differences between males and females. Findings indicated a difference between witnesses of unequal status regardless of sex.

Many of the later studies which look either at the powerful/powerless construct or attempt to study the components in isolation or various combinations have not found
consistent differences between sexes, even though the initial research was premised on Lakoff's observed male-female differences. Erickson et al. (1978) found that witnesses were seen as more credible when the subject and the witness were the same sex. However, Lind & O'Barr (1979) replicated this experiment only to find no effect for sex. Others (Bradac, Hemphill & Tardy, 1981; Hosman & Wright, 1987) also found no support for the relationship between masculinity-femininity and power. Wright II and Hosman (1983) found that sex interacted dissimilarly with the use of intensifiers and hesitations. Female witnesses were judged attractive when they used large amounts of intensifiers but less credible when they used more hesitations. A similar interaction was found between sex and empathy such that when powerful speech was used in a crisis-intervention setting, males gave higher empathy scores to a male counselor than to a female counselor.

Other studies concentrated on attempting to uncover biological sex differences according to the use of specific powerful/powerless components. Newcombe and Arnkoff (1979) found no differences when coding talk from pairs of unacquainted undergraduates for tag questions and qualifiers, rising intonation on declarative sentences, so and such as intensifiers, "cute" adjectives of admiration, and expletives and euphemisms. In a university workshop, analysis of taped conversations showed that males used more than thirty-three tag questions while females used none (Dubois & Crouch, 1975), while other research reported that the most typical intonation pattern was not the high rise pattern for females but the falling terminal contour (Edelsky, 1979). However, differences in language features were found in a similar study by Crosby and Nyquist (1977) which coded a subset of Lakoff's features: i.e., use of empty adjectives, hedges or qualifiers, and so. Swacker (1975) found that in a task which required men and women to describe a picture, women used more precise information
but included more qualifiers than men. Hartman (1976) also found women to use more qualifiers, but others could find no difference between the sexes (Baumann, 1976; Erickson et al, 1979; Hosman & Siltanen, 1988).

In looking at nonfluencies and intensifiers, the results are again mixed. The filled pause "you know" was found to be used by more women than men by some (Crosby & Nyquist, 1977 Studies 1 and 2; Fishman, 1980; Hirshman, 1975; Lakoff, 1975; Ostman, 1981) but found no sex difference in the distribution of occurrences of "you know" by others (Holmes, 1986). The intensifier "so" is found to be perceived as being used more often by women (Edelsky, 1976; Key, 1972). Other research supported that intensifiers in general were used more often by women than men (McMillan, Clifton, McGrath & Gale, 1977).

These studies demonstrate that findings of male-female difference are inconsistent. The fact that the majority of research dealing with either the construct of powerful/powerless language as a whole or the individual components includes an analysis of sex differences as a variable in the research is notable. This indicates that differences are consistently observed at some level. Researchers are unable, however, to statistically demonstrate that difference. One explanation may be that biological sex, which is primarily determined by one's chromosomal makeup, is not the single best predictor of differences in communication behavior. Recent studies have yielded promising findings with the environmentally determined variable of psychological sex (Greenblatt, Hasenauer & Freimuth, 1980; Inderleid & Powell, 1979; Wheeless & Dierks-Stewart, 1981). Therefore, the next section will look at the development of psychological sex which is often referred to as gender.
Psychological Sex

The relationship between discourse and sex can be traced as far back as 1665, but only since the 1970's has it surfaced as a direct line of investigation (West & Zimmermann, 1985). The last two decades have been replete with conflicting research that attempts to discover male-female differences. Research dealing with men and women has moved through several phases in the last twenty years (Ferree & Hess, 1987). The traditional view was that maleness and femaleness was strictly biologically determined, and therefore the behavioral implications for each sex were clear. The research reported earlier in this chapter adheres to this traditional perspective. A more recent perspective is that of sex role socialization in which the role of biology is combined or fused with the social role of upbringing, nurturance and environment in determining an individual's sex role orientation. In effect, nurture and nature become fused such that it becomes impossible to disengage the two for purposes of investigation.

In this section, the concept of psychological sex will be defined. Next, traditional research which looks at male-female differences according to biological sex will be presented in order to demonstrate the inconsistencies in this research. Finally, research which uses the perspective of gender, or psychological sex, will demonstrate the effectiveness of this approach in uncovering communication differences.

Pearson, Turner & Todd-Mancillas (1991) argues that "Although people believe biological sex to be a relatively simple and unchanging attribute, it is never unaffected by the overlay of social learning we call gender. Some researchers refer to this interaction as 'achieved' sex" (p.8). Psychological sex "...is the activity of managing situated conduct in light of normative conceptions of attitudes and activities appropriate for one's sex category. Psychological gender activities emerge from and bolster claims to membership in a sex category" (West & Zimmerman, 1987, p. 127). Thus, specific
attitudes such as empathy, emotionality, level of activity, and aggressiveness are thought to be more socially appropriate for certain biological sex categories. However, whether an individual acts in accordance with the social norm will depend on the socialization process.

One's adherence to a specific sex role category can be measured using a gender scale. Most psychological gender scales focus on specific personality traits which are assumed to differentiate men from women (Fecteau, Jackson & Dindia, 1989). In the BEM Sex Role Inventory, a sex role measure which gained popularity in the 1970's, a characteristic is qualified as masculine if it is judged as more desirable in American society for a man than a woman; a characteristic is qualified as feminine if it is judged as more desirable for a female than a male (Bem, 1974). There is, therefore, an association between these traits and biological sex, but the correspondence is not necessarily one-to-one. In other words, it is possible for a female to possess masculine traits as well as for a male to possess feminine traits. Males who endorse masculine characteristics and females who endorse feminine characteristics are sex-typed; they represent individuals who are highly attuned to cultural definitions of sex-appropriate behavior. Those who endorse opposite characteristics, according to BEM, are cross-typed, a psychological gender orientation that is sex-inappropriate (Bem, 1974,1975; Spence, Helmreich & Stapp, 1974). Persons who incorporate both masculine and feminine characteristics are termed androgynous while those who endorse both these characteristics but at a low level are termed undifferentiated. Psychological sex categories are more finely tuned to sex differences because they are not bipolar. With eight categories of masculine, feminine, androgynous, and undifferentiated it is possible to assess an individual's characteristics more specifically.
Many studies in communication behavior were premised on biological sex differences even though it appears that the determining factor for the behavior was not completely chromosomal. For example, Jespersen (1922) noted that women's speech is more fluent and less hesitant than men's speech, reasoning that this was because they have smaller and more "central" vocabularies. He claimed that men have expanded vocabularies because they go beyond only the everyday words and include many novel, technical, and infrequently used words (1922, p.252). It would seem that word choice would have more to do with one's exposure to words than whether one was biologically male or female. A line of research was also initiated during this period of time which utilized eavesdropping in public places in order to identify aspects of talk in a natural setting.

Moore (1922) collected data by writing down topics of conversation as he walked the streets of New York City. Topic choice, he noted, differed significantly between men and women. Men discussed amusements, business, and money, while women discussed clothing, interior decorating, and men. This study was replicated by Landis and Burtt in 1923 in Columbus, Ohio and showed the same trends. One could argue that these trends in topic choice were the result of social patterning of the times. A woman's role in the 1920's was to marry, have children and maintain the home while the husband worked outside the home. It was natural for talk to revolve around work for men and home for women due to the process of socialization. However, like most research on male/female difference, Moore's research was premised on biological differences which he argued cause different levels of "enthusiasms" between men and women which "must of necessity set an ultimate limit to women's success in assimilating male spheres of interest, regardless of the apparent equality of capacity often indicated by mental tests" (Moore, 1922, p. 214). It would seem, then, that to refute this assumption of the
predetermination of biology, it would be necessary to show that a change in socially acceptable roles would result in a change of topic choice as the environment impacted on what an individual considers to be normal. A recent study supports this view by showing that a convergence of topics among sexes has taken place, especially in non-work settings (Deakins, Osterink & Hoey, 1987). This evidence refutes Moore's initial claim of an "unyielding innate divergence" (Moore, 1922, p. 211) between the sexes. The socialization process has dramatically increased the topics of the loss of money and business in conversation between male-male, male-female, and female-female dyads. The new topics of self, personal experience, and household concerns have become prevalent among both sexes (Deakins, Osterink & Hoey, 1987). Given the changing roles of both men and women in society, these patterns further demonstrate that language is constructed through environmental learning and that this element of learning which is reflected in psychological sex should be considered.

The majority of research on male-female difference revolved around biological sex differences which yielded conflicting results in many areas which affect communication behavior, even though in studies such as topic choice, social patterning was a large contributing factor. For example, in looking at which sex is better at listening, some studies show that there is no difference between males and females (Buchli & Pearce, 1974; Hollow, 1982; King, 1959), others show that males are better listeners than females (Caffrey, 1955; Goldhaber & Weaver, 1968; Irvin, 1953; Nichols, 1948), while in other research, females were found to excel in listening (Palamatier & McNinch, 1972). Another skill thought to be important to competent communication is empathy. While often it is thought that women are more empathic than men, again research cannot demonstrate clear differences along the lines of biological sex. In one study, males were more empathic (MacDonald, 1977), in
others there was no difference between the sexes (Maccoby & Jacklin, 1974; Brehm, Powell & Coke, 1984), but then both males and females were found to be empathic in another study (Rosenthal, Archer, DiMatteo, Koivumaki & Rogers, 1974). Like empathy, self esteem can also affect one's ability to achieve specific communication goals effectively. Differences between males and females are also inconclusive. Some studies report no sex differences (Drummond, McIntire & Ryan, 1977; Zuckerman, 1980) while others demonstrate that males have a higher self esteem (Gold, Brush & Sprotzer, 1980; Smith & Self, 1978). Similarly, in literature on self disclosure there is more confusion. Here it is reported that in some studies men are more disclosive (Gilbert & Whiteneck, 1976; Sermat & Smyth, 1973), in others females disclose more than males (Cline & Musolf, 1985; De Forest & Stone, 1980; Dooley, Whalen & Flowers, 1978; Greenblatt, Hasenauer & Freimuth, 1980), and finally other studies report no difference (Brooks, 1974; Kohen, 1975; Montgomery & Norton, 1982).

Based on the results of the studies reported above, in addition to the already reported conflicts experienced in both the powerful/powerless literature and studies which look at specific variables or combinations of powerful/powerless components, it is clear that even though powerless talk originated from observations of sex differences, it is fruitless to pursue the traditional line of inquiry. Greenblatt, Hasenauer, and Freimuth (1980) state that "The use of biological sex as an antecedent variable is problematic, however, because it collapses all individual sex-role identities into one or the other of the exclusive categories of male and female " (p. 117). A more promising line of investigation is psychological sex because it reflects the learning that has occurred in one's social community (Greenblatt, Hasenauer & Freimuth, 1980; Inderleid & Powell, 1979; Wheeless & Dierks-Stewart, 1981). Recent research using psychological sex instead of, or in addition to biological sex, has had promising results.
The following studies demonstrate some of the findings of current gender research dealing with communication variables.

In research on communication apprehension, it has been determined that all males and females do not experience this type of anxiety in the same way. Greenblatt, Hasenauer, and Freimuth (1980) found that feminine females reported significantly more communication apprehension than masculine males, while with androgynous individuals, there was no difference between males and females. Androgynous females reported less apprehension than feminine females.

Several studies have been conducted in the area of conflict management using gender rather than biological sex. Baxter & Shepherd (1978) looked at attitudes towards competition and found that feminine persons disapproved of competition more than masculine or androgynous individuals regardless of their biological sex. They also determined that masculine persons were more rigid in that they were less likely to vary their approach regardless of whether they liked their competitor than either the feminine or androgynous person. Yelsma & Brown (1985) found that androgynous spouses reported that they were more likely to handle conflict constructively than feminine spouses, but not more than masculine spouses. Undifferentiated spouses reported the lowest scores for conflict.

Another area where psychological sex roles have been useful in determining behavior differences is in the study of marriage where understanding and misunderstanding by marriage partners was found to be a function of psychological sex (Indvik & Fitzpatrick, 1982). Sex-typed individuals were the most able to predict their partner's behavior. Androgynous mates were not found to be more understanding by their ability to predict the response of their partner than sex-typed mates, but they did exhibit more understanding than undifferentiated mates. In addition to specific
psychological gender type, the make-up of the dyad was seen to effect perceptions of understanding such that the highest level of understanding occurred when both members of the dyad were sex-typed, perhaps because behaviors were seen to be socially predictable since these behaviors were consonant with socially prescribed sex roles. In this study, the incorporation of both instrumentality and expressiveness in the androgen by virtue of being masculine and feminine appeared to create some confusion in sex-typed partners. However, when the partner of an androgen was undifferentiated, the predictability was quite high. The interaction between psychological sexes was quite evident in this study and demonstrated differences that would not have been captured by only looking at biological sex.

In looking at persuasion, psychological sex was correlated with attitude change (Montgomery & Burgoon, 1977, 1980). In the first study, subjects were given a message designed to get them to change their attitudes regarding when students should be admitted to the university. Traditionally sex-typed males demonstrated less attitude change than traditionally sex-typed females. Androgynous males, however, changed their attitudes more than traditional males but less than traditional females, while androgynous females were not as easily swayed as traditional females. Thus, there was an interaction between androgyny and sex. In the second study, traditional and nontraditional messages were presented to subjects who were either sex-typed or nonsex-typed, meaning that they were either androgynous or cross-typed between sex and sex-role. Traditional sex role types who received messages advocating traditional behaviors changed attitudes more than nontraditional individuals. Likewise, when nontraditional messages were received, nontraditional individuals changed their attitudes more than the traditional sex role individuals.
The communication skill of listening also can be differentiated along the lines of psychological sex. In listening to a personal problem, feminine females showed more concern by head nods and sympathetic comments than masculine females (Bem, 1975). Also, people who are more androgynous were shown to be more emphatic, a skill required for some types of listening, than less androgynous people (Fong & Barders, 1985).

