Linguistic Power and Persuasion: An Analysis of Various Language Style Components

Kevin Blankenship

Ball State University

Committee Members:

Thomas Holtgraves, Chair

Paul Biner

Bernard E. Whitley, Jr.

INTRODUCTION

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If there ever was a topic that is held near and dear to social psychology, it is the study of attitude change. Allport (1935) pointed out that "the concept of attitudes is probably the most distinctive and indispensable concept in American social psychology," (p. 198). This assertion seems as valid today as it was over sixty years ago. However, the topic of attitude change has not been clearly understood by researchers. Petty and Wegener (1999) point out that up until the late 1970s' the literature on attitude change "was in a state of disarray, to say the least," (p. 41). Before the concept of the two route models of persuasion (e.g., Petty & Cacioppo, 1986; Chaiken & Eagly, 1983), researchers' reliance on simple explanatory processes such as research participants' perceptions of the characteristics of the message source, which was predicted to have a stable effect on persuasion, ended up causing "a mystifying diversity of findings" (Petty & Wegener, 1999, p. 41). For example, an expert source was believed to facilitate persuasion (Kelman & Hovland, 1953), but at times turned out to be ineffective (e. g., Sternhal, Dholakia, & Leavitt, 1978).

As a result, theories of persuasion have been developed to explain the attitude changes that occur when people have been exposed to counterattitudinal messages. In addition, these theories help account for changes in attitude-relevant behaviors, such as

how they choose which electoral candidate to vote for and which product to buy (Petty & Cacioppo, 1986).

Theories of persuasion have hypothesized different pathways to attitude change. For example, some theories, such as cognitive response analysis (McGuire, 1969) emphasize that people are persuaded by their own thoughts about the message. Other theories emphasize that people will be more apt to accept the message without much thought and rely on how the argument is presented to persuade them (Chaiken & Eagly, 1984). As a result, many aspects of the message (e. g., strength) and how it is presented (e. g., source characteristics) have been studied. However, one feature of a persuasive appeal that has not been examined in much detail is language style. The purpose of the present study is to examine the effects of one language variable, powerless language, on a persuasive appeal. More specifically, this study will examine three specific markers of powerless language and their potential effects on persuasion.

The remainder of the introduction addresses three topics relevant to this study. First, the theories of persuasion related to the hypotheses are reviewed. Specifically, the cognitive response approach (Greenwald, 1968) and the recently developed "two-route" models -- The Elaboration Likelihood Model (Petty & Cacioppo, 1986) and the Heuristic and Systematic Model (Chaiken & Eagly, 1983) are discussed. Second, the effects of language variables on the persuasion process are discussed. These variables include speech rate, language intensity, rhetorical questions and linguistic power. Finally, powerless language is broken down into its various component parts and predictions about how these components will affect persuasion are made.

Persuasion Theories

The term attitude refers to an individual's overall evaluation of persons, objects, and issues (Petty & Wegener, 1998). A persuasive situation is any instance in which an active attempt is made to change a person's attitude toward any of the targets listed above. These attempts can be made by using four types of variables considered by Hovland, Janis and Kelley (1953) to be the primary causes of attitude change: source factors (e. g., credibility, attractiveness, power), message factors (e. g., style, organization, content), channel factors, (i. e., mode of communication), and receiver characteristics (e. g., intelligence).

This framework originally postulated by Hovland et al. (1953) was considered by many attitude theorists the most important approach for studying persuasion (Eagly & Chaiken, 1993). However, subsequent research using this framework led to inconclusive results because these primary causes of attitude change could increase, decrease, or have no effect on persuasion in an apparently random manner. No consistent explanations for the processes underlying these effects were found. As a result, researchers changed the focus of research on persuasion from behavioral or incentive-based to cognitive processes.[i] I will address three of the more influential cognitive theories that grew out of this attempt to explain persuasion.

Cognitive Response Approach

The basic premise of Greenwald's (1968) cognitive response approach to attitude change is that the persuasive impact of a message is largely determined by idiosyncratic cognitive responses (or thoughts) that receivers of the message generate as they

anticipate, receive, and reflect on a persuasive message. In other words, the thoughts an individual has about the message mediate the amount of persuasion that will occur. If the message recipient has generally positive thoughts, then more persuasion is predicted to occur. On the other hand, if generally negative thoughts are generated while being exposed to the message, then it becomes less likely that persuasion will occur.

Some empirical support for the cognitive response approach has been found. For example, Petty, Wells, and Brock (1976) found that distracting participants from attending to a message enhanced persuasion. They reasoned that this occurred because the distraction did not allow the receivers of the message to counterargue the message. Osterhouse and Brock (1970) also used distraction tasks and reported similar findings.

Although the cognitive response approach has some support, it has limits on its ability to explain how persuasion occurs. Eagly and Chaiken (1984) contended that the cognitive response approach lacks clear predictions for the persuasive effect of variables that are not related to recipient's motivation to cognitively process a message. For example, perceptions of source credibility may increase message-relevant thinking, or it may affect the favorability of the of the recipient's cognitive responses. Eagly and Chaiken suggested that one needs to find the condition which will most likely enhance or inhibit message-relevant thinking to accurately assess how a variable like credibility works. For example, source credibility may interact with motivation to process the message (Petty & Cacioppo, 1984) or may affect the recipient's degree of motivation to process a message.

Overall, the major strength of the cognitive response approach is its incorporation of variables identified in previous research (such as distraction and message repetition) that are related to the message recipient's ability and motivation to engage in message relevant thinking. In addition, this method spawned research that lead to the development of more valid models of persuasion, the Elaboration Likelihood Model (Petty & Cacioppo, 1986) and the Heuristic and Systematic Model (Chaiken & Eagly, 1983).

Elaboration Likelihood Model

Petty and Cacioppo (1986) proposed the Elaboration Likelihood Model (ELM) of persuasion, which posits that persuasion can take place through either of two routes: the central or peripheral route. Central route persuasion is based on careful thought regarding the central merits of an argument. This route emphasizes the importance of the elaboration of the message arguments. Peripheral route persuasion is based on cognitive, affective, or behavioral cues in the persuasion context other than the content of the message.

Researchers have attempted to determine the conditions under which persuasion will occur through the central or peripheral routes. The results suggest that the route taken depends upon numerous factors such as personal relevance of the topic (i. e., the extent to which a persuasive appeal has intrinsic importance; Sherif & Hovland, 1961), amount of exposure to the message, the degree of need for cognition (a tendency to engage in and enjoy thinking) of the target of persuasion, and the form of the argument (e.g., message framing; Meyerowitz & Chaiken, 1987).

Petty, Cacioppo, and Goldman (1981) conducted a study examining the effects of personal relevance. The issue used was either relevant for the participants or was not relevant for the participants. They found that participants low in personal relevance were more influenced by the likability of the communicator (a peripheral route factor) than participants in the high relevance condition. In contrast, the participants in the high relevance condition were more likely to process the merits of the arguments and were more persuaded by argument quality (a central route factor).

The amount of exposure to a message also may determine the route of persuasion by increasing the opportunity to scrutinize arguments. Cacioppo and Petty (1985) exposed participants to a strong argument (one that induced persuasion in pretests) or weak argument (one that did not induce persuasion in pretests) either once or three times. Participants in the weak argument condition were more likely to hold negative attitudes toward the attitude object when they had multiple exposures rather than one exposure, whereas participants in the strong argument condition were more likely to hold positive attitudes toward the attitude object as the amount of exposure increased. In addition, participants recalled more message arguments when the message was presented three times versus once. The ability to recall more message arguments in the frequent exposure condition than in single exposure condition indicated that message-based elaboration was higher in the frequent exposure condition. These recalled arguments, Cacioppo and Petty contend, were used in participants' formation of their attitudes. These results indicate frequent exposures result in more message-based elaboration, thus making central

processing more likely than peripheral processing, whereas single exposures to a message make peripheral processing more likely than central processing.

Individual differences can also determine the persuasion route taken. Cacioppo and Petty (1982) found that individuals high in the need for cognition were more likely to process information via the central route and that individuals low in the need for cognition are more likely to use the peripheral route. Participants high in the need for cognition also were more likely to recall message arguments and used more cognitive effort while listening to messages than those low in the need for cognition.

Finally, one way the ELM has been tested was to have participants perform a distraction task while being exposed to a persuasive communication. Such a procedure is assumed to prevent processing of the message and therefore allow only for peripheral processing. For example, Petty et al. (1976) presented counterattitudinal arguments to participants in either strong or weak forms. Participants were told the purpose of the experiment was to test how well people could do two activities at the same time. Some of the participants were told to listen to the argument and count the X's that flashed on a screen in front of them in one of four quadrants. The X's either did not flash at all (no distraction), flashed once every fifteen seconds (low distraction), flashed every five seconds (medium distraction), or flashed every three seconds (high distraction).

The results indicated that increased distraction resulted in more favorable thoughts for the weak argument, but increasing distraction was associated with less favorable thoughts for the strong argument. Participants in the high distraction group also were not able to recall as many of the arguments as the participants in the other groups. The

distraction task seemed to interrupt central processing and the participants had to rely more on simple cues through the peripheral route.

The ELM offers a more comprehensive account of persuasion than its progenitor, the cognitive response model. Research guided by the ELM has given researchers a more complete understanding of the conditions under which central and peripheral processing will affect persuasion. Its ability to organize and explain past research under one theoretical umbrella has sparked new avenues of research when it was most needed.

Heuristic and Systematic Model

An alternative two-route persuasion model was proposed by Chaiken and Eagly (1983). The Heuristic and Systematic Model (HSM) postulates that sometimes people can be persuaded using very little cognitive effort (heuristic processing). In other words, individuals come to form an attitude by assessing superficial cues related to an argument (e. g., source expertise) based on heuristics that are learned and stored on memory (e. g., experts' statements can be trusted; see Chen & Chaiken, 1999). The processing of simple learned rules or heuristics explains how persuasion occurs when individuals have little or no motivation to process a message. In contrast, when individuals have (and act on) the motivation to process a message, they may use systematic processing, which involves more careful processing of the contents of the argument.

Some evidence has been found for the conditions under which heuristic processing will occur. Wood, Kallgren, and Priesler (1985) found that participants who had little knowledge of the message topic indicated greater agreement with long rather than short arguments compared to participants who had more knowledge of the subject.

In addition, the low-knowledge participants did not scrutinize the argument as much as the high-knowledge participants. The explanation given for this phenomenon was that low-knowledge participants applied simple decision rules (heuristics) to form their attitudes, rather than processing the message carefully (see Eagly & Chaiken, 1993, for a review).