Other personality traits have been identified as differing according to one's psychological gender type. The highest self-esteem has been found in people who are high in the component of masculinity. One study found the highest self-esteem in people who are high in masculinity and low in femininity (Cate & Sugawara, 1986; Gauthier & Kjervik, 1982), while another study found the highest self-esteem in people high in both masculinity and femininity, or androgynous individuals (Zeldow, Clark & Daugherty, 1985). On the other hand, in looking at the area of self disclosure, sex role appears to interact with biological sex such that masculine females disclose more than masculine males while feminine males disclose more than masculine males (Pearson, 1980). Others have found a positive correlation between androgyny and disclosure (Sollie & Fischer, 1985; Wheeless, Zachai & Chan, 1988).

Gender has also been valuable in predicting controlling behavior. In looking at relational control patterns, one study found that control differed according to gender (Ellis & McCallister, 1980). Masculine individuals were found to be more inclined to compete for control than other gender types. Androgynous individuals were moderately competitive, but generally focused on getting the job done, while feminine individuals looked for equality and submissiveness. In specifically studying leadership, others have similarly found that masculine types are more controlling than feminine or androgynous types, but that androgynous people seem to have equal patterns of both dominant and

A series of studies have analyzed androgynous individuals specifically, discovering that they have a higher self esteem (Kimlicka, Cross & Tarnai, 1983), demonstrate greater communication adaptability (Kelly, O'Brien & Hosford, 1981), behavioral adaptability (Bem, 1975; Eman & Meyers, 1978), interpersonal competence (Brunner & Phelps, 1979), and social competence (Campbell, Steffen & Langmeyer, 1981) than other gender types. Research has demonstrated that the androgynous individual exhibits behavior that is situationally appropriate, flexible, and effective (Bem, 1975; Bem & Lenney, 1976; Bem, Martyna & Watson, 1976). Androgynous people have also been shown to receive more positive peer evaluations than feminine persons (Falbo, 1977).

Those studies which have looked at the relationship of psychological gender to communication have demonstrated impressive results. Psychological gender has also been shown to affect loquacity (Ickles & Barnes, 1978), conformity (Bem, 1975), responsiveness (Bem, 1975), and adaptability (Wheless & Wheeless, 1981). Psychological gender also appears to be superior to biological sex categories in identifying patterns of self-reported self-disclosure and communication apprehension (Greenblatt, Hasenauer & Freimuth, 1980; Pearson, 1980; Stokes, Fuehrer & Childs, 1980) because it takes social learning into account and does not limit the classification of sex to either male or female. Psychological gender was also a better predictor of self-reported communication behavior differences in a leadership context (Megargee, 1969; Weider-Hatfield, 1987). Since language is acquired through social interaction, it is important to study language in terms of psychological gender. A system of analysis that excludes the impact of the socialized variable of psychological gender type in favor of the dichotomous biological sex classification does not capture an important facet of
communication differences, namely the impact of socialization (Pearson, 1991).

To date, the study of powerful/powerless language has been limited by two major constraints upon the research design. The first obstacle to this research is created by the general design of past studies. In attempting to make claims about how individuals converse in certain communication situations, it is crucial to look at the actual dialogue that occurs between two individuals in that situation. Generalizing about communication behaviors from transcripts does not account for the interdependent nature of talk. Talk is not static. As people accommodate to their partner, their talk changes. Also, when discourse is manipulated for a research purpose by adding powerless features in order to make one condition significantly different from the other conditions, realistic speech may not be created. This was evidenced in the male powerless condition created by O'Barr and his associates (O'Barr & Atkins, 1980). In order to generalize about powerful/powerless talk, this speech style must be studied as it occurs in face-to-face communication. Not only does this provide additional information regarding how the construct is used, but it also allows for comparison with what is already known regarding impression formation.

Secondly, powerful/powerless language has only been studied in terms of sex differences. It has not been looked at in terms of gender. Many areas of communication have demonstrated that psychological gender is a more sensitive predictor of communication behavior than sex. By including both psychological gender and biological sex in a research design, it will be possible to see the effect that emergent gender has upon talk.

Therefore, the purpose of this study is to address four research questions. First, do males and females differ in their use of powerful/powerless talk? Second, do individuals of various gender types differ in their use of powerful/powerless talk?
Third, is there an interaction between sex and gender and the use of powerful powerless talk? Lastly, what is the relationship between sex, gender type, use of powerful/powerless talk, and perceptions of credibility? An analysis of conversation as it occurs in natural talk should yield a better understanding of what variables influence speech in a manner that affects impression formation regarding the credibility of the interlocutor.
CHAPTER III

METHOD

Subjects

Subjects were 132 undergraduates, 66 male and 66 female who were selected on the basis of their scores on the Personal Attributes Questionnaire (PAQ). During recruitment subjects were told that this was a study consisting of two phases designed to assess how people discuss issues. In Phase One of the study, students who indicated an interest in participating in the study were asked to fill out a packet of materials which contained two scales. One scale, the Issues and Opinions Questionnaire (IOQ), would determine the strength of their attitudes towards specific campus related topics, and the second instrument, the Personal Attributes Questionnaire (PAQ), would assess aspects of their personality. Subjects were told that their participation was completely voluntary and was in no way connected to their present course work. They were also informed that only some of those who completed the initial packet would be called back to complete Phase Two of the study. It was explained that selection for the study was based on answers to questions in the packet and that if they were contacted, they would be asked to discuss a campus issue with another subject of the opposite sex for ten minutes. They were told that their conversation would be videotaped and that no one would be present during their conversation. Following the ten minute conversation, they were then to fill out a thirty-two item questionnaire, the Conversational Assessment Instrument (CAI), regarding the conversation.
Instruments

Issues and Opinion Questionnaire (IOQ)

The IOQ is a 5-point Likert type scale comprised of specific campus issues. The purpose of the IOQ was to determine a topic which was sufficiently engaging to college student participants and would allow them to speak freely. Issues included in the IOQ deal with topics which occur at many college campuses throughout the United States. The items included in the IOQ in the appendix originated from speech topics in introductory speech classes (see Appendix A). Talk generated from these topics approached naturalistic conversation because the topic was inherently involving, thereby compensating for the laboratory situation and making the talk more realistic.

A topic was considered as sufficiently engaging if a student scored either a four or greater, indicating agreement or strong agreement, or a two or less than two, indicating disagreement or strong disagreement on an item.

Personal Attributes Questionnaire (PAQ).

The five scales which are currently used most frequently in gender research are the Bem Sex Role Inventory (BSRI), the Personality Attributes Questionnaire (PAQ), the ANDRO Scale, the Adjective Check List (ACL), and the Femininity and Masculinity scales keyed from the California Psychological Inventory (CPI) (Cook, 1985). While the scales are similar in many respects, each is also unique in its development, the criteria used for item selection, and the number of underlying factors. Often researchers select a scale based on the popularity of the scale rather than identifying whether the assumptions upon which the scale is constructed will actually fit with their research. Therefore, the results of these studies may, in the end, be spurious due to error in construct validity. It is important in doing gender research to select a scale
that has been demonstrated to be both psychometrically sound and is developed in line with the theoretical assumptions of the study.

The most widely used, and also criticized, scale is the BSRI (Edwards & Ashworth, 1977; Orlofski, 1981; Pedhazur & Tetenbaum, 1979). In a scathing attack, Pedhazur & Tetenbaum (1979) argued that "Bem's effort to construct measures of masculinity and femininity was destined to fail, as it was based solely on an empirical approach in which trait selection was determined by a multitude of nonindependent univariate tests of significance" (p. 1012). Since four hundred nonindependent t-tests were used to obtain the much smaller list of adjectives for item inclusion, they felt that findings were misleading because they capitalized on chance. They stressed that Bem's approach to the development of this scale was atheoretical which could also lead to the issue of construct validity. In addition, the BSRI is composed of items selected for sex-typed desirability. Pedhuzar and Tetenbaum criticized that definitions of "desirability" were not sufficiently clarified for the initial raters (1979). This scale reflects what respondents believe are the ideal traits for each sex. While Bem effectively countered these attacks (Bem, 1979), the BSRI has remained under fire (Spence, Helmreich & Stapp, 1975; Wheeless & Dierks-Stewart, 1981).

The ACL, ANDRO, and CPI are scales which do not appear to be used as frequently as the BSRI and PAQ, and therefore there is less evaluation of these measures. The ACL uses an extreme group comparison method in an attempt to maximize differences between the sexes. The ANDRO was developed from the BSRI and the Personality Research Form and consists of sentences to which the respondent must answer true or false instead of adjectives. The CPI is the least similar in design to the other scales in that the items are keyed from masculinity and femininity items from the California Psychological Inventory.
Spence and Helmreich used a trait approach in the construction of the PAQ. They assume that gender is a stable behavioral predisposition common to many individuals, that it varies across individuals, and that it can be inferred through certain indicators, such as questionnaires. These traits are additive. Spence and Helmreich are interested in identifying general behavioral tendencies which are associated with masculinity and femininity, not in predicting certain behaviors which will occur in specific situations. In this regard, they differ from Bem, whose initial studies looked at such behaviors as petting kittens (Bem, 1975), playing with babies and talking to lonely students (Bem, Martyna & Watson, 1976). They argue that one can only predict behavior which is directly related to instrumental/agentic and expressive/communal traits. The PAQ reflects sex typicality. Items are selected for this scale which are similarly desirable and typical for both sexes, not ideal.

There is a significant difference between the work of Bem and Spence and Helmreich. Therefore, in selecting a scale to measure masculinity and femininity, one must be careful to select a scale that will correspond with the theoretical assumptions of the study. The main research question in this study is what are the differences in the use of powerless language between masculine, feminine and androgynous individuals. A major assumption in the study is that language is a communication behavior which will be affected by sex typicality: instrumental/agentic behavior which is masculine and the expressive/communal behavior which is feminine affects speaking behavior. Bem's work is expansive in that she focuses on cognitive templates or gender schema, which she identifies as enabling the processing of information according to learned sex role identity schema. Spence and Helmreich concentrate on well defined sex role variables, e.g., traits. The PAQ is most appropriate to identify these traits which can be correlated to specific language in use rather than to use the BEM Sex Role Inventory since this
study is not interested in cognitive processing of language. Cook (1985) provides further support for the use of the PAQ by stating, "In my view, Spence and Helmreich's work is especially notable in the androgyny literature for its careful distinctions among related terms, its explicit discussion of the theoretical and statistical implications of different ways to measure androgyny, masculinity, and femininity, and its coherent program of research" (p.31).

In addition to the considering the theoretical assumptions of the psychological gender scale, it is also important to look at the construct validity of that scale. One obstacle to the effective analysis of current studies and the progress in gender research is that there is not a perfect correlation between these five scales. While all scales appear to yield factors which pertain to the instrumental/agentic and expressive/communal distinction, the number of factors yielded by each is different (Cook, 1985; Pearson, 1980). Therefore, the analysis of results of current research to date is complex and construct validity is potentially questioned. A basic tenet of sex role theory and androgyny concerns "the extent to which the characteristics measured by any one of these current sex-role scales reflect unitary traits or dispositions that are predictive of a wide range of behaviors, attitudes, and life-style choices" (Worell, 1978, p.789). Because the PAQ appears to best predict instrumental/agentic and emotional/communal behavior, it is selected for this study as the method of measurement of masculinity and femininity.

The PAQ is a twenty-four item self report scale which consists of trait descriptions stereotypically believed to differentiate the sexes (see Appendix B). The scale contains three subscales: masculinity, femininity, and masculinity-femininity. The masculine scale is comprised of traits which are stereotypically more characteristic of males than females and refer to attributes associated with instrumental behavior (e.g.
independence, self-confidence, activity). The feminine scale contains items that are associated with interpersonally-oriented behavior or expressiveness. These items are stereotypically characteristic of females (e.g. kindness, empathy, gentle, helpful). The original scale (Spence, Helmreich & Stapp, 1974) contained 55 items but was subsequently reduced to a shortened version containing 24 items (Spence, Helmreich & Stapp, 1975). The shortened form was shown to be reliable, with correlations between the full scale and the shortened version of .93, .93, and .91 for the M, F, and MF subscales respectively (Spence & Helmreich, 1980). Cronback alphas for the same sample given the short form were .85, .82, and .78 for the M, F, and MF subscales respectively. Therefore, the shortened version was used for this study.

The scale is scored using the median split method. The median scores for the entire sample are first determined on the M and F scales. Individuals are then classified according to their position above or below the median on the two scales into four categories. Subjects are considered masculine (a score which is above the median on the M scale but below the median on the F scale), feminine (a score which is above the median on the F scale but below the median on the M scale), androgynous (a score which is above the median on both the M and F scales), or undifferentiated (a score which is below the median on both the M and F scales). The undifferentiated category was not used for this study because it represents individuals who are neither expressive nor instrumental. Since this study is looking for the effect of the presence of masculinity and/or femininity on powerless language, a category which represents the absence of these traits was not applicable.

The PAQ was given to 827 subjects at four universities: 29 subjects at the State University of New York at Geneseo in Geneseo NY; 434 subjects at the University of Toledo in Toledo, OH; 159 subjects at Alfred University in Alfred, NY; and 205 subjects
at Bowling Green State University in Bowling Green, OH. There were 515 females and 312 males in the total subject pool. Subjects were classified into one of three psychological gender types according to the median split procedure. The median for the feminine subscale was 23 and the median for the masculine subscale was 22. Individuals who scored on the median were not considered for this study. A distribution of the scores on the masculine and feminine scales can be found in the appendix (see Appendix C).

**Conversational Assessment Instrument (CAI).**

This instrument consists of 32 five-point likert scale items designed to assess the perceptions of credibility of the conversational partner (see Appendix D). The scale is abstracted from the Tolheizen (1977) credibility scale which has been successfully used in past research on powerful/powerless language (Johnson, 1985). The original scale consisted of 45 likert scale items which tapped five dimensions of credibility: competence, trustworthiness, dynamism, objectivity, and association. However, the scale was abbreviated for this study in order to reduce fatigue of the subjects. Questions which appeared to be redundant and those which pertained to the factor of objectivity were eliminated since objectivity is not a factor which has been studied in connection with powerful/powerless talk in previous research.

While there are several instruments which have been shown to have high reliability in measuring credibility, the CAI was derived from the Tolheizen instrument because it had been used in previous research on powerless language (Johnson, 1985). The Tolheizen (1977) instrument was originally found to contain four factors of credibility: competence, character, objectivity, and association. However, subsequent research revealed five factors: competence, dynamism, character, association, and
objectivity (Johnson, 1985; Watson, 1978). In order to verify the reliability of the factors of the Conversational Assessment Instrument (CAI), a factor analysis was performed using a Varimax orthogonal rotation.

Criterion for the identification of factors was established such that each factor must obtain an eigenvalue greater than 1.0, there must be more than one item per factor, and each item which was selected as a member of a specific factor must have a value of at least .60. Rotated varimax factor coefficients are located in Appendix E. The cumulative variance of the first four factors of .57 is somewhat less than the findings in past research; Johnson (1985) obtained a cumulative variance of 67.8 on five factors.

Chronbach alphas determined the reliability of the factors of dynamism ($\alpha = .83$), association ($\alpha = .85$), trustworthiness ($\alpha = .65$), and competence ($\alpha = .46$). The dynamism factor resulted in the greatest similarity between items which loaded on this factor and items which loaded on the first factor in the Johnson (1985) research.

**Procedures**

In Phase 2 of the study, potential subjects were then contacted and asked for available times to return to be videotaped. Participants were asked for several times to enable the researcher to identify a partner of the opposite sex who could also meet at an agreed upon time. A second phone call verified the time for taping, and participants were scheduled to return to a specified location which varied with each university. In this manner, 66 dyads were formed containing a male and a female which were comprised of 22 masculine dyads, 22 feminine dyads and 22 androgynous dyads. Many potential subjects were eliminated from participation because an available partner could not be located. As a result, the data collection lasted nine months.
When the scheduled dyads arrived, participants were briefed that the purpose of the study was to understand "how people talk to each other when they attempt to solve a problem". They were reminded that earlier they had identified strong feelings about a particular campus issue, such as parking, on the Issues and Opinion Questionnaire. They were told that this problem was a common one on many campuses and that it needed to be solved. The researcher indicated that while the purpose of this study was not specifically to solve the campus problem but rather to understand how people engage in problem solving, that it was not uncommon for studies to attempt to accomplish more than one goal. Therefore, the researcher would be sending a compiled list of the suggestions that were offered by students to the administration. They were then instructed that they had ten minutes to arrive at some viable proposals to solve the problem. In the process they were to feel free to debate, criticize, or add to any suggestions that their partner might make because often the best solutions come through brainstorming rather than just individual effort. Participants were then informed that their conversation would be videotaped so that later the researcher could list their solutions to deliver to the administration. No mention was made of powerless language.

Participants were then handed a consent form and informed that their participation was totally voluntary. If at any time they did not wish to participate in the study, they were free to leave. They were also informed that transcriptions would be made from the videotapes and at that time their names would be changed to subject numbers, thereby maintaining their confidentiality.

After signing the consent forms, participants were taken to a room containing two lounge-type chairs placed diagonally and approximately three feet apart. This enabled participants to face each other but also be in full view of the camera. Each participant took a seat and the researcher adjusted the camera and external microphone which was
placed between and slightly behind the subjects to enhance sound production. Once
participants were settled, the researcher announced their subject numbers on the tape
and told them they had ten minutes to solve the campus problem. After ten minutes
elapsed, the conversation was terminated. Subjects were then taken to separate rooms
were they filled out the CAI. After completion of the CAI subjects were debriefed. They
were told that the main purpose of this study was to look at how people of different
gender use language. They were informed at the completion of the study, a synopsis of
the findings would be left with the communication department at their school.

Data for Analyses
Each videotape was transcribed, deleting the first and last minute of the conversation. A
content analysis was performed on eight minutes of talk. The first minute was dropped
from analysis because it was assumed that this would not be representative of normal
conversation. Participants often used this time to acclimate to their partner and the
videotaping situation. The last minute of talk was often used as a summarizing segment.
Since subjects often went back to material they had already discussed, again it was felt
that less types of tentative talk would surface at this point than during the middle eight
minutes. Again, as it was not representative of normal talk, it was deleted.

The transcription convention used in this study (see Appendix F) was devised by
A modified version which only included notation relevant to this study was utilized. Two
transcribers were trained on two practice segments of talk by matching their
transcriptions with two completed by the researcher. Where there was disagreement,
the tapes were played and segments discussed until agreement was obtained. A third
transcript was then completed in which the transcripts were judged to be reliable. At
this point, transcriber number one was given forty-one transcripts to type and
transcriber number two typed the remaining twenty-one transcripts.

Coding of the dyads was completed on the following variables: qualifiers,
cognitive disclaimers, intensifiers, tag questions, intonation, vocal segregates, sentence
correction, sentence incompletions, and repetitions. The researcher coded all of the
transcripts and was blind to the dyad type and sex of the participant. A second coder was
trained on one pilot transcript. Instances of disagreement resulted in the addition or
deletion of words, phrases, or occurrences within categories of variables. These
modifications are discussed below in the description of the variables. Two additional
training transcripts were then coded by both coders which resulted in a 92% agreement
for the first transcripts and a 90% agreement for the second transcript. Following
training, 66 dyads were then coded. Intercoder reliabilities for each variable were
obtained using the Pearson's Product Correlation Coefficient and are presented according
to the powerless language component. The following section details the dependent
variables of powerful/powerless talk.

Qualifiers

Qualifiers are words and phrases which deintensify an utterance. A qualifier may
modify either a noun or a verb. A list of qualifiers was compiled by combining a list
derived from previous research (Cegala, 1989) and by consulting a dictionary to
identify additional words or phrases. Each word and each qualifying phrase was scored as
one unit (see Appendix G). During the piloting of the coding system, disagreements
arose over what counted as a qualifier with the word "like". It was agreed that the word
"like" did appear to deintensify a statement when it was included as a word which did not
mean "similar". For example
A: I know, like um - this past winter, or like - winter-spring time, when it was raining alot. I was sick and my doctor's like "You shouldn't be out in the rain, walking around and bla-bla-bla". So I was like "okay".

Coders agreed that instances of like used in this manner would be coded as qualifiers. In this example, like was scored each time it was used. Intercoder reliabilities were .97 for the males and .99 for the females within the dyads.

Cognitive Disclaimers

Cognitive disclaimers are indicated by the conjunction "but" and were identified by marking the use of "but" in the transcript. Coders were then asked to make a judgement about the phrase preceding "but" as to whether or not it appeared to reduce the force of the statement. The following phrases are examples of cognitive disclaimers identified by Baumann (1979):

So--I don't know if that quite fits but...

Either I'm getting confused, or this is confused, but...

This may not be important but...

It sounds like a deliberate trap --I may be wrong, but...

Each disclaiming phrase counted as one unit. When a cognitive disclaimer included other variables under analysis, such as intensifiers or qualifiers, only the cognitive disclaimer was counted. At first the second coder had difficulty recognizing what counted as a cognitive disclaimer. However, with additional training the coder mastered the concept, resulting in a reliability of .97 for the males and .89 for the females.
Intensifiers

An intensifier is a form of speech which increases the force of an assertion. While it is usually a word, it may be a phrase, such as "As a matter of fact, Jim is the best technician I know". Each word or phrase which qualifies as an intensifier was counted as one unit (see Appendix H). Less training was needed for a coder to recognize an intensifier than a qualifier. The intercoder reliability for intensifiers was .99 for the males and .99 for the females.

Tag Questions

A tag question is a declarative statement which ends in a question which appears to ask for agreement or verification of that statement. In other words, the question is tagged at the end instead of originally being phrased as a question. The following sentences are examples of tag questions:

"That is what we are supposed to do, isn't it?"

"You want me to get that information today, don't you?"

Tag questions were identified by first looking for questions in the transcript. Once a question was identified, the coder determined whether the question was a direct question or whether it included a phrase at the end, the tag, which changed the original declaration to a question. A tag which included another powerless variable was only coded as a tag. The intercoder reliability was .98 for males and .97 for females.

Intonation

Intonational pattern was judged by the rising tone in a declarative form. Rising intonation appears to serve the same purpose as a tag question. Instead of directly asking a question, sometimes an individual will indirectly ask for agreement from their partner
with a rising intonation. The following example demonstrates this point.

A: I got so many parking tickets, cause when I lived in the Brick I
would park across - behind the library/

B: Uh huh

In this example, A is not certain that B understands exactly the location that A is
describing. B indicates with a minimal response that B does, in fact, know the location.

Intonation was marked on transcripts by the transcriber who was told to only mark
rising intonation at the end of a sentence, even though there were instances in mid
sentence which also indicated that the interlocutor was searching for agreement from the
listener. Rising intonation in backchannels or minimal responses were not coded. The
intonational pattern had to occur at the end of a sentence. Each incident of rising
intonational pattern was coded as one unit. In this case, intonation was not dependant
upon words, therefore it was possible for a coder to mark the end of a sentence with a
rising intonation and also mark the last word in the sentence as another powerless
variable. The intercoder reliabilities for intonation were .95 for males and .98 for
females.

Vocal Segregates

Vocal segregates are noises which reflect hesitation, such as uh, umh, and er.

During the pilot study, "you know" also emerged as a vocalization which was not intended,
in many instances, to ask for validation from the interlocutor. Rather, it seemed to be a
buffer in which the speaker was using these words to take up time to think about the next
segment of talk. Therefore, it was agreed that the phrase "you know" would be coded in
this category. An example of "you know" as a vocal segregate is:
A: They - they tend to think - that uh - you know, students and undergrads have - you know, nothing to do all day - but go to their class, and do their work.

On the other hand, you know was not counted when it was used specifically to ask for validation of the speaker's statement, for example:

B: Do you know what they mean when they say we don't have a parking problem, we have a laziness problem?

Reliability for vocal segregates was .99 for males and .99 for females.

Sentence Correction

Sentence correction involves changes in some aspect of the sentence. There are four types of corrections that have been shown to create impressions of tentativeness: grammatical correction, word order correction, lexical correction, and phonological change (Levin & Silverman, 1965). Each of these corrections were coded in a single category of sentence correction.

Grammatical correction. In this type of correction the subject realizes that there is an error in tense, agreement, aspect, gender, number, case or derivation, and attempts to change it. Examples are:

"He wants, wanted, to go with me"

"She said - he said - it was okay"

Word order correction. These have also been called spoonerisms. In this correction, the speaker realizes that the order of words has been transposed and consequently makes an attempt to correct the mistake. An example is
"She put the dog on the collar, I mean she put the collar on the dog".

**Lexical correction.** In this case the speaker errs in specific word choice. In correcting the sentence, a new word which indicates the correct meaning is exchanged for the old word. For example

"He talked - he whispered about it to Jean".

**Phonological change.** This change involves the correction of a sound, such as

"He was goin' - going - to come, but couldn't make it."

For this category of correction which included the four types mentioned above, the intercoder reliability was .97 for the males and .58 for the females across all types of sentence corrections.

**Sentence Incompletion**

This category includes any incident when a sentence was started but not finished. Incompletions are noted on the transcripts with a hatch mark (see Appendix E). The self interruption occurs at the end of the sentence.

Examples are

A: I hate to say that, but ...

A: I thought we could, well...

The intercoder reliability for incompletions was .99 for the male and .98 for the female.

**Repetitions**

The final category to be coded was repetitions. Like sentence corrections, there are several types of repetitions which create tentativeness according to Levin & Silverman
Words. When one word followed the same word, it was coded as a repetition. For example, in the sentence "She, she told me it was all right", the word "she" was coded as a repetition. If a word was followed by a vocal segregate and then repeated, it was also coded as a repetition. "She, uh, she told me it was all right" would also count as a repetition. If, however, a word was followed by any word other than itself or a vocal segregate, it was not coded as a repetition. For example, "She, I mean she told me it was all right" would not count as a repetition because at least one other word interrupted the repeated words. In this example, "I mean" was counted as a sentence correction.

Sounds. A sound repetition is commonly called stuttering. In this case the speaker repeats the initial sound in an attempt to say the entire word. An example of this is "I l-l-like her a lot", where the "l" sound is repeated until the word "like" is accomplished. Each time the sound was repeated, it was scored in this category. In the above example, this sentence would receive a frequency of two because the sound was repeated twice before the word "like" was finally pronounced. None of the subjects had speech impediments. If they had, the category could have been problematic. Rarely were sounds repeated more than twice before the word was completed.

Phrases. This last type of repetition goes beyond the word to actual phrases. Again, similar to word repetition, if a vocal segregate appeared between two repeated phrases, the repetition was counted. Any other type of word occurring between phrases would nullify inclusion into this category. An example of this would be, "We should really - we should really say no to him". In this case the intensifier "really" also occurs. If an intensifier or qualifier
occurs in the repeated word or phrase, the intensifier is scored once and the repetition is scored once.

The three types of repetitions were scored in only one category. The intercoder reliability for males was .91 and for females was .99.

**Design and Data Analysis**

A complete discussion of data analysis occurs in the results section. Due to the interdependent nature of dyadic communication (Kenny, 1987), the unit of analysis is the dyad. The design is a repeated measures design with the dyad composition of one male and one female as the repeated measure. A Repeated Measures Analysis of Variance was selected as the measure of analysis because the between-dyad independent variable, gender, is categorical and the within variable of sex is correlated (Kenny & Kashi, 1991). Using a one-tailed test of significance with an alpha of .05, it was determined that in order to achieve a medium effect size of .5 and a relatively strong level of power of 80, 22 dyads would be needed for each condition (Kraemer & Thiemann, 1987). A .5 effect size has been determined to be characteristic of social science research (Cohen, 1977).