The HSM proposed by Eagly and Chaiken (1983) is conceptually similar to the ELM (Petty & Cacioppo, 1986); the concept of systematic processing is almost identical to the central route, as is heuristic processing to the peripheral route. However it is claimed, a difference between the two models is that in the HSM, heuristic and systematic processing can occur in parallel with each other whereas in the ELM central and peripheral processing cannot (Eagly & Chaiken, 1984). This is simply not the case. In the ELM, a tradeoff occurs between central and peripheral route processing; only one route is dominant. For example, as central processing increases, peripheral processing decreases, and vice versa. This tradeoff hypothesis implies, though, that at most points along the elaboration continuum, both central and peripheral processing can and do co-occur (Petty, Kasmer, Haugtvedt, & Cacioppo, 1987). However, movement in either direction along the continuum will enhance one process over another (e.g., message elaboration vs. reliance on a heuristic; Petty & Wegener, 1999). The HSM posits that both processes are orthogonal and co-occur to jointly influence judgments (i. e., an additive effect; Chaiken & Maheswaran, 1994; Maheswaran & Chaiken, 1991), whereas the ELM assumes a more bipolar tradeoff role with respect to processing (Petty, 1994, 1997).

The basic proposition of the HSM is that simple cues or heuristics can mediate processing between a message and recipient's attitude toward that message when the motivation and ability to process a message is low. It also assumes that such heuristics are learned knowledge structures. Although the HSM's concept of heuristic processing is similar to the ELM's definition of peripheral route processing, it explains how both processing routes can occur at the same time.

Language Variables in Persuasion

Although researchers have examined how some message variables affect persuasion, there has been relatively little research on the role of language in the persuasion process. One potentially important message variable is the linguistic style of the communication or message. Language-related variables that affect persuasion include speed of speech, language intensity, rhetorical questions and powerless language. The way these variables affect persuasion will be discussed in the framework of cognitive persuasion theories.

Speech Rate

Speed of speech or speech rate refers to the rate at which a message is verbally delivered (Smith & Shaffer, 1995). Some research has shown that the faster the message is delivered, the greater the amount of persuasion that will occur (LaBarbera & MacLachlan, 1979; MacLachlan, 1982; Miller, Maruyama, Beaber, & Valone, 1976). Smith and Shaffer (1995) hypothesized that the effects of speech rate on persuasion may be moderated by the level of relevance the message has for individuals. Participants listened to a message that was either of high or moderate relevance and had a moderate or

fast speech rate presentation. The results indicated that when the message was of high relevance, the participants were persuaded only by the strength of the arguments and not by the speech rate. In addition, only argument quality had an impact on speaker credibility. However, when the message was of moderate relevance, participants were influenced by both argument quality and speech rate. Participants also rated the speaker to be of higher credibility when the speaker used a fast rate of speech.

Smith and Shaffer (1995) explained the results of their study within an ELM framework. Under conditions of high relevance, participants focused on the arguments. This central merit, they argue, was so strong that it did not allow speech rate to have an effect. However, speech rate did serve as a peripheral cue under conditions of moderate relevance. Participants formed their attitude using both the central cue (argument quality) and peripheral cue (speech rate). The results of the Smith and Shaffer study indicate that speech rate acted as a central cue under conditions of high relevance and acted as a peripheral cue under conditions of moderate relevance.

Language Intensity

Language intensity is the extent to which a message differs from a neutral position (Bowers, 1963). The main difference between high- and low- intensity language is language choice (Aune & Kikuchi, 1993). For example, if people want to voice their displeasure about something with low intensity, they may say, "I did not care for it." If they wanted to voice their displeasure in a high-intensity manner however, they may say, "I loathed that." In these instances, the content remains the same, but the style has changed. To say one does not care for something is a fairly neutral way to indicate

displeasure. However, to say one loathes something is a much clearer deviation from neutrality.

Aune and Kihuchi (1993) hypothesized that language intensity is an individual difference variable and that people might prefer a language intensity similar to their own, given that Buller and Aune (1992) found that people prefer speech rates similar to their own. This hypothesis was supported in that the results showed that the source of the message was judged to be of higher credibility when the source and the receiver were similar in their use of language intensity. In addition, when language intensity was similar, the receiver of the message was more likely to agree with the communication being advocated.

These results also could be explained by the ELM. Language intensity might have served as a peripheral cue that either encouraged or discouraged the receivers to comprehend the message by affecting the perceptions of the speaker. When the language intensity of the message was similar to the receivers', they liked the communicator, which resulted in attitude change. When language intensity was dissimilar, the receivers of the message did not accept the communicator, thus ignoring the merits of the arguments, which resulted in less agreement with the message.

Rhetorical Questions

Rhetorical questions have an interesting effect on persuasion because they can increase processing in some situations, but decrease it in others. Zillmann (1972) was the first to examine rhetorical questions in a persuasion context. He found that participants who heard the rhetorical version of a defense attorney's closing arguments in a murder

case (e. g. "Johnny was a peaceful boy, wasn't he?") were more favorable to the defense than those who heard the declarative version (e.g. "Johnny was a peaceful boy"). He argued that in a conversation or debate, a speaker is most likely to use rhetorical questions when presenting a good argument. The use of rhetorical questions in conjunction with poor arguments would lead to disagreement that would undermine the persuasive intent of the speaker. Zillman concluded that through socialization rhetorical questions became markers for strong arguments for most people.

An alternative explanation comes from research by Petty, Cacioppo, and Heesacker, (1981). They found that summarizing arguments as rhetorical questions (e. g., "Increasing tuition would lead to an improvement in the library, wouldn't it?") rather than statements (e. g., "Increasing tuition would lead to an improvement in the library") led to increased message processing when the issue was of low relevance (when people would normally not be thinking about the message), but reduced message processing when the issue was of high personal relevance (when people would normally be thinking about the message). This effect occurred, they argued, because the use of rhetorical questions should be most effective in a persuasive message when they enhance the thinking of recipients who do not naturally scrutinize a message; their use may disrupt the thought process of individuals who engage in a high amount of message scrutiny. Individuals who were already engaged in thinking about the message were distracted from their normal thought processing by the rhetorical questions.

Linguistic Power

The phenomenon of powerless speech has recently come into view in the social psychological literature, but it has ties in one form or another to anthropological studies dating back the late 1950's (e. g. Fischer, 1958). However, Robin Lakoff's work and subsequent book, Language and a Woman's Place (1975) stimulated researchers to examine gender differences in how men and women speak. She argued that types of linguistic features (dubbed women's language) were more prevalent in female speech than in that of males. Examples of these features of women's language include, but are not limited to, hedges (e.g., sort of, it seems like), polite forms (e g., please, thank you), intensifiers (e.g., very, really), deictic phrases (e.g., That man over there), and tag questions (e.g., isn't he, wouldn't it). Although Lakoff did not provide empirical data to support her premise, her book led to research that found that some women do indeed speak in such a manner, but the degree varied considerably among women (O'Barr, 1982). The results of this research led to more investigations into women's language, particularly in the courtroom context, from which O'Barr (1982) concluded that the variation in women's language is neither characteristic of all women nor limited only to women. O'Barr's data indicated that the variation in women's language features seemed more related to social powerlessness than to gender. Thus, the phenomenon discovered and investigated by Lakoff and O'Barr has been renamed powerless language to indicate its relationship to social status rather than gender.

Since the publication of Lakoff's (1975) book, powerless language has been studied almost exclusively in the courtroom. Erickson, Lind, Johnson, and O'Barr (1978)

investigated the impact of powerful versus powerless language in the context of a witness's testimony in the courtroom. They presented the same courtroom statements, differing in only the type of language used (powerful versus powerless) to participants. The types of powerless markers used included hedges, intensifiers, formal grammar, and polite forms. The use of the powerful style resulted in higher perceived credibility of the witness and greater acceptance of the position advocated than did the powerless style.

Since the early work of Lakoff (1975) and Erickson et al. (1978), linguistic power has been examined in many studies (e. g., Bradac, Hemphill, & Tardy, 1981; Bradac & Mulac, 1984; Johnson & Vinson, 1990; Wright & Hosman, 1983). Results from these studies have been consistent with those of the Erickson et al. (1978) study: the use of powerless language produces negative judgments of the communicator's sociability (attractiveness and likability) and competence (Bradac & Mulac, 1984). In addition, people who use powerful language (at least in the courtroom) are perceived more favorably with respect to social power, credibility, attractiveness and intelligence relative to those who use powerless language (Bradac & Mulac, 1984; Erickson et al., 1978; Gibbons, Busch & Bradac, 1991; Hosman & Wright, 1987).

Effects of Linguistic Power on Persuasion

Given the possible effect of powerless language in a social context, it is suprising that very little research has been conducted on linguistic power and persuasion. Further, an examination of the research that has been done indicates inconsistent and/or inconclusive results. Whitley and Greenberg (1986) examined the effects of paralinguistic confidence (the presence or absence of hesitations) on perceived confidence

and influence of eyewitnesses. Their results showed that eyewitnesses who used hesitations (defined as low paralinguistic confidence) were perceived by participants as less confident than eyewitnesses that did not use hesitations (high paralinguistic confidence) and participants were less influenced by the testimony. In another study, Carli (1990) examined the effects of powerful versus powerless (tentative) language on persuasion as a function of the gender of the speaker and the listener. She found that the way linguistic power affected message agreement depended on the gender of the speaker and the listener. Specifically, a female speaker was more persuasive with males when she used powerless language, but was more persuasive with females when she used powerful (i. e., lack of powerless markers) language. When the speaker was male, linguistic power had no effect on persuasion.

Gibbons et al. (1991) were the first researchers to use the elaboration likelihood model to examine the effects of linguistic power on persuasion. They had participants read a message in which arguments were either stated in powerless or powerful language. The powerless version contained hedges, tag questions, and hesitations. They also varied personal relevance and argument strength. After reading the arguments, participants were asked to rate their agreement with the argument, their perceptions of the argument, and their perceptions of the likability, intelligence and expertise of the source. They found that powerless speech had a significant effect on perceptions of the speaker, but it did not influence how the participants felt about the position being advocated. This finding is not consistent with Petty and Cacioppo's (1986) ELM, which would predict linguistic power to have an effect on persuasion through the peripheral route. Overall, linguistic power

did not seem to serve as an "argument" (i.e., "a piece of information relevant to determining the merits of an object or issue", Petty & Wegener, 1998, p.343) or a peripheral cue.

More recently, Holtgraves and Lasky (1998) examined the effects of linguistic power on persuasion as a function of gender of speaker, gender of participant, and distraction. Their results showed that participants perceived the message phrased in powerful language more favorably than the powerless version. In addition, the effect of linguistic power on persuasion was mediated by both perceptions of the speaker and the perceptions of the message.

Gibbons et al. (1991) found that powerless language acted as neither a central or peripheral cue, whereas Holtgraves and Lasky (1998) found powerless language to act as both a central and peripheral cue. One possible explanation for such discrepant results may relate to the mode with which the message was presented. Sparks, Areni and Cox (1998) examined the possible effect of linguistic power on persuasion as a function of the mode of communication (written vs. audio vs. video). Their results indicated that the mode of the message presentation moderated the effect of linguistic power on attitudes toward the message but not perceptions of the speaker. When the message was presented in written form, powerless language did not influence persuasion, which is consistent with the results of the Gibbons et al. (1991) study. However, when the message was in audio or video form, linguistic power had an effect on attitudes toward the message, which yielded results similar to Holtgraves and Lasky (1998), who used audio forms of the message. Further analysis indicated that written transcripts produced more message

directed thoughts than either audio or video, possibly because the written modality gives the individual a greater opportunity to comprehend message relevant information. Sparks et al. (1998) suggested that self-pacing and rereading of the message, behaviors possible only when reading a message, accounted for this finding.