**Statement of the Research Questions**

Past research has identified the powerful/powerless construct and provided direction in understanding the impact this style has on credibility. However, the powerful/powerless language style has not been sufficiently studied with the use of realistic talk and appropriate statistical methods of analysis. As a result, we are unable to say who might use powerful/powerless language or how this language style affects impressions formed in ongoing interactions. Therefore, this study addresses the
following research questions:

RQ1: Do males and females differ in their use of powerful/powerless talk?

RQ2: Do individuals of various gender types differ in their use of powerful/powerless talk?

RQ3: Is there an interaction between sex and gender and the use of powerful/powerless talk?

RQ4: Is there a relationship between sex, gender type, use of powerful/powerless talk and perceptions of credibility?
Chapter IV

Results

The results in this section are presented in two sections. The first section addresses the research question regarding whether there is a difference between the way individuals with different psychological genders use powerful/powerless language. A repeated measures multivariate analysis of variance was used to determine if there was a difference between psychological genders in their use of the construct of powerful/powerless language. The repeated measures design was used to account for the nonindependence of biological sex that occurs in a mixed dyad where one member of the dyad is male and the other member is female. Next, the powerless language construct was analyzed by using separate repeated measures analyses of variance on specific language features (e.g. intensifiers, qualifiers, cognitive disclaimers, tag questions, vocal segregates, sentence incompletions, sentence corrections, and repetitions). Results are reported according to research questions. Anova summary tables and tables of means for each powerless language variable appear at the end of this chapter. The analysis of the use of powerless language is followed by a section which looks at interactant's perceptions of the use of powerful/powerless language by their partner in order to answer the question regarding whether sex impacts on perceptions of credibility. Repeated measures anovas were employed on the four dimensions of credibility with the nine covariates of powerless language added in order to determine the best model to predict the individual whose powerless language use is perceived to lack credibility by their interactional partner.
Multivariate Analysis of Variance

A multivariate analysis of variance with two independent variables, sex (male or female) and gender (masculine, feminine, or androgynous) and nine dependent variables (powerful/powerless language components) did not demonstrate significant results (Wilks = .98; F (2, 126) = .52; P < .5948). However, due to the results from past research regarding powerful/powerless language and the possible separate effects which could be contributed by each dependent variable, separate univariate analyses of variance were used to test the impact of each of the nine language components.

Research Questions

RQ1: Do males and females differ in their use of powerful/powerless talk?

The principle analysis indicated that there were significant main effects for sex on intensifiers (F = 6.27, p < .01) and sentence incompletions (F = 4.03, p < .04). Other powerful/powerless variables were not significant.

RQ2: Do individuals of various gender types differ in their use of powerful/powerless talk?

The principle analysis indicated that there were significant main effects for dyads on qualifiers (F = 3.99, p < .02). Other powerful/powerless language variables were not significant.

RQ3: Is there an interaction between sex and gender and the use of powerful/powerless talk?

The principle analysis indicated that there were no interactions between sex and gender.
RQ4: Is there a relationship between sex, gender type, use of powerful/powerless talk and perceptions of credibility?

The impact of language components, sex and gender upon perceptions of credibility was determined by using a General Linear Models Procedure employing repeated measures anovas on the dimensions of dynamism, association, trustworthiness, and competence with the nine powerful/powerless language dependent language variables added in order to determine the model with the best fit for sex, gender, powerful/powerless language, and dimensions of credibility. The modeling procedure is discussed according to separate dimensions of credibility. First, the credibility dimension without the language components added is analyzed. Next, language components which were either significant or approached significance were added to determine the best predictive model.

**Dynamism.** The first variable considered was dynamism. A repeated measures analysis of variance was performed with dyad as the between factor and sex of the interactant as the within factor. Interaction between dyad and sex of interactant was significant ($F = 7.17$, df = 2, 63, $p = .0016$). The mean dynamism scores for each sex was then compared at each dyad type using Tukey's multiple comparison procedure at $\alpha = .05$. The mean dynamism scores for males was significantly higher than the mean dynamism score for females in the masculine dyads. There was no significant difference in mean dynamism scores between males and females in the feminine and androgynous dyads (see Table 3).
Table 3

Mean scores for dynamism

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<th>females</th>
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<td>28.409</td>
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</tbody>
</table>

Next, the mean dynamism scores were compared within each sex using Tukey's multiple comparison procedure at $\alpha = .05$. Within the males, there was no significant difference in mean dynamism among the three dyads. Within the females, the mean dynamism for the masculine dyad was significantly smaller than the mean dynamism for the feminine and androgynous dyads.

To determine if powerless language components were related to dynamism, several repeated measures models were considered in order to determine the best model. The first procedure entailed looking at a model with the type of dyad, sex, dyad * sex, and all nine powerless language components. The only language component that was significant was intensifiers ($F = 8.80, p = .0045$). In the second procedure, a model containing type of dyad, sex, dyad * sex, and all nine powerless language components was examined along with the nine 2-way interactions involving sex and the nine powerless language components. None of the 2-way interactions were significant at $\alpha = .05$. In the third procedure, a model containing all of the above variables plus nine 2-way interactions involving the type of dyad and the nine powerless language components was run. None of the 2-way interactions involving the type of dyad were significant at $\alpha = .05$. 
Three additional models were considered. First, the model containing the independent variables of type of dyad, sex, sex * dyad and the independent variable of intensifiers alone was examined. Intensifiers was significant (F = 11.37, df = 1, 62, p = .0013) and the relationship between intensifiers and dynamism was negative, such that as the number of intensifiers used in a conversation increased, perceived dynamism decreased. The parameter estimate for the term involving intensifiers was -.2233. This model turned out to be the best model for predicting dynamism. In addition, the model containing the independent variables of dyad type, sex, sex * dyad, intensifiers and vocal segregates was considered. This model was considered because the variable of vocal segregates was close to being significant in previous models. Adding vocal segregates to the model containing dyad type, sex, sex * dyad and intensifiers did not contribute any information for predicting dynamism (F = 1.02, df = 1, 61, p = .3163). Finally, the model containing the independent variables of dyad type, sex, sex * dyad, intensifiers, vocal segregates and vocal segregates * dyad was considered because vocal segregates * dyad was close to being significant in previous models. Again, adding vocal segregates * dyad to the last model did not contribute any additional information for predicting dynamism (F = .53, df = 2, 59, p = .5908).

Association. The second component of credibility was association. A repeated measures analysis of variance was performed with dyad as the between factor and sex of the interactant as the within factor. Interaction between dyad and sex of interactant was not significant (F = .11, df = 2, 63, p = .8989). In addition, sex of interactant was not significant (F = .05, df = 1, 63, p = .8305) and dyad was not significant (F = 2.75, df = 2, 63, p = .0713).
To determine if powerless language components were related to association, several repeated measures models were considered in order to determine the best model. The first procedure entailed looking at a model with the type of dyad, sex, dyad * sex, and all nine powerless language components. The only language component that was significant was qualifiers (F = 4.35, p = .0418). In the second procedure, a model containing type of dyad, sex, dyad * sex, and all nine powerless language components was examined along with the nine 2-way interaction involving sex and the nine powerless language components. Two of the 2-way interactions were significant. The interaction of tag questions * sex was significant (F = 10.87, df = 1, 45, p = .0019) and sentence corrections * sex was also significant (F = 8.17, df = 1, 45, p = .0064). In the third procedure, a model containing all of the above variables plus nine 2-way interactions involving the type of dyad and the nine powerless language components was run. None of the 2-way interactions involving the type of dyad were significant at $\alpha = .05$.

Several additional models were considered. First, the model containing the independent variables of type of dyad, sex, sex * dyad and the independent variable of qualifiers alone was examined. Qualifiers was not significant (F = 2.00, df = 1, 62, p = .1627). Next, the model containing the independent variables of dyad type, sex, sex

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**Table 4**

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* dyad, qualifiers and tag questions was considered. This model was considered because the variable of tag questions was involved with a significant interaction in previous models. Adding tag questions to the model containing dyad type, sex, sex * dyad and qualifiers did not contribute any information for predicting association (F = 2.45, df = 1, 61, p = .1224).

The analysis continued by examining other models containing specific interactions. A model containing the independent variables of dyad type, sex, sex * dyad, qualifiers, tag questions and tag questions * sex was considered because tag questions * sex was significant in previous models. Adding tag questions * sex to the last model was significant in predicting association (F = 6.65, df = 1, 60, p = .0124). The following model containing the independent variables of dyad type, sex, sex * dyad, qualifiers and intonation was considered because the interaction between intonation and sex was close to being significant. Adding intonation to the model with just dyad type, sex, sex * dyad and qualifiers did not contribute additional information for predicting association (F = 1.24, df = 1, 61, p = .2698). Another model which was examined contained the independent variables dyad type, sex, sex * dyad, qualifiers, intonation, and the interaction of intonation * sex. Again, adding intonation * sex did not add to the predictability of association (F = 3.39, df = 1, 60, p = .0704). An additional model which was considered contained the independent variables of dyad type, sex, sex * dyad, qualifiers, and sentence corrections because sentence corrections was involved in a significant interaction in previous models. Adding sentence corrections to this model did not contribute additional information to the predictability of association (F = 1.38, df = 1, 61, p = .2446). The next model containing dyad type, sex, sex * dyad, qualifiers, sentence corrections, and the interaction of sentence correction * sex was considered. The interaction of sentence correction * sex did contribute to the predictability of
association (F = 6.23, df = 1, 60, p = .0153).

Finally, the last model contained the independent variables dyad type, sex, sex * dyad, qualifiers, tag questions, intonation, sentence corrections and the interactions of sentence corrections * sex, tag questions * sex and intonation * sex. All interactions involving sex and the selected powerless language components were significant at $\alpha = .05$. Thus, the best model for predicting association includes the independent variables dyad type, sex, sex * dyad, qualifiers, tag questions, intonation, tag questions * sex, intonation * sex, and sentence corrections * sex. The relationship between qualifiers and association was negative, such that as the number of qualifiers used in conversation increased, perceived association decreased. The parameter estimate for the term involving intensifiers was -.0588.

All the other significant powerless language components interacted with sex: tag questions, intonation, and sentence corrections. For females, the relationship between tag questions and association was negative such that as the number of tag questions used in conversation increased, the perceived association decreased. The parameter estimated for the term involving tag questions was -.1357. For males, however, the relationship between tag questions and association was positive, such that as the number of tag questions increased, the perceived association level also increased. The parameter estimate for the term involving tag questions for males was .8187. The powerless language feature of intonation also created different perceptions of association for males and females. For females, the relationship between intonation and association was positive, such that as the number of rising intonations at the end of declarative sentences used in conversation increased, the perceived association increased. The parameter estimated for the term involving intonation was .1050. For males, however, the relationship between intonation and association was negative, such that as the number of
instances in which intonation increased, the perceived association level decreased. The parameter estimate for the term involving tag questions for males was -.2595. Lastly, the use of sentence corrections also resulted in different perceptions according to sex. For females, the relationship between sentence corrections and association was positive, such that as the number of sentence corrections used in conversation increased, the perceived association increased. The parameter estimate for the term involving intonation was .4120. For males, however, the relationship between sentence corrections and association was negative, such that as the frequency of sentence corrections increased during a conversation, the perceived association level decreased. The parameter term for the estimate involving sentence corrections was -.0701.

Trustworthiness. The second component of credibility was trustworthiness. A repeated measures analysis of variance was performed with dyad as the between factor and sex of the interactant as the within factor. Interaction between dyad and sex of interactant was not significant (F = .13, df = 2, 63, p = .88). In addition, sex of interactant was not significant (F = .67, df = 1, 63, p = .4160) and dyad was not significant (F = 1.84, df = 2, 63, p = .1677).

Table 5

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</table>
To determine if powerless language components were related to trustworthiness, several repeated measures models were considered in order to determine the best model. The first procedure entailed looking at a model with the type of dyad, sex, dyad * sex, and all nine powerless language components. There were three language components that were significant: qualifiers (F = 6.00, p = .0176), vocal segregates (F = 4.03, p = .0498), and sentence corrections (F = 5.33, p = .0248). In the second procedure, a model containing type of dyad, sex, dyad * sex, and all nine powerless language components was examined along with the nine 2-way interactions involving sex and the nine powerless language components. None of the 2-way interactions were significant at α = .05. In the third procedure, a model containing all of the above variables plus nine 2-way interactions involving the type of dyad and the nine powerless language components was run. The 2-way interaction involving the type of dyad and sentence corrections was significant (F = 4.26, p = .0246).

Eight additional models were considered in order to determine which model best predicted trustworthiness. First, the model containing the independent variables of type of dyad, sex, sex * dyad and the independent variable of qualifiers alone was examined. Qualifiers were significant (F = 7.07, df = 1, 62, p = .0100) and the relationship between qualifiers and trustworthiness was negative, such that as the number of qualifiers used in a conversation increased, perceived trustworthiness decreased. The parameter estimate for the term involving qualifiers was -.0381. In addition, the model containing the independent variables of dyad type, sex, sex * dyad, and sentence corrections was considered. This model was considered because the variable of sentence corrections was significant in previous models. Adding sentence corrections to the model containing dyad type, sex, and sex * dyad did not, however, did not contribute any information for predicting dynamism (F = .25, df = 1,61, p = .6162). Next, the model
containing the independent variables of dyad type, sex, sex * dyad, and vocal segregates was considered because vocal segregates was also significant in previous models. Vocal segregates was significant (F = 5.49, df = 1, 61, p = .0224) and the relationship between vocal segregates and trustworthiness was negative, such that as the number of vocal segregates used in a conversation increased, perceived trustworthiness decreased. The parameter estimate for the term involving vocal segregates was -.0464.

In another model, the independent variables of dyad type, sex, sex * dyad and qualifiers were combined with sentence corrections. However, adding sentence corrections to the model already containing qualifiers did not contribute any information for predicting trustworthiness (F = 3.45, p = .0681).

An additional model looked at the independent variables of dyad type, sex, sex * dyad and qualifiers with vocal segregates. Adding vocal segregates to the model with qualifiers did not contribute any information for predicting trustworthiness (F = 1.36, p = .2488).