Another difference between the Holtgraves and Lasky (1998), Gibbons et al. (1991, and Carli (1990) study was the use of different powerlessness markers used in each study. Carli (1990) used tag questions, hedges, and disclaimers (e.g., I may not be an expert, but…), whereas Holtgraves and Lasky (1998) used tag questions and hesitations, but used hedges instead of disclaimers. Gibbons et al. (1991) used the same types of markers as Holtgraves and Lasky (1998), but used fewer of them. This suggests that the number and type of powerlessness markers may produce different effects on the persuasiveness of a message (see also Bradac & Mulac, 1984).

The purpose of the present study is to examine the effects of different powerless language markers on persuasion. That is, do hesitations differ from hedges and tag questions in their effect on how the speaker or message is attended to, and does this have a corresponding effect on the persuasiveness of a communication? Several studies have found that the components of powerless language do have different evaluative consequences (Wright & Hosman, 1983; Bradac & Mulac, 1984; Hosman & Wright, 1987; Hosman, 1989). For example, Bradac and Mulac (1984) examined the separate effects of powerless language markers in a social context. They had participants read segments of the responses of job interviewees. The segments included either one of six types of powerless language (hedges, tag questions, intensifiers, polite forms, hesitations

and deictic phrases) or no powerless markers. In addition, they varied the gender of the speaker. After reading the segments, participants were asked to rate each interviewee on his effectiveness and power.

The results (shown in Table 1) indicated that a five-level hierarchy of linguistic markers could be plotted on a continuum in order of participants' perceptions of effectiveness and power. At the higher end of the continuum, the powerful and polite forms were perceived by participants as being the most powerful and effective. Intensifiers were seen as being less powerful and effective than the powerful and polite forms, but more powerful and effective than the use of deictics, hedges and tags were seen as less powerful and effective than the markers mentioned above, but more effective and powerful than hesitations.

Insert Table 1 Here

Hosman and Siltanen (1991) examined the effect of powerless language on perceptions of the speaker's control of others and control of the self. Control of others was defined as the extent to which the communicator is perceived as domineering and influential. Control of self was defined as the extent to communicator was perceived as confident and self-assured. Their results indicated that a powerful message and one containing intensifiers produced the highest ratings of authoritativeness, control of others, and control of self, whereas hesitations and tags produced the lowest ratings. The ratings of the hedged message fell between the two others. On the rating of sociability, tag

questions received the lowest ratings while the other components were given neutral ratings.

In summary, different markers of powerless language have different effects on perceptions of both the speaker and the message. It seems likely, then, that these markers will also have different effects on the persuasiveness of a message. This may explain why previous research on powerless language and persuasion has produced conflicting results.

It is also possible that linguistic markers of powerlessness affect persuasion through different routes. Tag questions, for example, may affect persuasion through the central route by increasing the amount of relevant thoughts about the message for some individuals (Petty et al., 1981). Examination of Petty et al.'s (1981) manipulations of rhetorical questions show that they are similar in both style and content to tag questions. For example, Petty et al. (1981) used the phrases "Don't you agree", "Isn't it", and "Don't you think." Researchers have manipulated linguistic power by using similar, if not the same, phrases as rhetorical questions (e. g., don't they, isn't it, don't you agree). Recall that Petty et al. (1981) and Zillman (1972) used rhetorical questions in a message and found that they led to increased message processing under some conditions; tag questions should affect persuasion in a similar manner. The use of tag questions should induce message processing under conditions of low topic relevance by making strong arguments appear to be stronger and weak arguments appear to be weaker than when no tag questions are present. In the high relevance condition, tag questions should disrupt processing, effectively making strong arguments weaker and weak arguments stronger

than when they are absent. In this case, tag questions should affect persuasion by affecting message processing (i. e., acting as an argument).

In contrast, hesitations may affect persuasion peripherally by affecting perceptions of the speaker's likability, competence, knowledge, and trustworthiness. This possibility is consistent with the finding of Holtgraves and Lasky (1998) who found that linguistic power affected persuasion both peripherally (when participants were distracted) and centrally (when participants were able to process the message). Bradac and Mulac (1984) found hesitations were the least powerful of seven types of specific powerless language markers. In addition, frequent use of hesitations produced negative ratings of a speaker's authoritativeness and sociability. Similarly, results were found by Hosman (1989) that hesitations may indicate a lack of self-control. Some studies (Miller & Hewgill, 1964; McCroskey & Mehrley, 1969) found that hesitations indicate uncertainty and thus produce negative evaluations of the speaker's competence, dynamism, and character. In the assessment of attractiveness of the speaker, Hosman and Wright (1987) found the highest ratings were given to messages that contained powerful language. However, the lowest ratings were given to the message high in hesitations. This suggests that hesitations may have an effect primarily on perceptions of the speaker. If this is the case, then hesitations will affect persuasion via the peripheral route. Thus, when personal relevance is low, hesitations will decrease the persuasiveness of the message by negatively affecting perceptions of the source of the message, and this should occur regardless of argument strength. When personal relevance is high, hesitations will not affect the persuasiveness of the message.

How will hedges alone affect the persuasiveness of a message? One possibility is that hedged speech decreases persuasion by weakening the strength of the message's arguments, resulting in less agreement with the message. This hypothesis comes from research based on the results of the effect of language intensity on persuasion. Messages with a high level of intensity tend to use more clear and precise language than low intensity messages. A clear message should be perceived as higher in quality, thus increasing the amount of attitude change (Petty & Cacioppo, 1986). Message clarity has been found to mediate the relationship between language intensity and persuasion (Kochevar, 1967; McEwen & Greenberg, 1970). In fact, language intensity has been found to increase the persuasive extremity of the position advocated by the source (Hamilton & Stewart, 1993). A message containing hedges may decrease the clarity of the message's arguments by implying a more neutral position than non-hedged speech, thereby decreasing the message's persuasiveness. Hedged speech has been found to decrease the force of a message (Wright & Hosman, 1983) and indicate negative perceptions of a speaker's authoritativeness (Hosman, 1989). Thus, hedges may act as an argument "neutralizer," in effect acting as an "argument" (central) and decreasing argument strength. Thus, it seems likely the hedges will affect persuasion via the central route. It is expected that under conditions of low relevance, hedges will not affect persuasiveness of the message in either argument condition because people in this situation are not motivated to process the message and so are not affected by argument manipulations. In contrast, under conditions of high relevance, hedges will affect the

persuasiveness of the message by decreasing the clarity of the message's arguments for both strong and weak arguments.

In sum, past research has treated powerless markers as if they were equivalent. Researchers examining the role of powerless language in persuasion have created powerless language versions comprised of different powerless markers. The fact that the research has produced conflicting results may be due in part to the possibility that these markers have different effects in the persuasion process. Tag questions, for example, may affect persuasion through the central route by either increasing the amount of or decreasing message-relevant thoughts (Petty et al., 1981). In contrast, hesitations may affect persuasion peripherally by affecting perceptions of the speaker. When the recipient's motivation to process the message is low, hesitations may decrease the persuasiveness of a message by having a negative effect on perceptions of the speaker. However, when the motivation to process the message is high, hesitations will not affect the persuasiveness of the message relative to a message containing no hesitations. The use of hedges in a message may affect persuasion through the central route. Therefore, when the motivation to process a message is high, the use of hedges in a message will decrease the clarity of the arguments presented in the message. As a result, the message will be less persuasive than a message that contains no hedges. However, when the motivation to process the message is low, the use of hedges in a message will not affect the persuasiveness of the message. The present research will examine the possibility that three linguistic markers of powerlessness -- tag questions, hesitations, and hedges-- will affect persuasion through different routes.

Summary of Hypotheses

1. Tag questions: It is expected that tag questions will affect persuasion via the central route by inducing or inhibiting processing of the message. Specifically, when personal relevance is low, tag questions should instigate message processing. Therefore, under conditions of low relevance, the difference in processing between the strong and weak arguments should be much greater when tag questions are used than when they are absent. Strong arguments will result in more favorable attitudes toward the topic, more favorable perceptions of the message and more favorable cognitive responses in the strong argument condition relative to the weak argument condition than when tag questions are present. In the high relevance condition, tag questions should disrupt processing. Therefore, under conditions of high relevance, the difference between the strong and weak arguments should be greater when tag questions are absent than when they are present. This will result in more favorable attitudes toward the topic, more favorable perceptions of the message and more favorable cognitive responses when the arguments in the message are strong rather than weak and when tag questions are absent. In addition, it is expected that participants' perceptions of the message will mediate the effect of tag questions on attitudes toward the proposal.

2. Hesitations: It is expected that hesitations will affect persuasion by way of the peripheral route. Therefore, when personal relevance is low, hesitations will produce less favorable attitudes toward the topic (by having a negative effect on perceptions of the source of the message), less favorable perceptions of the message and speaker, and less favorable cognitive responses than the control message regardless of argument strength

(e. g., no argument strength main effect). When personal relevance is high, hesitations will not affect attitudes toward the topic, perceptions of the message, and perceptions of the speaker; only the argument strength manipulation will have an effect. In addition, it is expected that participants' perceptions of the speaker will mediate the effect of hesitations on attitudes toward the proposal.

3. Hedges: It is expected that hedges will affect persuasion by way of the central route. Therefore, when personal relevance is low, hedges will not affect the persuasiveness of the message, perceptions of the speaker, perceptions of the message, or cognitive responses in either argument condition (e. g., no argument strength main effect). When personal relevance is high, hedges will result in less favorable attitudes toward the topic (by decreasing the perceived clarity of the message), less favorable perceptions of the message and speaker, and more negative cognitive responses than the control message in both the strong and weak argument conditions, but the argument strength main effects will be significant. In addition, it is expected that participants' perceptions of the message will mediate the effect of hedges on attitudes toward the proposal.

METHOD

Participants

Participants were 219 female and 132 male introductory psychology students who received partial credit toward completion of course requirements. Participants ranged in age from 18 to 45 with a mean of 19.6 years and a standard deviation of 2.8 years. They participated in groups of 8-12 in a classroom setting.

Design

The design was a 2 (Relevance) X 2 (Argument Strength) X 4 (Language) completely crossed between-subjects design. Participants were randomly assigned to one of the sixteen conditions. Participants listened to an audio compact disk of a male speaker arguing that comprehensive final exams should be implemented for seniors in all majors. The message consisted of sample arguments adopted from Petty and Cacioppo (1986), and is shown in Appendix A.