Next, a model containing the independent variables of dyad type, sex, sex * dyad, vocal segregates, and sentence corrections was considered. Adding sentence corrections to the model containing vocal segregates, however, did not contribute any information for predicting trustworthiness (F = 3.43, p = .0689).

In the following model, the independent variables of dyad type, sex, sex * dyad were considered with qualifiers, sentence corrections, and vocal segregates. Both qualifiers (F = 5.14, p = .0269 and sentence corrections (F = 5.77, p = .0194) were significant, but vocal segregates (F = 3.63, p = .0615) was not significant.

Finally, the model containing type of dyad, sex, sex * dyad, qualifiers, sentence corrections and the interaction of sentence correction and dyad was considered because the interaction of sentence corrections * dyad was significant in previous models. Adding
the interaction to the model containing type of dyad, sex, sex * dyad, qualifiers and sentence corrections did contribute information for predicting trustworthiness \( (F = 3.16, p = .0497) \). This was the best model for predicting trustworthiness.

The relationship between qualifiers and trustworthiness was negative such that as the use of qualifiers increased in conversation, trustworthiness decreased. The parameter estimate for the term involving qualifiers was -.0405. The type of dyad and sentence corrections interacted to affect trustworthiness. For masculine dyads, the relationship between sentence corrections and trustworthiness was positive, such that as the frequency of sentence corrections increased, trustworthiness also increased. The parameter estimate for the term involving sentence corrections for the masculine dyads was .2176. For feminine dyads, the relationship between sentence corrections and trustworthiness was also positive, such that as the frequency of sentence corrections increased, trustworthiness increased. The parameter estimate for the term involving sentence corrections for feminine dyads was .1482. For the androgynous dyads, however, the relationship between sentence corrections and trustworthiness was negative, such that as the frequency of sentence corrections increased, perceived trustworthiness decreased. The parameter estimate for the term involving sentence corrections for androgynous dyads was -.0772.

**Competence.** The last variable considered was competence. A repeated measures analysis of variance was performed with dyad as the between factor and sex of the interactant as the within factor. Interaction between dyad and sex of interactant was significant \( (F = 5.38, df = 2, 63, p = .007) \). The mean competence score for each sex was then compared at each dyad type using Tukey's multiple comparison procedure at
\( \alpha = .05 \). The mean competence score for males was significantly greater than the mean competence score for females in the masculine dyads. There was no significant difference in mean competence scores between males and females in the feminine and androgynous dyads (see Table 6).

Table 6

<table>
<thead>
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Next, the mean competence scores for dyads were compared within each sex using Tukey's multiple comparison procedure at \( \alpha = .05 \). Within the males, there was a significant difference in the mean score on competence among the three dyads. The male mean score in the masculine dyad was significantly higher than the male mean score in the androgynous dyad. It was not significantly higher than the feminine mean dyad score. However, with females, there was no significant difference in scores on competence among the dyads.

To determine if powerless language components were related to competence, several repeated measures models were considered in order to determine the best model. The first procedure entailed looking at a model with the type of dyad, sex, dyad * sex, and all nine powerless language components. The only language component that was significant was vocal segregates \( (F = 7.13, p = .010) \). In the second procedure, a model containing
type of dyad, sex, dyad * sex, and all nine powerless language components was examined along with the nine 2-way interaction involving sex and the nine powerless language components. The 2-way interaction of sex and repetition was significant (F = 4.61, df = 1, 45, p = .0372). In the third procedure, a model containing all of the above variables plus nine 2-way interactions involving the type of dyad and the nine powerless language components was considered. None of the 2-way interactions involving the type of dyad were significant at \( \alpha = .05 \).

Three additional models were considered. First, the model containing the independent variables of type of dyad, sex, sex * dyad and the independent variable of vocal segregates alone was examined. Vocal segregates were significant (F = 12.66, df = 1, 62, p = .0007) and the relationship between vocal segregates and competence was negative, such that as the number of vocal segregates used in a conversation increased, perceived competence decreased. The parameter estimate for the term involving vocal segregates was -.1011. This model turned out to be the best model for predicting competence. In addition, the model containing the independent variables of dyad type, sex, sex * dyad, vocal segregates and repetitions was considered. This model was considered because the interaction of repetitions * sex was significant in previous models. Adding repetitions to the model containing dyad type, sex, sex * dyad and vocal segregates did not contribute any information for predicting competence (F = .34, df = 1,61, p = .5646). Finally, the model containing the independent variables of dyad type, sex, sex * dyad, vocal segregates, repetitions, and repetitions * sex was considered because repetitions * sex was significant in previous models. Again, adding repetitions * sex to the last model did not contribute any additional information for predicting dynamism (F = .39, df = 1, 60, p = .5324).
Summary of findings for RQ: 4.

Research question four asked whether there is a relationship between sex, gender type, use of powerful/powerless talk and perceptions of credibility. When looking at the dimensions of credibility without the language components added, there were interactions between sex and gender type on two dimension. Masculine males were seen to be more dynamic and competent than masculine females. When language components were added in order to determine the best model, the impact on dimensions of credibility varied according to the dimension. The best model to predict dynamism included the independent variables of dyad, sex, sex * dyad and the dependent variable of intensifiers. The best model to predict association included the independent variables of dyad, sex, sex * dyad and the dependent variables of qualifiers, tag question and intonation along with the interactions of tag question * sex, intonation * sex, and sentence correction * sex. The best model to predict trustworthiness included the independent variables of dyad, sex, sex * dyad and the dependent variables of qualifiers and sentence corrections along with the interaction of sentence corrections * dyad. Finally, the best model to predict competence included the independent variables of dyad, sex, sex * dyad and the dependent variable of vocal segregates.
### Table 7

**ANOVA Table for Intensifiers**

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### Table 8

**Mean Scores for Intensifiers**

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Table 9

**Anova Table for Qualifiers**

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Table 10

**Mean Scores for Qualifiers**

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Anova Table for Cognitive Disclaimers

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Table 12

Mean Scores for Cognitive Disclaimers

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**Anova Table for Tag Questions**

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Table 14

**Mean Scores for Tag Questions**

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Table 15

Anova Table for Intonation

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Table 16

Mean Scores for Intonation

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Table 17

**Anova Table for Vocal Segregates**

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Table 18

**Mean Scores for Vocal Segregates**

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Table 19

Anova Table for Sentence Corrections

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Table 20

Mean Scores for Sentence Corrections

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Table 21

**Anova Table for Sentence Incompletions**

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Table 22

**Mean Scores for Sentence Incompletions**

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**Anova Table for Repetitions**

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<td>25.46</td>
<td>.36</td>
<td>.70</td>
</tr>
<tr>
<td>Dyad number (type dyad)</td>
<td>63</td>
<td>4497.56</td>
<td>71.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>28.18</td>
<td>28.18</td>
<td>.35</td>
<td>.55</td>
</tr>
<tr>
<td>Sex * Dyad type</td>
<td>2</td>
<td>266.37</td>
<td>133.18</td>
<td>1.65</td>
<td>.20</td>
</tr>
<tr>
<td>Residual</td>
<td>63</td>
<td>5091.93</td>
<td>80.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 24

**Mean Scores for Repetitions**

<table>
<thead>
<tr>
<th>Dyad</th>
<th>N</th>
<th>Males</th>
<th>Females</th>
<th>Dyad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculine</td>
<td>22</td>
<td>11.77</td>
<td>11.77</td>
<td>11.77</td>
</tr>
<tr>
<td>Feminine</td>
<td>22</td>
<td>9.31</td>
<td>11.31</td>
<td>10.31</td>
</tr>
<tr>
<td>Androgynous</td>
<td>22</td>
<td>13.81</td>
<td>9.04</td>
<td>11.42</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>34.89</td>
<td>32.12</td>
<td>33.50</td>
</tr>
</tbody>
</table>
CHAPTER V
DISCUSSION

This section contains a summary of the study with a discussion of those results and a discussion of those trends in the data which did not achieve statistical significance but demonstrated a pattern of response. Limitations of the study will then be addressed followed by implications for future research on powerful/powerless language.

Summary of the Study

The purpose of this study was to assess the impact of psychological gender on the use of powerful/powerless language. To achieve this objective, 827 undergraduate students at four different universities were given the PAQ to determine their psychological gender and the IOQ to identify a campus issue which interactants would find sufficiently engaging. Using the median-split method, subjects were identified as either masculine, feminine, or androgynous. Dyads containing a male and a female were formed by matching a subject’s psychological gender type, so that there were 22 dyads of each psychological gender type. Subjects were asked to discuss the campus issue they indicated was most involving on the IOQ for ten minutes. They were asked to resolve this issue by working with their partner to identify proposals which could be forwarded to the administration. Following their conversation, subjects completed the CAI in order to assess their perceptions of their partner’s credibility. Their conversations were videotaped and subsequently transcribed. There were nine powerful/powerless variables coded in the transcripts that have previously been identified as exhibiting
impressions of lack of power or tentativeness: intensifiers, qualifiers, cognitive
disclaimers, tag questions, vocal segregates, sentence incompletions, sentence
corrections and repetitions.

Four research questions were asked regarding the use of powerful/powerless
language. The first three questions dealt with the differences in the use of
powerful/powerless language according to an individual's sex and psychological gender.
A Multivariate Analysis of Variance indicated that there was no significance. Separate
analyses of variance, however, produced some significant effects. These effects and other
trends in the data are discussed according to research question.

The first question asked, do males and females differ in the use of
powerful/powerless language? At the p < .05 confidence level, significance was found
between males and females on two of the nine powerful/powerless language components.
Females, regardless of their psychological gender type, used significantly more
intensifiers and sentence incompletions than males. While dyad type was not significant,
an inspection of the means of males and females in each dyad reveal some interesting
similarities between these two powerful/powerless language components. Androgynous
dyads used the greatest number of intensifiers (M = 39.13) and sentence incompletions
(M = 9.93), while androgynous females had the highest usage of all individuals for
intensifiers (M = 43.45) and sentence incompletions (M = 11.68) in all dyad types.
This result is not surprising given that accommodation theory argues that interlocutors
tend to converge their speech styles in cooperative interactions (Mulac et al., 1988).
Since androgens are the most flexible individuals of all dyad types, they are more likely
to pattern their talk after their partner (Bem, 1975; Bem & Lenney, 1976; Bem,
Martyna & Watson, 1976). The fewest of the language components occurred with the
feminine males (Mintensifiers = 3.72; Msentence incompletions = 7.18). Given that
intensifiers and sentence incompletions are powerless components typically associated with females, one would expect that males who are socialized with strong feminine qualities would use more, not less of these components. However, one explanation for the lowest usage rate may evolve from what society expects regarding the behavior of individuals physically observed to be male. Males are expected to be strong and powerful. Through childhood it may be that feminine males are sanctioned for feminine behavior. Therefore, upon reaching college, they have learned, most likely at some covert level, that one's feminine tendencies may be masked through the use of language. Feminine males may learn to use fewer intensifiers and sentence incompletions as a strategy to mask their gender. So, while on the surface it appeared that females in general used more of these powerful/powerless language components than males, there was also a trend in use according to both sex and gender. The interaction of sex and gender was not strong enough to produce significance, but was evident in a comparison of the means.

To date few studies have looked at powerful/powerless language constructed during an interaction, and those that do are questionable (McMillan, Clifton, McGrath & Gale, 1977). McMillan et al. found that women did use more intensifiers than men, but that the frequency was less in mixed-sex rather than same-sex dyads. However, the research design for this study involved groups of individuals from five to seven people per group, not dyads. In addition, the sample size was not large enough to provide sufficient power as only 67 females and 37 males participated in the study which resulted in six female groups, two male groups, and ten mixed sex groups. Finally, the interdependence between members of the group was not taken into account because the authors used simple t-tests (Kenny & Kashi, 1991). Thus, the results were questionable in light of present statistical research. This study confirmed the McMillan
et al. results regarding intensifiers and provided new knowledge regarding their use in dyadic interactions.

Sentence incompletions represent one type of nonfluency and were not included in past powerful/powerless research which included only hesitations. Thus, the finding that females use more sentence incompletions than males provides a new language component for the powerful/powerless speech style. There could be several reasons for women to complete sentences less than men. Sentence incompletion may be the result of detecting through some nonverbal cue that the interaction partner has something to say resulting in quickly allowing their partner to speak. Hall (1984) indicates that women are better judges of nonverbal communication. Others support this statement with findings that women are more accurate at decoding nonverbal messages (Henley, 1977; Zuckerman, DeFrank, Hall & Rosenthal, 1976). Thus, it could be that females sensed that their partner was ready to enter the conversation and prematurely ended their talk in order to let their partner speak. This supports the PAQ which identifies the feminine gender orientation as relationship oriented. In addition, it would seem that as a relationship develops, two changes may occur in talk in response to getting to know the interlocutor. First, a form of synchrony develops in which the listener anticipates the response of the speaker and makes that response for the speaker. This might occur during a speaking pause as a helpful way to move the conversation along. In the case of sentence incompletions, however, it could be that the speaker knows that the listener understands the flow of thoughts in the sentence and therefore the speaker is not compelled to finish those thoughts with a complete sentence. Rather, the speaker moves on to the next thought because the meaning is understood. This follows the cooperative principle, or specifically Grice's (1975) maxim of parsimony in that all talk should be economical. The following example, where incompletions are underlined, demonstrates
this point:

A: I think maybe upstairs on every floor would work a lot better.

B: That’s true, course it would mean more bins.

A: That would mean - yeah - that’s the only problem.

In this case, A was a female. In effect, by not completing the sentence, A validates B’s statement that more bins would be needed for recycling. It is also important to note that the dyad type which used the greatest number of sentence incompletions was androgynous, even though the difference between dyads was not significant. Androgynous gender types are considered to be both relational or communal and task oriented or agentic (Berzins, Welling & Wetter, 1978; Spence, Helmrich & Stapp, 1974). It is possible that androgynous females, in an effort to reach their interaction goal of submitting specific solutions to their problem, might fail to complete their sentences because they sensed, again at a covert level, that it was important to both support and allow their partner to provide solutions. Given the results of this study, it appears that sentence incompletions are a valid component of powerful/powerless talk.