Procedure

Participants were told that each year the psychology department assists the College of Communication, Information, and Media in evaluating radio editorials that are sent in by colleges and universities throughout the country, and their task would be to provide ratings of the broadcast quality of the editorials. Following these instructions, participants signed an informed consent form, listened to some introductory remarks

about the editorials they were about to hear, and then listened to one of the audio messages. After listening to the editorial, participants completed the dependent measures and were debriefed and given course credit for participating. This procedure is similar to the one used by Petty et al. (1981).

Manipulated Variables

Personal relevance manipulation. Before hearing one of the four versions of the message, participants were read a brief background paragraph about the editorial (shown in Appendix B). For those in the high personal relevance conditions, the paragraph explained that as a result of a recent academic re-evaluation, the president of the university had recommended a number of changes to begin the next academic year. The editorial described one of the changes that would personally affect each of the students. In the low relevance conditions, the background paragraph explained that the editorial will concern a proposal that the president of a distant university (University of Pittsburgh) had recommended be instituted at his institution in ten years. Thus, none of the students present would be affected personally by the proposal.

Argument quality manipulation. The message contained either three major arguments that were logically sound, defensible, and compelling or that were open to challenge and easy to refute. The strong arguments were selected from a pool that elicited primarily favorable thoughts in a pretest, and the weak arguments were selected from a pool that elicited mainly counterarguments in a pretest (e. g., Petty & Cacioppo, 1986). The specific arguments in the message were taken from the strong and weak communications described by Petty and Cacioppo (1986). Strong and weak argument

manipulations are used frequently in ELM research, and, as Petty and Cacioppo (1984) point out, are used to create conditions under which cognitive responses to the message is either pro- or counter-attitudinal. Strong arguments enhance more favorable cognitive responses toward the message, whereas weak arguments produce more responses against the message.

Linguistic power manipulation. Powerful and powerless speech style versions of the strong and weak arguments were constructed (presented in Appendix A). The version containing tag questions had six tag questions (e. g., right?, isn't it?, don't you think?) in the message. The version containing hedges (e. g., sort of, probably) had six hedges in the message. The version containing hesitations (e. g., um…, ah…) had six hesitations in the message. Finally, the powerful version of the message had none of the powerless language styles.

Dependent Measures

Four sets of dependent measures were used (presented in Appendix C). They included measures pertaining to the participant's attitude toward the advocated position, perceptions of the speaker, perceptions of the message, and cognitive responses regarding the communication.

Attitude toward comprehensive final exams. On the first page of the booklet containing the dependent measures participants read: "Because your own views on the desirability of instituting a comprehensive exam may influence the way you rate the broadcast quality of the editorial, we would like to obtain a measure of how you feel about the idea of a comprehensive exam." Participants rated their attitude toward

comprehensive final exams by rating the position advocated on five 7-point semantic differential scales (harmful/beneficial, wise/foolish, good/bad, favorable/unfavorable, and desirable/undesirable). Then they rated how strongly they agree with the message on a 7-point scale (strongly agree/strongly disagree). The alpha reliability for these five items obtained in this study was .91.

Perceptions of the speaker. Participants also rated their opinion of the speaker using 7-point scales as done by Gibbons et al. (1991) and Holtgraves and Lasky (1998). Participants indicated their perceptions of the speaker's likability (not very likable/very likable), competence (not very competent/very competent), knowledge (not very knowledgeable/very knowledgeable), and trustworthiness (not very trustworthy/very trustworthy). The internal consistency between these items for this study was .85.

Perceptions of the message. Participants also rated their views about the quality of the messages used in the communication. This was done using four 7-point items assessing the message's soundness (not very sound/very sound), reasoning (not very well reasoned/very well reasoned), strength (not very strong/very strong), and logic (not very logical/very logical). The internal consistency among these items for this study was .89. The remaining questions were “filler” items using the same format: not very intelligent/very intelligent, energetic/not very energetic.

Cognitive responses. After completing the attitude scales, participants completed a cognitive response task similar to the one used in the Petty et al. (1981) study (shown in Appendix D). Participants were given 3 minutes to list the thoughts they had while listening to the message. They were instructed to write one thought per line on a piece of

81/2" by 11" lined paper provided by the researcher. After recording their thoughts, participants were instructed to rate their thoughts as either + (in favor of senior comprehensive exams), - (opposed to senior comprehensive exams), or 0 (neutral or irrelevant). All positive items were summed together as well as the negative items. The difference between the number of positive and negative items divided by the total amount of items were used to indicate the overall amount of positive or negative thoughts.

Manipulation check. Manipulation checks embedded in the questionnaire assessed the effectiveness of the language manipulation, argument strength manipulation, and relevance manipulation. The language manipulation check consisted of four items that assessed the extent the speaker stammered, added questions, used terms like "kind of" and "sort of" and how powerful the speaker's language was. The argument strength manipulation check consisted of one item that assessed participants' perceived strength of the message's arguments, and the relevance manipulation check consisted of one item assessing how relevant the message was to participants.

In addition, to assess message processing, participants rated how distracted they felt while reading the message. Similarly, to assess message clarity, participants rated how clear they perceived the message to be. Participants also rated the amount of confidence they thought the speaker exhibited. Previous research has shown that the type of language used to manipulate speech power can also affect perceptions of the speaker (Whitley & Greenberg, 1986). It is expected that when controlling for perceptions of the speaker's confidence, the type of language used will still have a significant effect on participant's attitude toward the topic.

RESULTS

Power Analysis. An a priori power analysis was conducted to determine the statistical power required to avoid making a Type II error when predicting null results in the above hypotheses regarding both linguistic power and argument strength. As applied to this study, the average effect size of linguistic power was determined from three previous studies similar to this one (0.92; Holtgraves & Lasky, 1998; Gibbons et al., 1991; Sparks et al., 1998). The statistical power of this study with 22 participants per cell is about 0.99, meaning that there is a 1% chance of making a Type II error.

The average effect size of argument strength was also determined from previous studies similar to this one (0.35; Gibbons et al., 1991; Petty et al., 1981; Sparks et al., 1998). Therefore, the statistical power of this study with 22 participants per cell is about 0.50, meaning that there is a 50% chance of making a Type II error.

To control for Type 1 error rate (the probability of rejecting the null hypothesis when t is true), the Bonferroni inequality procedure was used. This procedure adjusts the error of the set of entire tests to the chosen criterion, which is in this case .05. Thus, all effects described as significant were reliable at less than .017.

Manipulation Checks

The analysis suggested that the three manipulations were successful. Participants in the high relevance condition perceived the message as more personally relevant

relative to the low relevance condition (M = 5.13 vs. 4.2), t(1, 349) = 5.23, p < .001, and participants in the strong argument condition perceived the messages as being stronger than the weak argument condition (M = 4.41 vs. 4.02), t(1, 349) = 2.53, p = .01. In addition, participants in the strong argument condition produced more favorable cognitive responses relative to the weak argument condition (M = 2.01 vs. .02), t(1, 349) = 14.51, p < .001 and participants in the weak argument condition produced more negative cognitive responses relative to the strong argument condition (M = 3.2 vs. 1.1), t(1, 349) = 11.51, p < .001. Participants in the tag question conditions perceived the speaker as adding more questions relative to the control condition (M = 6.5 vs. 2.4), t(1, 173) = 22.44, p < .001. Participants in the hesitation conditions perceived the speaker as stammering more often relative to the control condition (M = 5.1 vs. 2.5), t(1, 177) = 12.34, p < .001. Participants in the hedge conditions perceived the speaker as using words such as "kind of" and "sort of" relative to the control condition (M = 5.18 vs. 2.0), t(1, 176) = 12.48, p < .001.

In addition, a one-way analysis of variance (ANOVA) examined participants' perceptions of speaker power, which was found to be significant F(3, 347) = 17.16, p < .001. A post hoc examination using the Scheffe test at the .05 level of significance (equivalent to .05 after controlling for alpha error) compared the means of the four language types on speaker power indicated that the message containing no powerless language markers was rated significantly the most powerful (M = 4.34 vs. 3.59; 3.31; 2.94), F(1, 347) = 120.91, p < .001. There was no difference in perceptions of power between tag questions and hedges (M = 3.59 vs. 3.31), F(1, 347) = 1.88, p > .012, but tag

questions were rated significantly more powerful than hesitations (M = 3.59 vs. 2.94), F(1, 347) = 9.84, p < .012. Finally, there was no difference on ratings of power between hesitations and hedges (M = 2.94 vs. 3.31), F(1, 347) = 3.22, p > .012.

Analysis of Tag Questions

Attitudes toward the proposal. All relevant means are reported in Table 2. It was hypothesized that under conditions of low relevance, the difference between strong and weak arguments on attitudes would be greater in the tag question condition than in the control condition. Results of a planned comparison indicated that the difference between strong and weak arguments on this measure was no greater in the tag question condition (difference = 0.78) than in the control condition (difference = 0.66), which is contrary to what was hypothesized, F(1, 166) = 0.07, p > .017.

Insert Table 2 Here

It was hypothesized that under conditions of high relevance, the difference between strong and weak arguments would be greater in the control condition than in the tag question condition. Results of a planned comparison indicated that the predicted difference between means was significant, F(1, 166) = 12.33, p < .017, indicating that in the control condition, the difference between means was greater than in the tag question condition (difference = 1.07 vs. -0.44), which was hypothesized.

Perceptions of the speaker. All relevant means are reported in Table 3. It was hypothesized that under conditions of low relevance, the difference between strong and

weak arguments would be greater in the tag question condition than in the control condition. Results of a planned comparison indicated that the difference between strong and weak arguments was no greater in the tag question condition (difference = 1.19) than in the control condition (difference = 0.65), $F(1, 166) = 1.87$, $p > .017$, which is contrary to what was hypothesized.

Insert Table 3 Here

It was hypothesized that under conditions of high relevance, the difference between strong and weak arguments would be greater in the control condition than in the tag question condition. Results of a planned comparison indicated that the difference between the strong and weak argument conditions was no greater in the control condition (difference = 0.51) than in the tag question condition (difference = 0.36), $F(1, 166) = 0.15$, $p > .017$, which is contrary to what was hypothesized.

Perceptions of the message. All relevant means are reported in Table 4. It was hypothesized that under conditions of low relevance, the difference between strong and weak arguments would be greater in the tag question condition than in the control condition. Results of a planned comparison indicated that the difference between strong and weak arguments was no greater in the tag question condition (difference = 1.32) than in the control condition (difference = 1.25), $F(1, 166) = 1.87$, $p > .017$, which is contrary to what was hypothesized.

Insert Table 4 Here

It was hypothesized that under conditions of high relevance, the difference between strong and weak arguments would be greater in the control condition than in the tag question condition. Results of a planned comparison indicated that the difference between the strong and weak argument conditions was no greater in the control condition (difference = 1.00) than in the tag question condition (difference = 0.71), $F(1, 166) = 0.77$, $p > .017$, which is contrary to what was hypothesized.

Cognitive responses. All relevant means are reported in Table 5. It was hypothesized that under conditions of low relevance, the difference between strong and weak arguments would be greater in the tag question condition than in the control condition. Results of a planned comparison indicated that the difference between strong and weak arguments was no greater in the tag question condition (difference = 2.72) than in the control condition (difference = 3.45), $F(1, 166) = 0.58$, $p > .017$, which is contrary to what was hypothesized.

Insert Table 5 Here

It was hypothesized that under conditions of high relevance, the difference between strong and weak arguments would be greater in the control condition than in the tag question condition. Results of a planned comparison indicated that the difference

between the strong and weak argument conditions was no greater in the control condition (difference = 3.30) than in the tag question condition (difference = 1.54), $F(1, 166) = 3.53$, $p > .017$, which is contrary to what was hypothesized.

Analysis of Hesitations

Attitudes toward the proposal. All relevant means are reported in Table 6. To test the a priori hypothesis regarding the low relevance condition, a 2 (Argument Strength) X 2 (Hesitation vs. Control) ANOVA on the attitude measure in the low relevance condition revealed a significant Argument Strength main effect $F(1, 85) = 7.02$, $p = .01$, indicating that participants in the strong argument condition had more favorable attitudes toward the message than those in the weak argument condition ($M = 4.92$ vs. 4.34), which is contrary to what was hypothesized. The main effect for Language was not significant $F(1, 85) = 3.88$, $p = .052$, which is not consistent with what was hypothesized. In addition, the Argument Strength X Language interaction was not significant $F(1, 85) = 0.12$, $p = .73$, which is consistent with what was hypothesized.

Insert Table 6 Here

To test the a priori hypothesis regarding the high relevance condition, a 2 (Argument Strength) X 2 (Hesitation vs. Control) ANOVA on the attitude measure in the high relevance condition revealed the Argument Strength main effect to be not significant $F(1, 85) = 3.38$, $p = .070$, which is contrary to what was hypothesized. There was a significant Language main effect $F(1, 85) = 37.25$, $p < .001$, indicating that the control

message was rated more favorable than the message containing hesitations (M = 5.2 vs. 4.03), which is contrary to what was hypothesized. In addition, there was a significant Argument Strength X Language interaction F(1, 85) = 13.79, p < .001, which is contrary to what was hypothesized. A post hoc examination of the interaction indicated that in the strong argument condition, the control message resulted in more favorable attitudes than the message containing hesitations (M = 5.74 vs. 3.85), F(1, 42) = 38.44, p < .001, whereas attitudes toward the proposal did not differ as a function of language in the weak argument condition (M = 4.47 vs. 4.21),), F(1, 43) = 3.76, p = .06.

Perceptions of the speaker. All relevant means are reported in Table 7. To test the a priori hypothesis regarding the low relevance condition, a 2 (Argument Strength) X 2 (Hesitation vs. Control) ANOVA on participants' perceptions of the speaker in the low relevance condition revealed a significant Argument Strength main effect F(1, 85) = 6.57, p = .012, indicating that participants in the strong argument condition had more favorable perceptions of the speaker than those in the weak argument condition (M = 4.66 vs. 4.14), which is contrary to what was hypothesized. The predicted main effect for Language was significant F(1, 85) = 7.52, p = .007, indicating that participants in the control condition had more favorable perceptions of the speaker than those in the hesitation condition (M = 4.68 vs. 4.12), which was hypothesized. The Argument Strength X Language interaction was not significant F(1, 85) = 0.39, p = .54, which was hypothesized.

Insert Table 7 Here

To test the a priori hypothesis regarding the high relevance condition, a 2 (Argument Strength) X 2 (Hesitation vs. Control) ANOVA on participants' perceptions of the speaker in the high relevance condition revealed that the main effect for Argument Strength was not significant $F(1, 85) = 1.81$, $p = .181$. There was a significant main effect for Language $F(1, 85) = 60.69$, $p < .001$, indicating that participants in the control condition had more favorable perceptions of the speaker than those in the hesitation condition ($M = 5.05$ vs. 3.75), which was contrary to what was hypothesized. In addition, the Argument Strength X Language interaction was not significant $F(1, 85) = 0.64$, $p = .43$, which was hypothesized. All relevant means are shown in Table 7.

Perceptions of the message. All relevant means are reported in Table 8. To test the a priori hypothesis regarding the low relevance condition, a 2 (Argument Strength) X 2 (Hesitation vs. Control) ANOVA on participants' perceptions of the message in the low relevance condition revealed a significant Argument Strength main effect $F(1, 85) = 22.99$, $p < .001$, indicating that participants in the strong argument condition had more favorable perceptions of the message than those in the weak argument condition ($M = 5.23$ vs. 4.22) which was contrary to what was hypothesized. The Language main effect was not significant $F(1, 85) = 0.01$, $p = .98$, which is contrary to what was hypothesized. In addition, the Argument Strength X Language interaction was not significant $F(1, 85) = 1.13$, $p = .29$, which was hypothesized.

Insert Table 8 Here

To test the a priori hypothesis regarding the high relevance condition, a 2 (Argument Strength) X 2 (Hesitation vs. Control) ANOVA on participants' perceptions of the message in the high relevance condition revealed the predicted main effect for Argument Strength to be significant $F(1, 85) = 14.17$, $p < .001$, indicating that participants in the strong argument condition had more favorable perceptions of the message than those in the weak argument condition ($M = 5.13$ vs. 4.33). The Language main effect was significant $F(1, 85) = 25.95$, $p < .001$, indicating that participants in the control condition had more favorable perceptions of the message than those in the hesitation condition ($M = 5.24$ vs. 4.18), which was contrary to what was hypothesized. In addition, the Argument Strength X Language interaction was not significant $F(1, 85) = 1.16$, $p = .285$, which was hypothesized.

Cognitive responses All relevant means are reported in Table 9. To test the a priori hypothesis regarding the low relevance condition, a 2 (Argument Strength) X 2 (Hesitation vs. Control) ANOVA on participants' cognitive responses in the low relevance condition revealed a significant Argument Strength main effect $F(1, 85) = 22.68$, $p < .001$, indicating that participants in the strong argument condition had more favorable cognitive responses than those in the weak argument condition ($M = 0.06$ vs. -2.37), which was contrary to what was hypothesized. The Language main effect was not significant $F(1, 85) = 1.99$, $p = .16$, which is contrary to what was hypothesized. In

addition the Argument Strength X Language interaction was not significant $F(1, 85) = 3.57$, $p = .062$, which was hypothesized.

Insert Table 9 Here

To test the a priori hypothesis regarding the high relevance condition, a 2 (Argument Strength) X 2 (Hesitation vs. Control) ANOVA on participants' cognitive responses in the high relevance condition revealed the predicted main effect for Argument Strength to be significant $F(1, 85) = 54.07$, $p < .001$, indicating that participants in the strong argument condition had more favorable cognitive responses than those in the weak argument condition ($M = 0.66$ vs. -2.22). In addition, there was a main effect for Language $F(1, 85) = 25.95$, $p < .001$, indicating that participants in the control condition had more favorable cognitive responses than those in the hesitation condition ($M = 0.35$ vs. -2.02), which is contrary to what was hypothesized. Finally, the Argument Strength X Language interaction was not significant $F(1, 85) = 1.46$, $p = .23$, which was hypothesized.

Analyses of Hedges

Attitudes toward the proposal. All relevant means are reported in Table 10. To test the a priori hypothesis regarding the low relevance condition, a 2 (Argument Strength) X 2 (Hedges vs. Control) ANOVA on the attitude measure in the low relevance condition revealed a nonsignificant Argument Strength main effect $F(1, 82) = 2.35$, $p = .129$, a nonsignificant Language main effect $F(1, 82) = 2.90$, $p = .092$, and a

nonsignificant Argument Strength X Language interaction effect F(1, 82) = 1.68, p = .20. All of these results are consistent with what was hypothesized.

Insert Table 10 Here

To test the a priori hypothesis regarding the high relevance condition, a 2 (Argument Strength) X 2 (Hedges vs. Control) ANOVA on the attitude measure in the high relevance condition revealed the predicted Argument Strength main effect to be significant F(1, 87) = 15.55, p < .001, indicating that the message containing strong arguments was rated more favorable than the message containing weak arguments (M = 5.18 vs. 4.34), which was hypothesized. In addition, there was a significant Language main effect F(1, 87) = 17.53, p < .001, indicating that the control message was rated more favorable than the message containing hedges (M = 5.2 vs. 4.3), which was hypothesized. Finally, the Argument Strength X Language interaction was not significant, F(1, 87) = 1.06, p = .306, which is consistent with what was hypothesized.

Perceptions of the speaker. All relevant means are reported in Table 11. To test the a priori hypothesis regarding the low relevance condition, a 2 (Argument Strength) X 2 (Hedges vs. Control) ANOVA on participants' perceptions of the speaker in the low relevance condition revealed a nonsignificant Argument Strength main effect F(1, 82) = 1.61, p = .209, a nonsignificant language main effect F(1, 82) = 3.53, p = .064, and a nonsignificant Argument Strength X Language interaction F(1, 82) = 3.53, p = .064. All of these results are consistent with what was hypothesized.

Insert Table 11 Here

To test the a priori hypothesis regarding the high relevance condition, a 2 (Argument Strength) X 2 (Hedges vs. Control) ANOVA on participants' perceptions of the speaker in the high relevance condition revealed a nonsignificant Argument Strength main effect $F(1, 87) = 1.07$, $p = .305$, which is contrary to what was hypothesized. In addition, there was a significant Language main effect $F(1, 87) = 32.66$, $p < .001$, indicating that the control message had more favorable perceptions of the speaker than the message containing hedges ($M = 5.05$ vs. 3.9), which was hypothesized. Finally, the Argument Strength X Language interaction was not significant $F(1, 87) = 0.55$, $p = .458$, which was hypothesized.

Perceptions of the message. All relevant means are reported in Table 12. To test the a priori hypothesis regarding the low relevance condition, a 2 (Argument Strength) X 2 (Hedges vs. Control) ANOVA on participants' perceptions of the message in the low relevance condition revealed a nonsignificant Argument Strength main effect $F(1, 82) = 4.44$, $p = .038$, which is what was hypothesized, and a significant Language main effect $F(1, 82) = 6.56$, $p = .012$, indicating that the control message had more favorable perceptions of the message than the message containing hedges ($M = 4.71$ vs. 4.08), which was contrary to what was hypothesized. Finally, the Argument Strength X Language interaction was significant $F(1, 82) = 8.03$, $p = .006$, which is contrary to what was hypothesized. Post hoc analysis of the interaction indicated that in the strong

argument condition, the control message resulted in more favorable perceptions of the message than the message with hedges (M = 5.35 vs. 3.99), F(1, 82) = 14.75, p < .001, whereas perceptions of the message didn't differ as a function of language in the weak argument condition (M = 4.10 vs. 4.17), F(1, 82) = 0.04, p = .85.