The second research question asked if individuals of different gender types differ in their use of powerful/powerless language. The only language component to be affected significantly by gender type was the use of qualifiers which were used more often by people from a feminine gender, regardless of their biological sex. In this case, nurture or environment was more important than biological traits in determining the frequency of qualifier use.

There have been several studies looking at qualifiers as a component of powerless talk (Bradac et al., 1981; Bradac & Mulac. 1984; Erickson et al., 1978; O'Barr, 1982; O'Barr & Atkins, 1980; Wright II & Hosman, 1983). Most of these studies look at perceptions created when individuals use varying amounts of qualifiers. In the few
studies which look at how qualifiers are actually used by males and females, results are not consistent (Bradley, 1981; Crosby & Nyquist, 1977; Swacker, 1975). In this study, qualifiers were used differently according to gender, not sex. They were used least often by masculine females and most often by feminine females. Social learning is most likely responsible for this difference between members of the same sex but different genders. There is evidence to indicate that conversational style is at least partly determined by one's social or cultural experiences (Tannen, 1990). New York Jews and Greek Americans have different language styles which make the frequency and intent of interruptions, for example, quite different between members of these cultures (Tannen, 1990). In the same vein, the socialization process which is responsible for an individual's masculine, feminine, or androgynous gender orientation is also likely to impact on one's tendency to use specific language components according to their gender role orientation. Researcher's indicate that socially prescribed beliefs about sex role differences in language may actually cause male/female differences in behavior (Pearson, 1985).

The finding in this study that qualifiers were gender, not sex, specific is noteworthy because it indicates that the reason for inconsistent findings regarding sex differences in the use of qualifiers in past research may be the result of the reliance on biological sex rather than psychological gender. However, qualifiers were the only powerless variable which were gender specific. One reason for this may be that qualifiers were the most frequently occurring powerful/powerless language components and therefore a difference in frequency of use is more likely to be detected ($M = 40$).

Researchers have debated the "hammer effect" which posits that as one continues to increase the frequency of occurrence of a powerless variable, there is more likelihood to obtain statistical significance (Bell, Zahn & Hopper, 1984).
While qualifiers was the only powerful/powerless language component to be significantly different between gender types, the finding for cognitive disclaimers approached significance $F(2,63) = 2.87, p < .06$. Therefore, while we cannot statistically support that masculine gender types use disclaimers less than androgynous and feminine gender types, the data suggests that this might be the case. Also, mean scores demonstrate that females did use more cognitive disclaimers than males. A disclaimer is a specific type of qualifier. By separating the disclaiming phrase from other types of qualifiers, we have a better idea of specifically what type of tentative language is used more often by men or women who are either masculine, feminine, or androgynous. However, cognitive disclaimers are not used often in a ten minute conversation. There were some dyads in which no one used a cognitive disclaimer. The small rate of usage makes it more difficult to achieve statistical significance. In this light, the reported trends are noteworthy and may become significant with a research design that analyzes longer periods of talk. Most research which includes cognitive disclaimers in the powerful/powerless language construct does not use natural language but rather transcripts which have been manufactured for research purposes and are jeopardized by the "hammer effect". This study provides an understanding of how disclaimers are evidenced in real talk and by whom.

The third research question asked if there is an interaction between sex and gender and the use of powerful/powerless talk. Initial results indicated that there were no significant interactions with any of the powerful/powerless variables and sex and gender. Because the finding approached significance for intensifiers, a Tukey's comparison procedure was utilized at the 0.1 confidence level in order to identify the relationship between sex, gender, and use of intensifiers. The Tukey's comparison procedure showed that while there was no significant difference between males and
females of the masculine dyad type, there was a difference for the androgynous dyads. In androgynous dyads the females scores were significantly higher than the males scores. Means for dyads are reported in table 25.

Table 25

<table>
<thead>
<tr>
<th>Dyad type</th>
<th>N</th>
<th>males</th>
<th>females</th>
</tr>
</thead>
<tbody>
<tr>
<td>masculine</td>
<td>22</td>
<td>37.50</td>
<td>35.36</td>
</tr>
<tr>
<td>feminine</td>
<td>22</td>
<td>30.72</td>
<td>41.81</td>
</tr>
<tr>
<td>androgynous</td>
<td>22</td>
<td>34.81</td>
<td>43.45</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>103.03</td>
<td>120.62</td>
</tr>
</tbody>
</table>

The difference between androgynous males and females in the use of intensifiers could be explained by concentrating on the behavioral implications of the impact of both sex and gender. While males and females in this group share the same social patterning leading them to adopt both masculine and feminine traits, society provides expectations about behavior based on one's outward appearance which is determined by one's sex. Since androgens are more flexible, it may be that in interacting with a member of the opposite sex who is a stranger, males and females unconsciously adjust their use of intensifiers to fit societal expectations of what is appropriate for their sex. If this is the case, a Kramer-Jacklin research design should demonstrate this flexibility.

Several other interesting findings emerged concerning intensifiers. First, in this study, intensifiers were the second most frequently used of the powerful/powerless components (M = 34). This finding supports O'Barr (1980) who found similar results.
Second, the intensifier component, unlike other powerful/powerless variables, was found in past research to be considered powerful rather than powerless when used with only a small number of other powerless components (Hosman, 1987; Hosman & Siltanen, 1988). Past research which found intensifiers to be powerless consisted of researcher-constructed messages. In this study in which interactants formulated their own messages, it was apparent that intensifiers were always accompanied by other powerful/powerless speech components. Hence, to claim that high intensifiers result in increased perceived power is inappropriate when high intensifier use is unlikely to occur outside of the prefabricated message.

The remaining variables of tag questions, intonation, vocal segregates, sentence corrections and repetitions were not significantly different between psychological gender, biological sex, or the combined effect of gender and sex. The lack of significance is informative for a variety of reasons. Failure to confirm sex differences in language variables provides support for an argument advanced by Dindia (1987) which questions the validity of most of the previous findings in the area of gender research. For example, several studies established that females use more tag questions than males (Eakins & Eakins, 1978; Fishman, 1980; Key, 1975; Siegler & Siegler, 1976). Other research debated these findings (Baumann, 1979; Dubois & Crouch, 1975; Kramer, 1973; Lapadat & Seesahai, 1977). These studies did not look at tag questions in conjunction with psychological gender, nor did they use the dyad as the unit of analysis in statistical procedures. In this study, the trend pointed towards traditionally sex-typed individuals as those who used the most tag questions. This may account for past conflicting findings. When cross-typed and androgynous individuals are added into a research design looking for sex difference, the results will most likely vary depending on the psychological gender make-up of the subjects. Thus, subject pools which included
more sex-typed individuals would confirm Lakoff's thesis that women use more tags than men. However, subject pools with large numbers of androgens and cross-typed individuals may report nonsignificance. Typically, college subjects are drawn from the researcher's academic area. It was the experience of this researcher that there were more androgynous communication majors than other gender types. Business majors tended to have more masculine gender types than other majors, and art and psychology majors had a majority of feminine and androgynous majors. Therefore, the make-up of the subject pool could be crucial to the end results. Hence, the lack of significance for either gender or sex in this study calls into question much of the research on tags.

While tags directly ask for confirmation from the listener, a more subtle but similar variable in creating impressions of lack of power in a conversation is intonation. Lakoff (1975) included rising intonation at the end of a declarative sentence as a feature of women's language. Like a tag question, it serves a relational function in that it usually prompts the interlocutor to respond to the speaker to demonstrate understanding. The following example from a conversation exemplifies this point.

Intonation is indicated by the slash mark (/).

A .....Then getting up, walking down two flights of stairs, going down to the basement and throwing down something/

B: yeah

A: I mean that requires effort. There's nothing - I mean, it's kind of like - why should I do this? And I know I'm not alone/

B: Right.

Each instance of intonation prompts a response of some type from B, however, it also appears to create the impression of uncertainty recognized by Lakoff. The research findings on intonation have been mixed, with some providing support for females using...
more intonational patterns (Brend, 1971; Lakoff, 1975) and others finding no support (Newcombe & Arkoff, 1979). The insignificant result in this study demonstrated that there is no difference between sexes or people with different psychological genders. Previous research did not look at the importance of psychological gender, only biological sex. Therefore, this finding adds to our understanding of the use of intonational patterns. It was interesting to note that the most frequent users of rising intonation were androgynous females who were both task and relationship oriented by virtue of being androgynous and again, that the greatest difference between the number of rising intonations used at the end of a sentence occurred between males and females in the androgynous dyad. This was the same finding demonstrated with the use of intensifiers. Hence, the explanation for this androgynous sex difference is again, most likely the result of the impact of sex in stranger dyads.

The three forms of nonfluencies of sentence corrections, vocal segregates, and repetitions did not show significant differences between the sexes or between psychological categories. This is interesting in and of itself in that all forms of nonfluencies did not appear to operate uniformly. Therefore, they should not be combined into one category. Some research on powerful/powerless language does not appear to adequately distinguish these nonfluencies. For example, O'Barr (1982) included hesitation forms in his research on powerful/powerless language, defining these as pause fillers and meaningless particles of speech. This would seem to include vocal segregates but ignore sentence incompletions and sentence corrections. It might include repetitions of the first sound of a word, but would ignore instances where entire words or phrases are duplicated. Other research also fails to make important distinctions in nonfluencies (Bradac & Mulac, 1984; Lay & Burton, 1968; Mulac & Lundell, 1980; Sereno & Hawkins, 1967). Thus, while Bradac & Mulac (1984) report
that there is no difference between the use of nonfluencies which they term as hesitations, this finding may not be completely accurate due to the definition of what counts as a hesitation.

Perceptions of Credibility with Powerful/powerless Language

Past research suggests that perceptions of power may vary according to sex. Wright and Hosman (1983) found that males and females perceived attractiveness differed when they used high numbers of intensifiers. Females were considered to be more attractive than male witnesses. In addition, males were considered more credible with a high use of hedges than females. They argue that judgements of credibility and attractiveness may be the result of behavior acting in conjunction with sex. To date, however, no one has considered the role of psychological gender in impression formation. Therefore, this study sought to identify not only how powerful/powerless language was actually used according to both sex and gender, but also what effect sex and gender had on perceptions of credibility when powerful/powerless language was used. Therefore, the fourth research question was is there a relationship between sex, gender type, use of powerful/powerless talk and perceptions of credibility?

Credibility is one component of a speaker's power. McCroskey and Young (1981) note that in classical and contemporary times, ethos, or a receiver's attitude towards a source, is a multidimensional construct. While Hovland, Janis and Kelly (1953) identify the dimensions of credibility as expertness, trustworthiness, and intention towards the receiver, the literature is replete with discussions of dimensionality (for a detailed review, see McCroskey & Young, 1981). In powerful/powerless language research, the main credibility components have been dynamism, trustworthiness, and competence. Therefore, the Tolheizen (1977) scale best approximated past research
which would allow for comparability.

Results from the CAI demonstrated that dimensions of credibility (e.g. dynamism, association, trustworthiness, and competence) are impacted differently by sex, gender, and/or powerful/powerless language. By looking at each credibility dimension it is possible to unpack which powerful/powerless variables covary with sex, gender, or the interaction of sex and gender to create the perception of powerlessness.

Perceptions of dynamism were affected by sex and gender. When an individual was a masculine gender type, their sex affected the perception of their dynamism by their conversational partner, but this was not the case with androgynous and feminine gender types. In masculine gender types, females were perceived as significantly less dynamic than males. This finding is supported in past research which argues that women are treated negatively if they behave like a man (Haccoun, Sallay & Haccoun, 1978; Wiley & Eskilson, 1982). The only powerful/powerless language component to significantly affect perceptions of dynamism was intensifiers. Other language components did not contribute significantly to impression formation regarding dynamism. Therefore, it seems likely that a major factor in creating the impression of being a dynamic individual for masculine gender types in a conversation is the use of intensifiers. As masculine males use more intensifiers, they are considered more dynamic but with masculine females, increased use of intensifiers lowers impressions of dynamism.

Past research has looked at the impact of powerful/powerless language on credibility. While some studies showed intensifier use lowered perceptions of credibility, the dimension of dynamism was not specifically analyzed (Erickson et al., 1978; O'Barr, 1982). Therefore, in order to understand the relationship between the results of this study and past research it is necessary to look at past research regarding
perceptions of credibility created by intensifiers and other powerful/powerless components which may affect dynamism.

In general, a great deal of confusion has existed over the role of intensifiers in impression formation, and yet it is the second most frequently used component of the powerful/powerless language style. Lakoff (1975) and O'Barr (1982) found that the use of intensifiers created impressions of powerlessness. Bradac and Mulac (1984), however, argued that intensifiers were perceived as relatively powerful while Hosman and Siltanen (1988) demonstrated that the use of few intensifiers in conjunction with hedges and hesitations are perceived as powerful. Other studies found that in the context of other powerful/powerless language components that intensifiers do not create significant evaluative results at all (Bradac, Courtwright & Bowers, 1979). Thus, to date it has not been clear whether intensifiers actually create impressions of power or powerlessness. This research may shed new light on these conflicting results. It is apparent that intensifiers do impact perceptions of credibility affected by the dynamism dimension, but only for some people. Thus, whether an individual is perceived to be powerless when they use a sufficient number of intensifiers would depend on whether or not that person is a masculine female. By constructing messages regardless of one's gender type, realistic impressions are most likely masked.

Several studies have identified powerless variables other than intensifiers which are believed to lessen one's perceived dynamism when used. Johnson and Vinson (1987) found that female witnesses were considered more dynamic when they did not use powerless talk. Increased use of nonfluencies has been shown to lessen perceived dynamism (Miller & Hewgill, 1964; Mulac & Sherman, 1974; Sereno & Hawkins, 1967). Hesitations have also limited perceived credibility (Miller & Hewgill, 1964). Therefore, several powerful/powerless have been identified as components affecting
dynamism. However, few of these studies have looked at talk which was constructed naturally. Rather, perceptions of talk were formed mostly by individuals asked to judge a researcher-constructed message in an imaged context. These constructed messages may have resulted in perceptions relative to the artificial nature of the construction with measured amounts of powerless variables rather than the actual variables. In this study, only intensifiers affected dynamism. This finding challenges prior research.

Unlike dynamism, overall perceptions of association which were not correlated with powerful/powerless language use were not affected by either sex or gender. However, the mean scores show that scores on association were very similar between males and females within each dyad type. In other words, males and females apparently appeared to feel comfortable problem solving with someone of the opposite sex when they were similar in psychological gender. However, with the use of powerful/powerless language components, tag questions, intonation, and sentence corrections, specific perceptions of association were created depending on one's sex. Females had higher ratings on association when they used fewer tag questions, greater intonation, and more sentence corrections. In other words, increasing some aspects of powerless talk by females created a better relationship between male and female interactants from the perspective of the male. Several studies have pointed to the use of powerless language as a situationally tactical strategy (Bradac et al., 1981; Bradac & Mulac, 1984).

It may well be the case that with regard to certain judgements, e.g., communicator competence, low hesitancy and high politeness produce a rather positive attribution, perhaps especially when the communicator is female, whereas high hesitancy and low politeness produce a rather negative attribution. Study of these subvariables (and others, perhaps) may increase knowledge of the consequences of high- and low-power styles and, more directly, such study may
allow for the isolation of those linguistic features which covary with variations in power per se. (Bradac et al., 1981, p. 341)

For males, however, association was increased when they used more intensifiers, but association decreased with additional intonations and sentence corrections. This finding is supported when one reviews the initial results of this study which showed that masculine males had the highest usage of intensifiers of any male gender type. It may well be that there is a social expectation for masculine males to use more intensifiers. Berger and Bradac (1982) argue that language cues elicit judgments of similarity or dissimilarity with stereotypes which result in increased or decreased uncertainty. When uncertainty is decreased because a masculine male uses a relatively high rate of intensifiers thereby fitting the stereotype of the masculine male, greater association can occur with the interlocutor. Likewise, the stereotype of woman’s speech reported by Lakoff includes high use of tag questions, intonation, and sentence corrections. While women may not actually use these powerless language features, as was demonstrated in the earlier part of this study and through past research, they are expected to use them (Bennet & Weinberg, 1979; Fichtelius, Johansson & Nordin, 1980; Key, 1972; McConnell-Ginet, 1983). When they conform to social expectations, a higher level of association occurs. Association appears to be enhanced when females behave predictably. Results of the failure to conform to social stereotypes are evident, for example, in past research looking at males and intonation. Men have been judged to be more effeminate with enhanced intonational patterns (Terango, 1966).

The third component of credibility was trustworthiness. Perceptions of trustworthiness appeared to be affected by three powerful/powerless language components: qualifiers, vocal segregates, and sentence corrections. Generally, across dyad types and sexes, the more qualifiers and vocal segregates that are used, the less one
is perceived to be trustworthy. Vocal segregates in particular are evidence of poor presentation speaking skills. Mulac and Sherman (1975) found that when vocal segregates were reduced, trustworthiness was increased. Similar results were found by Hosman and Wright (1987) when they operationalized vocal segregates as hesitations. However, the use of sentence corrections created different impressions depending on one's gender type. For masculine and feminine dyads, trust increased with the addition of sentence corrections. On the other hand, in androgynous dyads, trust decreased with sentence corrections. While the reasons for this are not clear, speculation suggests that when masculine individuals correct themselves, the interlocutor attributes this correction to an attempt to be more precise. When feminine individuals correct themselves, they may be perceived as acting in accordance with their stereotype. However, because androgynous individuals incorporate both masculine and feminine traits, it may be difficult for the interlocutor to identify an attribution according to a stereotype. Therefore, this increase in uncertainty lowers ratings of trust because these individuals are not supposed to correct themselves.

Finally, competence ratings were affected by both sex and dyad types. Like dynamism, in masculine dyads females were seen to be less competent than males. There was no difference between sexes in either the feminine or androgynous dyads. Within dyads, masculine males were perceived as more competent than androgynous males. This finding conflicts with previous research which argues that androgynous individuals are more flexible and therefore are more likely to be perceived as competent communicators (Brunner & Phelps, 1980). Females did not differ in perceived competence between dyads. The powerful/powerless language component which most affected the perception of competence was vocal segregates. The more vocal segregates that one uses, regardless of their sex or gender, the less competent they are perceived.
Limitations

There were several limitations to this study which should be addressed. The first limitation deals with the sample. The initial subject pool consisted of 827 subjects from four different universities. The majority of these subjects were students who ranged in age from 18 to 22 years of age. In the first stage of the study, subjects were asked to participate in a study on conversation by filling out the PAQ and IOQ in their class. They were informed that participation was totally voluntary and in no way connected with their class. Most subjects were contacted in introductory communication classes which were mandatory classes for a variety of academic majors. The majority of the subjects were not communication majors. Since participation in the study was voluntary, there was no way to determine the number of students who initially refused to participate, although feedback from faculty distributing the PAQ and IOQ was that nonparticipation was minimal. In the second stage of the study, after eliminating approximately 16% of the subjects who scored in the undifferentiated category, potential male-female pairs from like gender types were identified according to campus and availability. Males and females were paired according their responses regarding possible meeting days and times. Availability was the major factor limiting participation in the study. While there were 708 potential subjects, only 67 dyads were available due to time restraints. One dyad did not show up for a taping session.

While on the surface the cooperation by subjects in this study appeared to be beneficial to the study, a closer look demonstrates that this subject pool may be one reason for the lack of significant findings. Subjects were unusually cooperative in returning for the taping session. They were flexible in regulating their personal schedules so that they could participate in phase two. It may be that those individuals who chose not to participate in the initial phase of the study may also use more
powerless language than those who do not mind being videotaped. Knowledge of the potential for videotaping may have threatened some potential subjects who were more reticent and shy. Nonparticipants may have also been less flexible in changing their schedules in order to participate in a study which had no immediate payoff for them. People who use powerless language are perceived to be less competent communicators than those who use powerful language (Bradac & Mulac, 1984). One aspect of communication competence is flexibility (Spitzberg & Cupach, 1984). If lack of flexibility was one reason for nonparticipation, there may be a relation between inflexibility and powerless language use.

A second limitation is obviously the situation. While every effort was made to make the task as realistic as possible, the presence of the videocamera may have provided an unnatural element which confounded normal talk in a problem solving situation. Since videotaping occurred on several college campuses, it was difficult to obtain laboratory facilities with one-way mirrors which would hide the camera. Therefore, the camera was in plain view of the subjects. To reduce the effect of camera anxiety, the first minute of talk was deleted from the transcripts. However, this may not have been enough to compensate for the unnatural impact of the camera. Also, while every attempt was made to obtain comfortable seating for subjects, the very placement of chairs at an angle so that both subjects would be able to be taped with one camera may have been unnatural for subjects. Therefore, subjects may have considered that they were "on stage" rather than in a natural situation discussing an issue that they dealt with on a daily basis. This performance quality may have led them to use more powerful talk than they ordinarily would use if they were in a more natural setting. Another factor which could have affected the results of this study was that students from different schools were taped in different rooms. While every effort was made to maintain a
similarity between environments, they were not identical. Some rooms may have contributed to the artificiality more than others.

An additional limitation to this study could have been the topics selected for the IOQ. The topic discussed the most was the lack of parking on campus. While subjects appeared to be able to discuss this topic easily, not every student had a car. Therefore, it is likely that not every subject was equally affected by the problem of insufficient parking spaces. This potential lack of involvement could have affected the type of talk generated in the conversation leading to nonsignificant results. In addition, it is not known whether the topics included in the IOQ had some gender or sex bias associated with them.

Another limitation was the duration of the study. Due to the complexity of the research design, it was impossible to do all the taping during the same time period. It took over nine months to complete taping. While almost everyone who was contacted agreed to be taped thereby limiting the threat of attrition, merely obtaining the necessary number of males and females for each psychological gender was time consuming and dependant on student schedules.

While issues of situation and subject selection could have affected the outcome of this study, another factor which could have explained the nonsignificant findings in this research is the measure of gender. Several instruments were considered to tap the concept of psychological gender. The PAQ was selected because it is the most psychometrically sound instrument presently available. Gender is a socially defined concept which is constantly undergoing the changes that society places on what it means to be male and female. The PAQ appears to measure traditional concepts of gender, e.g., male dominance and female nurturance. However, men and women today are moving away from these traditional definitions because they do not facilitate present lifestyles. This
raises the question of how one actually measures gender. Perhaps an instrument which asks the subject for present and future situational behaviors instead of overall traits would be more accurate in pinpointing the emerging and socially dynamic concept of gender.

Another limitation to this study deals with possible biases subjects may have brought to the problem-solving situation. While subjects were asked whether or not they know their partner, other personal history regarding the subject was not obtained. There are many potential social influences to the use of language in addition to gender. Culture, sibling order, family influences, and social experiences have all been shown to affect language use. Knowledge of other influences prior to the analysis of talk would allow for the researcher to control for these influences which could affect statistical results.

An additional limitation to the generalizability of results from this study was the research design which only looked at mixed sex dyads. By not including male-male, and female-female dyads it is impossible to be certain whether the results of the perceptions of credibility were due to language use or to the sex of the interactant. For example, do masculine females paired with each other perceive their partner to be less dynamic and less competent, or is this view only held by masculine males when they are paired with the masculine female. Without the inclusion of same-sex dyads in the research design, it is impossible to identify this possible effect.

Implications

This study made several major contributions to research. The first contribution deals with the research design. From as early as 1979, scholars have discussed the issue of interdependence when doing interaction research (Kraemer & Jacklin, 1979).
While most scholarly dialogue regarding this issue took place in the field of psychology, communication scholars dealing with sex differences were challenged when Kathryn Dindia (1987) published a seminal article on interruptions which called into question the majority of studies which looked at male-female differences. Her claim was premised on the argument that one could not treat members of a dyad as independent because there is an interaction which must be accounted for between the partners. Therefore, the appropriate level of analysis is the dyad rather than the individual.

However, researchers for the most part ignored Dindia's charge. By using a research design which treated the dyad as the unit of analysis and a repeated measures ANOVA as a statistical measure, the correlation of males and females within the dyad was taken into account. To date, there is no research on the construct of powerful/powerless language which uses this type of a design in the face-to-face setting. While some of the powerful/powerless language components were studied in an ongoing interaction, the issue of interdependence was not taken into account when analyzing these interactions. In addition, all powerful/powerless language components were not studied at once in the face-to-face setting to look at covariation with perceptions of the interlocutor. Given the findings that credibility was impacted by some language components according to one's sex and gender, it is worthwhile to continue to study powerful/powerless language using a face-to-face setting and the dyad as the unit of analysis. Further work is needed, however, to understand the differences between same sex and mixed sex dyads.

The lack of clear cut findings regarding the impact of psychological gender but the appearance of trends which suggest that gender could be a determining factor in language use point to the need to continue research which includes the variable of psychological gender in the design. However, future research should include other environmental factors along with the gender component to more accurately account for variance in
powerful/powerless language. Along with learning our membership to a sex role category, language skills are also affected by socioeconomic level, peer group membership, status within that peer group, intelligence, ethnicity, and race. All of these important environmental factors may impact along with psychological gender to affect powerful/powerless language.

Perhaps the most important implication suggested by this research deals with the nature of present studies designed to understand powerful/powerless language. Most research to date involves studies with simplistic laboratory designs which use contrived talk constructed by the researcher. Subjects are asked to make judgments about their impression of the power of the individuals using this contrived talk (Bradac et al, 1981; Bradac & Mulac, 1984; Johnson, 1985; Wright and Hosman, 1983). The results of this study show that a very different conclusion is reached when the research design is complex, permitting interactants to create their own talk. Conversational partners do not use the same ratio of powerful/powerless variables provided to subjects in written transcripts, and the variables may differ according to their psychological gender. Thus, the obtained results will be different. This was particularly evident with cognitive disclaimers, tag questions, and intonation because these components were used infrequently. Bell, Zahn and Hopper (1984) argued that when messages are constructed in the powerless condition by adding an unnaturally high number of powerless components, then the results may be due to the "hammer effect". They found that small numbers of disclaimers did not affect subject's impressions of the speaker, but the greater the number of disclaimers, the less competence, certainty and character the speaker was felt to exhibit. While the "hammer effect" was discussed in 1984, simplistic designs continued to emerge in communication literature. Research on language which does not use natural language in context most likely does not contribute
valid findings regarding how real people use language. It is time to move beyond the relatively simple and controlled language studies to research which addresses the complexity of the many variables that impact upon language use. Future research needs to concentrate on real language studies.

Given the results of this study, additional research is needed which includes the variable of psychological gender in the design. The findings regarding androgyny need particular attention. At a time when the business community is stressing the manager who is both task and relationship oriented, or androgynous, the role of powerless language used by the androgen in impression formation is an important issue. This research indicates that the use of specific powerless language variables, such as sentence corrections, create different impressions of credibility for the androgen than for a masculine or feminine individual. Therefore, management training which operates on the assumption that all powerless language variables are inappropriate for all people could produce some serious consequences for not only androgens but also masculine females.

Future research should include other environmental factors along with the gender component to more accurately account for variance in powerful/powerless language. Along with learning our membership to a sex role category, language skills are also affected by socioeconomic level, peer group membership, status within that peer group, intelligence, ethnicity, and race. All of these important environmental factors may impact along with psychological gender to affect powerful/powerless language. In addition, future studies need to operationalize gender in a manner that incorporates the dynamic nature of the construct. Findings of this study point to the realization that continued use of the BEM and PAQ as exclusive measures of gender may not yield accurate results.
This study used an approach based on discourse analysis. However, the marginal significance suggests several future directions. First, longer periods of discourse should be collected in a Kraemer-Jacklin design to better understand the role of the least used powerless language components. Second, perhaps research would be best served by utilizing a conversational analytic approach. In reading these transcripts, it became evident that several components were operating at levels that the microscopic discourse analysis method did not uncover. In several instances, interactants appeared to understand the flow of talk from their partner so well that both individuals ended up stating the same words simultaneously. The following example demonstrates this point.