Insert Table 12 Here

To test the a priori hypothesis regarding the high relevance condition, a 2 (Argument Strength) X 2 (Hedges vs. Control) ANOVA on participants' perceptions of the message in the high relevance condition revealed the predicted Argument Strength main effect to be significant F(1, 87) = 10.97, p < .001, indicating that the message containing strong arguments had more favorable perceptions of the message than the weak argument message (M = 4.80 vs. 4.06), which was hypothesized. In addition, there was a significant Language main effect F(1, 87) = 51.61, p < .001, indicating that the control message had more favorable perceptions of the message than the message containing hedges (M = 5.24 vs. 3.61), which was hypothesized. The Argument Strength X Language interaction was not significant F(1, 87) = 1.18, p = .28, which was hypothesized.

Cognitive responses. All relevant means are reported in Table 13. To test the a priori hypothesis regarding the low relevance condition, a 2 (Argument Strength) X 2 (Hedge vs. Control) ANOVA on participants' cognitive responses in the low relevance condition revealed a significant Argument Strength main effect F(1, 82) = 17.10, p <

.001, indicating that the message containing strong arguments had more favorable cognitive responses than the weak argument message (M = -0.14 vs. -2.14), which is contrary to what was hypothesized. The Language main effect was not significant F(1, 82) = 3.61, p = .061, which was hypothesized. Finally, the Argument Strength X Language interaction was not significant F(1, 82) = 3.92, p = .05, which was hypothesized.

Insert Table 13 Here

To test the a priori hypothesis regarding the high relevance condition, a 2 (Argument Strength) X 2 (Hedges vs. Control) ANOVA on participants' cognitive responses in the high relevance condition revealed the predicted Argument Strength main effect to be significant F(1, 87) = 26.83, p < .001, indicating that the message containing strong arguments had more favorable cognitive responses than the weak argument message (M = 0.63 vs. -1.60). The Language main effect was significant F(1, 87) = 14.98, p < .001, indicating that the control message had more favorable cognitive responses than the message containing hedges (M = 0.35 vs. -1.31) which was hypothesized. Finally, the Argument Strength X Language interaction was significant F(1, 87) = 6.11, p = .015, which is contrary to what was hypothesized. Post hoc analysis of the interaction indicated that in the strong argument condition, the control message resulted in more favorable cognitive responses than the message with hedges (M = 2.00 vs. -0.74), F(1, 87) = 19.54, p < .001, whereas cognitive responses did not differ as a

function of language in the weak argument condition (M = -1.30 vs. -1.91), F(1, 87) = 1.02, p = .32.

Summary of ANOVA results

To briefly summarize, the use of tag questions interacted with argument quality and decreased attitude favorability relative to the control condition in the high relevance condition only, which supported hypothesis 1. Lack of support, however, was found for the remaining hypotheses involving tag questions. The use of hesitations in a communication decreased participants' perceptions of the speaker in the low relevance condition, whereas in the high relevance condition, the use of hesitations decreased attitude favorability, perceptions of the speaker, perceptions of the message, and resulted in more negative cognitive responses relative to the control message. Thus, the predicted effects occurred when the topic was of high rather than low relevance. The use of hedges in a communication led to decreased perceptions of the message in the low relevance condition relative to the control message, whereas under conditions of high relevance, the use of hedges led to a decrease in attitude favorability, perceptions of the speaker, perceptions of the message and more negative cognitive responses relative to the control communication. Overall, partial support was found for the hypotheses regarding hedges when they were in the high relevance condition, as expected.

Mediational Analyses

Analyses of covariance (ANCOVA) were conducted to assess the extent to which the differential effects of linguistic power on attitudes toward the proposal were mediated by perceptions of the speaker, perceptions of the message, and cognitive responses. To

control alpha error rate, the Bonferroni correction was used. In addition, none of the ANCOVAs had a significant treatment by attribute interaction (i.e., the assumption of homogeneity of slopes was met).

Analysis of tag questions. It was hypothesized that the effect of tag questions on attitudes would be mediated by participants' perceptions of the message. However, because there was no initial effect of tag questions on perceptions of the message (as shown in Table 4), an ANCOVA could not be conducted.

In addition, it was hypothesized that distractibility would mediate the effect of tag questions on attitudes in high relevance participants. However, the results of planned comparisons examining the difference in distractibility between the strong and weak arguments in the tag question and control conditions under conditions of high relevance indicated a nonsignificant effect $F(1, 164) = 0.75$, $p > .017$, which is contrary to what was hypothesized. As a result, an ANCOVA could not be conducted.

Analysis of hesitations. It was hypothesized that the effect of hesitations on attitudes would be mediated by participants' perceptions of the speaker. As indicated earlier (see Table 7), perceptions of the speaker were affected by hesitations in the high relevance condition, thus providing a significant relationship between hesitations and perceptions of the speaker (Baron & Kenny, 1986). The results of an ANCOVA examining the effect of hesitations in the high relevance condition on attitudes with perceptions of the speaker as a covariate $F(1, 86) = 13.35$, $p < .001$, indicated that the effects of hesitations on the attitude measure were no longer significant when perceptions of the speaker was used as a covariate, $F(1, 86) = 5.10$, $p = .03$ (which equals .09 after

controlling for alpha error). However, when scores on the attitude measure were used as a covariate, $F(1, 86) = 13.35$, $p < .001$, the effect of hesitations on perceptions of the speaker remained significant $F(1, 86) = 27.48$, $p < .001$. Thus, the effects of hesitations on message agreement are mediated by participants' perceptions of speaker, but message agreement did not mediate the effects of hesitations on perceptions of the speaker, which was hypothesized.

An additional post hoc analysis using the ANCOVA method examined the possible mediating role of perceptions of the speaker in the low relevance condition. As indicated earlier (see Table 7), perceptions of the speaker were affected by hesitations in the low relevance condition, thus providing a significant relationship between hesitations and perceptions of the speaker. The results of an ANCOVA examining the effect of hesitations in the low relevance condition on attitudes with perceptions of the speaker as a covariate, $F(1, 86) = 6.06$, $p = .016$, indicated that the effect of hesitations on the attitude measure remained significant when perceptions of the speaker $F(1, 86) = 6.54$, $p = .012$, was used as a covariate.

An additional post hoc analysis using the ANCOVA method was used to examine the possible mediating role of perceptions of the message and cognitive responses. The results of an ANCOVA examining the effect of hesitations in the high relevance condition with perceptions of the message as a covariate, $F(1, 86) = 32.37$, $p < .001$, indicated that the effect of hesitations on the attitude measure remained significant when perceptions of the message $F(1, 86) = 10.41$, $p = .002$, was used as a covariate. The results of an ANCOVA examining the effect of hesitations in the high relevance

condition with cognitive responses as a covariate, $F(1, 86) = 23.76$, $p < .001$, indicated that the effect of hesitations on the attitude measure remained significant when cognitive responses $F(1, 86) = 11.21$, $p = .001$ was used as a covariate.

Analysis of hedges. It was hypothesized that the effect of hedges on attitudes would be mediated by participants' perceptions of the message. As indicated earlier (see Table 12), the perceptions of the message was affected by hedges in the high relevance condition, thus providing a significant relationship between hedges and perceptions of the message (Baron & Kenny, 1986). The results of an ANCOVA on the effect of hedges on attitudes with perceptions of the message as a covariate, $F(1, 88) = 24.99$, $p < .001$, indicated that the effects of hedges on the attitude measure were no longer significant when perceptions of the message was used as a covariate, $F(1, 88) = 0.364$, $p = .55$. However, when scores on the attitude measure was used as a covariate, $F(1, 88) = 24.99$, $p < .001$, the effect of hedges on perceptions of the message remained significant $F(1, 88) = 26.90$, $p < .001$, which was hypothesized.

Additional post hoc analyses using the ANCOVA method examined the possible mediating role of perceptions of the message in the low relevance condition. As indicated earlier (see Table 12), perceptions of the message was affected by hedges in the low relevance condition (contrary to what was hypothesized), thus providing a significant relationship between hesitations and perceptions of the speaker (Baron & Kenny, 1986). The results of an ANCOVA examining the effect of hedges in the low relevance condition on attitudes with perceptions of the message as a covariate, $F(1, 83) = 13.01$, $p < .001$, indicated that the effect of hedges on the attitude measure remained significant

when perceptions of the message $F(1, 83) = 7.13$, $p = .009$, was used as a covariate.

A post hoc analysis examined the possible mediational role of participants' perceptions of the speaker in the high relevance condition. The results of an ANCOVA examining the effects of hedges on the attitude measure with perceptions of the speaker as a covariate, $F(1, 88) = 8.48$, $p = .005$, indicated that the effect of hedges on attitudes was no longer significant when perceptions of the speaker was used as a covariate, $F(1, 88) = 3.67$, $p = .059$, but when scores on the attitude measure were used as a covariate, $F(1, 88) = 8.48$, $p = .005$, the effect of hedges on perceptions of the speaker remained significant $F(1, 88) = 19.52$, $p < .001$. Thus, the effects of hedges on message agreement are mediated by perceptions of the message (only in the high relevance condition) and perceptions of the speaker, but message agreement did not mediate the effects of hedges on perceptions of the speaker or perceptions of the message.

A post hoc analysis examined the possible mediational role of participants' cognitive responses in the high relevance condition was conducted. The results of an ANCOVA examining the effects of hedges on the attitude measure with cognitive responses as a covariate, $F(1, 88) = 34.75$, $p < .001$, indicated that the effect of hedges on attitudes was no longer significant when cognitive responses were used as a covariate, $F(1, 88) = 5.37$, $p = .023$. However, when scores on the attitude measure were used as a covariate, $F(1, 88) = 34.75$, $p < .001$, the effect of hedges on cognitive responses was no longer significant $F(1, 88) = 1.87$, $p = .175$. Thus, it is inconclusive to determine the possible mediating role of cognitive responses on message agreement.

In addition, it was hypothesized that perceptions of message clarity would mediate

the effect of hedges on attitudes in high relevance participants. An ANOVA examining the effect of hedges on perceptions of message clarity in the high relevance condition indicated a significant Language main effect $F(1, 87) = 15.19$, $p < .001$, indicating that the control message was rated more clear than the hedged message ($M = 5.8$ vs. 4.42). The results of an ANCOVA examining the effect of hedges on attitudes with message clarity as a covariate, $F(1, 86) = 1.58$, $p = .21$, however, indicated that the effect of hedges remained significant $F(1, 86) = 10.03$, $p = .002$, which is contrary to what was hypothesized.

Finally, to test for speaker confidence as a possible confound on the effects of linguistic power on persuasion (e. g., Whitley & Greenberg, 1986), an ANCOVA was conducted to examine the effect of tag questions and hedges on attitudes with perceptions of speaker confidence as a covariate. The results indicated that the effect of tag questions on attitudes with confidence as a covariate, $F(1, 42) = 1.35$, $p = .25$, remained significant $F(1, 42) = 22.92$, $p < .001$. In addition, the effect of hedges on attitudes with confidence as a covariate, $F(1, 88) = 1.1$, $p = .31$, remained significant $F(1, 88) = 8.59$, $p = .004$. An additional post hoc analysis indicated that the effect of hesitations on attitudes remained significant with confidence used as a covariate, $F(1, 86) = 2.2$, $p < .14$, remained significant as well $F(1, 86) = 13.19$, $p < .001$. Therefore, speaker confidence did not play a role in participant's ratings of their attitudes toward the proposal.

DISCUSSION

The overall objective of the present study was two-fold. First, this study was conducted to examine the possibility that the various types of powerless language markers commonly used in the manipulation of linguistic power (e.g., tag questions, hesitations, and hedges) have differential effects on how a communication is attended to, relative to a message containing no powerless language markers. For example, it is possible that hedges differ from hesitations in their effect of the attention an individual directs to either the speaker or message? Secondly, do these differential effects on message attendance affect the persuasiveness of a communication? For example, do hedges affect persuasion via the central/systematic route, whereas hesitations affect persuasion through the peripheral/heuristic route? Each of these powerless language markers are discussed in turn.

Tag Questions

Based on previous research regarding rhetorical questions on persuasion (Petty et al., 1981), it was expected that tag questions would instigate message processing when the communication was of low relevance to the individual, but that they would disrupt message processing when the communication was of high relevance (relative to a communication containing no tag questions). In addition, evidence of these effects would lead to the conclusion that tag questions serve as a central cue in the persuasion

processes, as defined by Petty and Cacioppo (1986).

The results of the present study indicated that in the high relevance condition, the use of tag questions affected people's attitude toward the communication's proposal as a function of the argument quality of the message's content by making the strong arguments weaker while having no effect on the weak arguments. Under conditions of low relevance, however, the use of tag questions did not interact with argument quality in affecting participants' attitudes toward the proposal or cognitive responses, a finding that is contrary to previous research on rhetorical questions (Petty et al., 1981). In addition, the use of tag questions did not affect participants' perceptions of the speaker or message. When the message was perceived as high in personal relevance for the individual, however, the use of tag questions decreased attitude favorability, but did not affect participants' perceptions of the speaker, message or participants' cognitive responses.

The question remains, then, do tag questions serve as a peripheral cue or as an argument? The results of this study suggest that there is some support that tag questions serve as an argument, thereby affecting persuasion via the central route. This is evidenced in the effect of tag questions undermining strong arguments in the high relevance condition only. The results should be interpreted with caution, however, for two reasons. First, tag questions affected only attitudes, not perceptions of the speaker. This lack of an effect rules out participants' perceptions of speaker as possible mediators. This despite the fact that previous studies demonstrated the effect of tag questions on impressions of the speaker (Bradac & Mulac, 1984). This lack of an effect indicates that the results of this study, in part, do not replicate past research. More importantly, the use

of tag questions did not affect cognitive responses. Past research using the two dominant models of persuasion regarding language variables show a link between attitudes and cognitive responses when people are motivated and able to process the message (see Petty & Wegener. 1998, for a review).

Hesitations

It was expected that the use of hesitations in a communication would result in less persuasion by affecting a recipient's attitudes, perceptions of the speaker, message, and cognitive responses but only when the communication is of low relevance to the individual, as compared to a message containing no hesitations. This finding would lend support to the possibility that hesitations act as a peripheral cue. That is, when participants were not motivated to process the message, they would use hesitations in the message to base their attitude toward the proposal.

The results of this study indicated that when hesitations were included in a communication that was made highly relevant to participants, they resulted in less favorable attitudes, perceptions of the speaker, perceptions of the message, and cognitive responses than when the communication was presented without hesitations. The use of hesitations did not affect attitudes when the communication was of low relevance to participants, but led to a decrease in participant's perceptions of the speaker. Upon examination of the mediational analyses, participants' perceptions of the speaker mediated the effect of hesitations on attitudes. That is, participants viewed the speaker as less knowledgeable, competent, trustworthy, and likable than the speaker who did not use hesitations, which in turn affected their attitude toward the proposal.

One implication of these findings that is relevant to the ELM and HSM is that hesitations serve as an argument. Evidence for this conclusion stems from the fact that the use of hesitations in a communication had an effect only when participants were motivated to process the message (e.g., under conditions of high relevance). The results of mediational analyses, however, indicated that hesitations affected attitudes by way of participants' perceptions of the speaker.

At first blush these findings seem somewhat contradictory: a supposed argument cue having its effect on what has been suggested to be a peripheral cue (e.g., the source of the communication). It may be the case that the more traditional way of thinking of a peripheral cue (e.g., source-based) is not as accurate as once thought. For example, Petty and Wegener (1999) note that central-route based attitude change is based on "relatively extensive and effortful information processing activity" (p. 42). Thus, it may be that some source-based (peripheral) cues are still attended to and utilized by message recipients as an argument when the motivation to process a message is high. This concurrent processing explanation can be accounted for in both of the widely used persuasion models, the Elaboration Likelihood Model (ELM; Petty & Cacioppo, 1986) and the Heuristic Systematic Model (HSM; Chaiken & Eagly, 1983), but it is explained differently by each model. For example, the HSM posits that both central/systematic and heuristic/peripheral processes occur in parallel (concurrent processing hypothesis), whereas the ELM states that central processing obscures peripheral processing when motivation/ability is high (trade-off postulate).

The question is, then, which model best explains the results of this study? Two

issues need to be addressed to answer this question. The first issue pertains to the modality of the message. Because it was presented in audio form, participants could not attend to the message at their own pace (Sparks et al., 1998). Therefore, participants may have had the motivation, but not necessarily the ability, to process the message centrally. As a result, they may have attended more closely to aspects of the message to which they could most easily attend (i.e., hesitations).

The second issue is related to the level of elaboration participants' engaged in while attending to the communication. It may be that they were near the midpoint of the elaboration continuum, in which central route processing would be less likely to drown out all peripheral processing than if they were further along the continuum. Thus, the ELM's trade off postulate would be just as valid as the HSM's concurrent processing hypothesis. There is no way to tell, however whether this is true given the design of this experiment.

Hedges

It was expected that under conditions of high relevance, the use of hedges in a communication would result in less favorable attitudes than a message without hedges by affecting the perceptions of the message itself rather than the speaker, thus providing evidence that hedges serve as an argument cue. The results of this study indicated that the use of hedges in a message affected the persuasiveness of the communication, perceptions of the speaker, message, and cognitive responses by decreasing attitudes only under conditions of high relevance, relative to a communication containing no hedges, regardless of argument strength. In addition, the results of mediational analyses indicated

that participant's perceptions of the speaker and message mediated the effect of hedges on attitudes toward the proposal in the high relevance condition.

An implication of these results is that the use of hedges decrease the strength of a message. Initially it was hypothesized that the use of hedges in a communication would decrease the clarity of the message, but it may be the case that hedges decrease the strength of the communication's arguments. To date, there is no direct evidence from previous research that supports this finding. Numerous studies have found that the use of hedges in a communication decrease ones' credibility and authority (e.g., Hosman, 1989; Vinson & Johnson, 1989; Wright & Hosman, 1983), but the mediator of this effect is unclear. Although message strength was not use as a mediator in this study, it seems possible to design a study to explore message strength as a possible mediator of hedges on speaker authority and credibility. An area of future research would be to explore this possibility.

From an ELM framework, hedges seem to serve as an argument cue. The use of hedges in a communication affected participants' evaluation of the communication when they were motivated to process the message (e.g., under conditions of high relevance).

Linguistic Markers and Message Processing

The first issue, then, was whether these three powerless language markers affect how one attends to a communication differently. The results of the current study suggest that they do. For example, tag questions affected people's attitude toward the message's proposal as a function of the personal relevance of the message's content. Under conditions of low relevance, the use of tag questions did not affect attitude favorability in

the hypothesized directions. When the message was perceived as high in personal relevance for the individual, however, the use of tag questions decreased attitude favorability, but only when the message contained strong arguments. Contrast these results with the effect of hesitations. When hesitations were included in a message containing strong arguments, they led to decreased attitudes toward the proposal (relative to the message without hesitations) but did not affect attitudes when used in conjunction with weak arguments, regardless of relevance. In addition, when hesitations were used and the communication was highly relevant to participants, they resulted in less favorable attitudes than when the communication was presented without hesitations. The use of hesitations did not affect attitudes when the communication was of low relevance to participants. With respect to hedges, their use affected the persuasiveness of the communication by decreasing attitudes only under conditions of high relevance, relative to a communication containing no hedges, regardless of argument strength.

Given the results of this study, one should not ignore the similarities among the powerless language markers examined here on persuasion. Most notably, all three powerless language markers had some sort of an effect on persuasion when the communication was highly relevant to the individual. Under conditions of high relevance, all three markers decreased the persuasiveness of the communication, although in different ways. Tag questions were the only markers to affect persuasion when the issue was of low relevance to participants.

The ultimate purpose of this study was to attempt to bridge the gaps regarding past research on linguistic power and persuasion. The results of this study compliment

the findings of past research (Gibbons, et al., 1991; Holtgraves & Lasky, 1998). For example, certain types of powerless language markers do have differential effects on how a communication is attended to. This finding supports the possibility that these differential effects among powerless language markers may be at the root of discrepancies in past research on linguistic power and persuasion. For example, under certain conditions the use of tag questions resulted in more persuasion than the same message without tag questions. It may be the case that when researchers attempt to operationalize linguistic power via tag questions or hesitations or hedges, the specific types of markers chosen affected their results. An area of future research may be to examine powerless language markers that affect persuasion differently and include them in a message to examine which marker has the more pronounced effect. For example, when a message contains both hesitations and tag questions, can the presence of one marker overpower the effect of another, depending on the type of relevance? Although past research has done something similar to this, the results of this study may be used to guide specific predictions.

A number of strengths regarding this study should be noted. First, this study was the first to use an audio compact disk format in order to present the communication. The use of the compact disk format made execution of the study easier for the experimenter by having each message contained as a separate track, rather than having to forward or rewind a tape, or even use different tapes for each message manipulation. In addition, the quality of the recording was better than taped versions of the messages. There wasn't a "ticking" sound that is common with the use of tape recordings, which made the message

clear when the volume was turned up. As a result, it may have been easier for participants to attend to the message and its contents in a less distracting way.

A second strength of this study is that it was designed to directly examine the effects of different powerless language markers on persuasion. Past researchers have used more than one type of powerless language marker in their linguistic power manipulations without really knowing the similarities and differences among the powerless language markers (Holtgraves & Lasky, 1998; Gibbons et al., 1991; and others).

A number of limitations of this study should be addressed. First, for this study there was no a priori distinction between participants' cognitive responses directed toward the message versus the speaker. This lack of a distinction may have affected the results obtained in this study. For example, if one were to examine only the cognitive responses aimed toward the speaker versus the message, one may be able provide more specific evidence for how an individual attends to a communication.