A: [[I think that's really (unintelligible )]
B: [yeah see that's that's what I was talkin' - mandatory. It's that you've got to do it]
A: [[do it]]
B: yeah
A: m hum
B: That was kind of neat - it was like in sync

In this example, A and B say "do it" at the same time. It surprised them that they were able to both come to the same conclusion at the same time, even though it was evident that their entire conversation was replete with sentence corrections and incomplete sentences as they appeared to engage in more and more synchronous communication.

This particular dyad was feminine and represented other feminine dyads which had high levels of synchronicity. It may be more meaningful to look at patterns which occur in these dialogues in conjunction with sex and psychological gender than to calculate a frequency of predetermined categories. Discourse analysis also missed the trend in which rising intonation which was used at the end of a declarative statement elicited
either minimal responses or backchannels. Future research using conversational analysis may be able to correlate this strategy to gender.

Another reason why a conversational analysis approach might be more useful is that the very ambiguity of language makes it difficult to count variables of powerful/powerless language. Words change meaning according to context and intonation. "I mean - think about it" said in a slow, quiet manner can be interpreted very differently from "I mean THINK about it" said with emphasis. A more accurate interpretation of this phrase would necessitate listening to the tapes. However, when conducting research in which one of the variables under analysis is sex, the researcher must remain blind to the identity of the subject. Therefore, transcripts must be relied upon exclusively. Using a conversational analysis method would avoid this ambiguity.

Another interesting possibility would provide for triangulation in theory building (Faulkner, 1982). A body of research exists on domineering and dominance tendencies (Rogers-Millar & Millar, 1979). By studying conversations from both the perspective of powerful/powerless language and dominance, specific language may be correlated with dominance moves.

A final direction for research suggested by this study is to further investigate specific language components. Sentence incompletions emerged in this study as a significant variable in powerful/powerless language. Also, future research should be conducted with the vocal segregate "you know". Past research is mixed regarding the use of "you know". Some studies find females use this term more than males (Crosby & Nyquist, 1977; Fishman, 1980; Hirshman, 1975; Lakoff, 1975; Ostman, 1981), while others found no significant difference between the sexes (Holmes, 1986). In this study, "you know" was treated as a vocal segregate which resulted in no significant differences for either sex or psychological gender. Future research would benefit by
separating this phrase into a separate category.

Summary

This study looked at the differences between the way males and females of different gender types use and perceive powerful/powerless language in a problem solving situation. The study was based on the premise that both biology and environment are important determinants of language behavior. The results suggest that both males and females who have a masculine psychological gender will use fewer qualifiers than other gender types. Both sexes of the feminine gender type will use the most qualifiers. Females are more likely to leave their sentences incomplete, while intensifiers are used quite differently by androgens, depending on whether they are male or female with androgynous females using the most intensifiers. Thus, in answer to the question "does psychological gender and sex effect an individual's use of powerless language?", one must respond that it does with some powerful/powerless components but it does not with others. In addition, it was also determined that dimensions of credibility (e.g. dynamism, association, trustworthiness, and competence) were impacted differently by sex, gender, and/or powerful/powerless language. Individuals who have a masculine gender type received different evaluations of dynamism and competence according to their sex. Masculine females were perceived to be less dynamic and less competent than masculine males. It was also determined that intensifiers impacted most on perceptions of credibility, vocal segregates affected perceptions of competence, and that trustworthiness was impacted the high use of qualifiers and vocal segregates. Sentence corrections affected trustworthiness according to one's gender type: masculine and feminine dyad types were perceived as more trustworthy with a higher use of sentence corrections while the androgynous dyads were perceived as less trustworthy with high
sentence correction usage. Finding regarding the perception of association was different for males and females. With females, high association was achieved by fewer use of tag questions but a higher use of intonation and sentence corrections. For males, however, the use more intensifiers but less intonation and less sentence corrections improved association.

This study demonstrates that both sex and gender are potentially influential. In addition, we are also reminded that perceptions of power in conversation are not clear cut and depend on more than simply improving one's use of powerful/powerless language. In order to understand this perception further, natural language research on powerful/powerless language should be continued.
APPENDIX A

Issues and Opinion Questionnaire

The following issues have been discussed in Communication classes as issues which directly affect our community. This questionnaire is designed to identify which of the following topics you feel is important enough to try to persuade others to do something about. Please read the following statements and mark your response from one to five regarding how you feel about this topic. Space is also provided at the bottom for you add any additional topic you feel would be relevant, along with your response to that topic.

1. The parking situation at ______________ is sufficient and should not be changed.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Don't care</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. The campus security should be responsible for providing an escort service.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Don't care</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Money for building developments is being well spent at our university.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Don't care</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Students should get involved with the "Bump the Dump" movement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Don't care</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Students should get involved with recycling

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Don't care</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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APPENDIX C

PAQ Score Distribution

<table>
<thead>
<tr>
<th>PAQ Category</th>
<th>N</th>
<th>Androgynous</th>
<th>Masculine</th>
<th>Feminine</th>
<th>Undifferentiated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>103</td>
<td>109 [35%]</td>
<td>38 [12%]</td>
<td>62 [20%]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(33%)</td>
<td>(34%)</td>
<td>(14%)</td>
<td>(19%)</td>
</tr>
<tr>
<td>Females</td>
<td>180</td>
<td>124 [24%]</td>
<td>154 [30%]</td>
<td>57 [11%]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(32%)</td>
<td>(13%)</td>
<td>(36%)</td>
<td>(20%)</td>
</tr>
</tbody>
</table>

Median values:
Masculinity = 22.36
Femininity = 23.30

*a Spence and Helmreich's (1978) data appear in parentheses.*
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### APPENDIX E

**VARIMAX FACTOR COEFFICIENTS**

<table>
<thead>
<tr>
<th>Scale Item</th>
<th>Credibility Dimension</th>
<th>Factor Coefficients (Rounded to Two Places)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FI</td>
</tr>
<tr>
<td>1. Dynamism</td>
<td></td>
<td>.72</td>
</tr>
<tr>
<td>2. Association</td>
<td></td>
<td>.51</td>
</tr>
<tr>
<td>3. Dynamism</td>
<td></td>
<td>.34</td>
</tr>
<tr>
<td>4. Association</td>
<td></td>
<td>.56</td>
</tr>
<tr>
<td>5. Trustworthiness</td>
<td></td>
<td>.17</td>
</tr>
<tr>
<td>6. Competence</td>
<td></td>
<td>.55</td>
</tr>
<tr>
<td>7. Trustworthiness</td>
<td></td>
<td>.60</td>
</tr>
<tr>
<td>8. Dynamism</td>
<td></td>
<td>.45</td>
</tr>
<tr>
<td>9. Trustworthiness</td>
<td></td>
<td>.28</td>
</tr>
<tr>
<td>10. Dynamism</td>
<td></td>
<td>.68</td>
</tr>
<tr>
<td>11. Association</td>
<td></td>
<td>.13</td>
</tr>
<tr>
<td>12. Dynamism</td>
<td></td>
<td>.74</td>
</tr>
<tr>
<td>14. Competence</td>
<td></td>
<td>.32</td>
</tr>
<tr>
<td>15. Dynamism</td>
<td></td>
<td>.51</td>
</tr>
<tr>
<td>16. Competence</td>
<td></td>
<td>.76</td>
</tr>
<tr>
<td></td>
<td>Association</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
<td>---</td>
</tr>
<tr>
<td>17.</td>
<td>Association</td>
<td>.51</td>
</tr>
<tr>
<td>18.</td>
<td>Competence</td>
<td>.65</td>
</tr>
<tr>
<td>19.</td>
<td>Dynamism</td>
<td>.64</td>
</tr>
<tr>
<td>20.</td>
<td>Dynamism</td>
<td>.71</td>
</tr>
<tr>
<td>21.</td>
<td>Association</td>
<td>.68</td>
</tr>
<tr>
<td>22.</td>
<td>Association</td>
<td>.57</td>
</tr>
<tr>
<td>23.</td>
<td>Dynamism</td>
<td>.68</td>
</tr>
<tr>
<td>24.</td>
<td>Association</td>
<td>.49</td>
</tr>
<tr>
<td>25.</td>
<td>Trustworthiness</td>
<td>.62</td>
</tr>
<tr>
<td>26.</td>
<td>Competence</td>
<td>.48</td>
</tr>
<tr>
<td>27.</td>
<td>Association</td>
<td>.27</td>
</tr>
<tr>
<td>28.</td>
<td>Competence</td>
<td>.67</td>
</tr>
<tr>
<td>29.</td>
<td>Trustworthiness</td>
<td>.52</td>
</tr>
<tr>
<td>30.</td>
<td>Dynamism</td>
<td>.55</td>
</tr>
<tr>
<td>31.</td>
<td>Competence</td>
<td>.58</td>
</tr>
<tr>
<td>32.</td>
<td>Dynamism</td>
<td>.43</td>
</tr>
</tbody>
</table>

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APPENDIX F

Transcription Code


Dyad #_____  A = ???  B = ???

A:
B:

Explanation of symbols

This transcript will emphasize turn-taking, speech disfluencies, and intonation.

Overlapping speech  [ ]  place brackets where turn begins [and ends ]

Simultaneous speech  [[ When speakers begin to talk at same time end turn continued  = Speaker hears end of turn and beginning of next turn as continuous stream of speech with no overlap or pause.

pauses  ((pause)) Noticeable silence
- (hyphen) Brief pause within turn (pause) Longer than 1 second pause

elongation  : (colon) prolongation of preceding syllable
::: longer prolongation (determined by number of colons.

intonation  . (period) Full stop falling intonation
? (question mark) standard question intonation.
/ (slash) Terminal rising intonation.

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transcriber notes

((comments)) Contextual comments or comments regarding what happened nonverbally in the talk or environment, such as laughing.

uncertainty ( ) Indicates that the transcriber is uncertain about the accuracy of this segment and fills in what s/he thought was heard.

Empty parentheses Indicate that the transcriber could not make out this talk at all
APPENDIX G

Qualifiers

<table>
<thead>
<tr>
<th>Qualifier</th>
<th>Synonym</th>
</tr>
</thead>
<tbody>
<tr>
<td>a little</td>
<td>most</td>
</tr>
<tr>
<td>about</td>
<td>much</td>
</tr>
<tr>
<td>almost</td>
<td>near</td>
</tr>
<tr>
<td>anxiety</td>
<td>not quite</td>
</tr>
<tr>
<td>anxious</td>
<td>not sure</td>
</tr>
<tr>
<td>appears</td>
<td>not that</td>
</tr>
<tr>
<td>approximate</td>
<td>occasional</td>
</tr>
<tr>
<td>assume</td>
<td>possible</td>
</tr>
<tr>
<td>conjecture</td>
<td>possibly</td>
</tr>
<tr>
<td>could</td>
<td>potential</td>
</tr>
<tr>
<td>dilemma</td>
<td>presumably</td>
</tr>
<tr>
<td>do not know</td>
<td>presume</td>
</tr>
<tr>
<td>doubt</td>
<td>pretty</td>
</tr>
<tr>
<td>estimate</td>
<td>probable</td>
</tr>
<tr>
<td>fair</td>
<td>probably</td>
</tr>
<tr>
<td>feasible</td>
<td>qualm</td>
</tr>
<tr>
<td>few</td>
<td>quandry</td>
</tr>
<tr>
<td>gather</td>
<td>rather</td>
</tr>
<tr>
<td>general</td>
<td>reasonably</td>
</tr>
<tr>
<td>hardly</td>
<td>relative</td>
</tr>
<tr>
<td>hedge</td>
<td>reluctant</td>
</tr>
<tr>
<td>hesitant</td>
<td>reservation</td>
</tr>
<tr>
<td>hesitate</td>
<td>roughly</td>
</tr>
<tr>
<td>hopeful</td>
<td>scarcely</td>
</tr>
<tr>
<td>I guess</td>
<td>seem</td>
</tr>
<tr>
<td>I think</td>
<td>seems if</td>
</tr>
<tr>
<td>indecisive</td>
<td>some</td>
</tr>
<tr>
<td>inclined</td>
<td>somewhat</td>
</tr>
<tr>
<td>indefinate</td>
<td>sort of</td>
</tr>
<tr>
<td>imaginable, imagine</td>
<td>speculate</td>
</tr>
<tr>
<td>imprecise</td>
<td>suppose</td>
</tr>
<tr>
<td>likely</td>
<td>surmise</td>
</tr>
<tr>
<td>kind of</td>
<td>suspect</td>
</tr>
<tr>
<td>may</td>
<td>uncertain</td>
</tr>
<tr>
<td>maybe</td>
<td>usual</td>
</tr>
<tr>
<td>might</td>
<td>vacillate</td>
</tr>
<tr>
<td>misgiving</td>
<td>vague</td>
</tr>
<tr>
<td>moderately</td>
<td>waver</td>
</tr>
<tr>
<td>more or less</td>
<td>whatever</td>
</tr>
<tr>
<td></td>
<td>wonder</td>
</tr>
</tbody>
</table>
APPENDIX H

Intensifiers

a lot excessive supreme
absolute explicit sure
actual extreme thorough
all finest too
appears too
always forever total
anybody foremost unaviodable
anomore full undivided
anyone genuine unconditional
anything high undisputed
anytime if indeed unequivocal
anywhere invariable utter
assurance lots very
assure matter of fact well
at least most wherever
best necessary whole
better necessarily
better necessarily

certain

clear

clear

clear

complete

conclusive

confident

consistently

constant

definite

determine

entire

especially

eternally

ever

every

everybody

everyone

everything

everytime

everywhere

evident

exact

exceptional

125
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