Secondly, there is little conclusive evidence regarding the effect of tag questions on persuasion, in light of the fact that the tag question manipulation was effective. For reasons not clear to the author, this study even failed replicate the findings of previous research of tag questions on impression formation (Hosman, 1989). A post-hoc examination suggests that under certain conditions, tag questions may not be as "powerless" as some researchers once thought (e.g., Bradac & Mulac, 1984; O'Barr, 1982). Specifically, a 2 (Argument Strength) X 2 (Tag question vs. Control) ANOVA of the attitude measure in the low relevance condition revealed a significant main effect for

Language $F(1, 85) = 9.31$, $p = .003$, indicating that participants in the control condition had less favorable attitudes toward the proposal than those in the tag question condition ($M = 4.39$ vs. 5.09). That is, when the message was considered of low relevance to participants, tag questions actually increased the persuasiveness of the message. In contrast, the "powerless" effect occurred consistently for both hesitations and hedges under conditions of high relevance. Perhaps in some social contexts it may be more appropriate to use tag questions to invoke social responsiveness (e.g., to gain a certain response, say an attitude change, from one's listener). It just may be the case then, that people are more susceptible to the more powerful aspect of tag questions' effect when the message isn't very relevant to them. Some indirect evidence from this study is the significant language main effect and the lack of the qualifying Argument Strength X Language interaction for participants in the low relevance condition. In other words, tag questions made both strong and weak arguments stronger when tag questions were present. This provides some indirect evidence that participants may have just been agreeing with the communication regardless of how strong or weak the arguments in the communication were, which would support the social responsiveness explanation given above.

In conclusion, the construct of linguistic power may be a more difficult one to define than researchers once thought. Linguistic power has gone through various transformations from being considered women's language (Lakoff, 1975) to linguistic power (Erickson, 1978; Holtgraves & Lasky, 1998). In addition, linguistic power's subsequent effect on persuasion is just as difficult to unravel. For example, the use of tag

questions may either enhance or stunt the persuasiveness of a communication, although the results of this study cannot determine the underlying process by which this occurs. But what is known is that participants' perceptions of the speaker and message (as measured in this study) are not involved in the process.

Future research is needed to determine what process underscores the differential effect tag questions have on persuasion. Hesitations, on the other hand, appear to decrease the persuasiveness of a communication by affecting participant's perceptions of the speaker. Finally, the use of hedges decreases the persuasiveness of a communication through both participants' perceptions of the speaker and message. These differential effects of linguistic power on persuasion should be taken into account in future research. By doing this, researchers may be able to better predict linguistic power's effect on impression formation, persuasion, and other related areas in communication research.

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FOOTNOTE

[1]Hovland et al.'s (1953) framework is behavioral in the sense that its key idea is that people's beliefs and attitudes become habitual through a learning process based on incentives. These incentives are embedded in one of the four causes of attitude change and provide information on how one should respond to a persuasive attempt. This is because the attitude (whether implicit or explicit) is "followed by the receipt or anticipation of positive reinforcement" (Eagly & Chaiken, 1993).

APPENDIX A: Transcripts of the Messages Used

Control condition

Strong Arguments

One of the major purposes of a university, if not the major purpose, is to give students an opportunity to learn. Unfortunately, many universities are not doing a good job of this. It is important to try and improve the job that universities are doing to prepare students in this regard. The President's commission does note that one solution, comprehensive examinations for seniors, has been effective.

A five-year study by the National Scholarship Achievement Board involved a survey of the effectiveness of the universities that adopted this plan. One major finding showed that the grade point average of undergraduates at these universities increased by 31%. School without comprehensive exams did not show improvement. The prospect of a comprehensive exam clearly is effective in challenging students to work harder and faculty to teach more effectively.

In addition to the grade point average improvement, the graduating seniors received a 20% higher salary than those seniors who came from colleges without comprehensive exams. Ninety-two percent of the students that take the comprehensive exams have jobs upon graduation. Only 68% of the students that do not take the comprehensive exams have jobs upon graduation. Therefore, comprehensive final exams will help students in the job market as well.

Another advantage that students gain by taking the comprehensive exams is admission to graduate and professional schools. According to the President's Council,

students that take the comprehensive exams improve their chances for admission by 20%. Admissions offices feel that if a student does well on an examination that requires four years of preparation, he or she has a good chance to succeed in a graduate or professional program.

It is apparent the students that take these comprehensive exams benefit from the preparation required from the exams. The institution of comprehensive exams would improve the effectiveness of Ball State University/ University of Pittsburgh.

Weak Arguments

One of the major purposes of a university, if not the major purpose, is to give students an opportunity to learn. Unfortunately, many universities are not doing a good job of this. It is important to try and improve the job that universities are doing to prepare students in this regard. The President's commission does note that one solution, comprehensive examinations for seniors has been effective.

A five-year study by the National Scholarship Achievement Board involved a survey of the effectiveness of the universities that adopted this plan. One major finding showed that the anxiety of students at these universities increased by 31%. Schools without comprehensive exams did not show an increase in student anxiety. The Board reasoned that anxiety over the exams would motivate students to study more in their courses while they were taking them.

In addition to the possible motivational component, data shows that some students favor the senior comprehensive exam policy. For example, one faculty member asked his son to survey his fellow students at a school that recently instituted the exams. Over 55%

of his son's friends agreed that the exams would be beneficial.

Another advantage that students gain by taking the comprehensive exams is that it is considered a fair practice. Graduate students have always had to take a comprehensive exam in their major area before receiving their degrees, and it is only fair that undergraduates should have to take them also. As the Dean of the Harvard Business School said, "If a comprehensive exam is considered necessary to demonstrate competence for a graduate masters or doctoral degree, by what logic is it excluded as a requirement for the bachelors degree?"

It is apparent the students that take these comprehensive exams benefit from the implementation of the exams. The institution of comprehensive exams would improve the effectiveness of Ball State University/ University of Pittsburgh.

Tag Question Condition

Strong Arguments

One of the major purposes of a university, if not the major purpose, is to give students an opportunity to learn, **right?** Unfortunately, many universities are not doing a good job of this. It is important to try and improve the job that universities are doing to prepare students in this regard, **isn't it**? The President's commission does note that one solution, comprehensive examinations for seniors, has been effective.

A five-year study by the National Scholarship Achievement Board involved a survey of the effectiveness of the universities that adopted this plan. One major finding showed that the grade point average of undergraduates at these universities increased by 31%. School without comprehensive exams did not show improvement. The prospect of

a comprehensive exam clearly is effective in challenging students to work harder and faculty to teach more effectively, **don't you think?**

In addition to the grade point average improvement, the graduating seniors received a 20% higher salary than those seniors who came from colleges without comprehensive exams. Ninety-two percent of the students that take the comprehensive exams have jobs upon graduation. Only 68% of the students that do not take the comprehensive exams have jobs upon graduation. Therefore, comprehensive final exams will help students in the job market as well, **wouldn't you agree?**

Another advantage that students gain by taking the comprehensive exams is admission to graduate and professional schools. According to the President's Council, students that take the comprehensive exams improve their chances for admission by 20%. Admissions offices feel that if a student does well on an examination that requires four years of preparation, he or she has a good chance to succeed in a graduate or professional program, **don't they?**

It is apparent the students that take these comprehensive exams benefit from the preparation required from the exams. The institution of comprehensive exams should improve the effectiveness of Ball State University/ University of Pittsburgh **wouldn't it?**

Weak Arguments

One of the major purposes of a university, if not the major purpose, is to give students an opportunity to learn, **right?** Unfortunately, many universities are not doing a good job of this. It is important to try and improve the job that universities are doing to prepare students in this regard, **isn't it?** The President's commission does note that one

solution, comprehensive examinations for seniors has been effective.

A five-year study by the National Scholarship Achievement Board involved a survey of the effectiveness of the universities that adopted this plan. One major finding showed that the anxiety of students at these universities increased by 31%. Schools without comprehensive exams did not show an increase in student anxiety. The Board reasoned that anxiety over the exams would motivate students to study more in their courses while they were taking them, **don't you think?**

In addition to the possible motivational component, data shows that some students favor the senior comprehensive exam policy. For example, one faculty member asked his son to survey his fellow students at a school that recently instituted the exams. Over 55% of his son's friends agreed that the exams would be beneficial.

Another advantage that students gain by taking the comprehensive exams is that it is considered a fair practice. Graduate students have always had to take a comprehensive exam in their major area before receiving their degrees, and it is only fair that undergraduates should have to take them also, **wouldn't you agree?** As the Dean of the Harvard Business School said, "If a comprehensive exam is considered necessary to demonstrate competence for a graduate masters or doctoral degree, by what logic is it excluded as a requirement for the bachelors degree?"

It is apparent the students that take these comprehensive exams benefit from the implementation of the exams **don't they?** The institution of comprehensive exams should improve the effectiveness of Ball State University/ University of Pittsburgh, **wouldn't it?**

Hesitation Condition

Strong Arguments

One of the **…um…** major purposes of a university, if not the major purpose, is to give students an opportunity to learn. Unfortunately, many universities are not doing a good job of this. It is important to try and **…uh…** improve the job that universities are doing to prepare students in this regard. The President's commission does note that one solution, comprehensive examinations for seniors, has been effective.

A five-year study by the National Scholarship Achievement Board involved a survey of the effectiveness of the universities that adopted this plan. One major finding showed that the **…ah…** grade point average of undergraduates at these universities increased by 31%. School without comprehensive exams did not show improvement. The prospect of a comprehensive exam clearly is effective in challenging students to work harder and faculty to teach more effectively.

In addition to the grade point average improvement, the graduating seniors received a 20% higher salary than those seniors who came from colleges without **…um…** comprehensive exams. Ninety-two percent of the students that take the comprehensive exams have jobs upon graduation. Only 68% of the students that do not take the comprehensive exams have jobs upon graduation. Therefore, comprehensive final exams will help students in the job market as well.

Another advantage that students gain by taking the comprehensive exams is admission to graduate and professional schools. According to the President's Council, students that take the comprehensive exams **… um…** improve their chances for

admission by 20%. Admissions offices feel that if a student does well on an examination that requires four years of preparation, he or she has a good chance to succeed in a graduate or professional program.

It is apparent the students that take these comprehensive exams **…uh…** benefit from the preparation required from the exams. The institution of comprehensive exams would improve the effectiveness of Ball State University/ University of Pittsburgh.

Weak Arguments

One of the **…um…** major purposes of a university, if not the major purpose, is to give students an opportunity to learn. Unfortunately, many universities are not doing a good job of this. It is important to try and **…uh…** improve the job that universities are doing to prepare students in this regard. The President's commission does note that one solution, comprehensive examinations for seniors has been effective.

A five-year study by the National Scholarship Achievement Board involved a survey of the effectiveness of the universities that adopted this plan. One major finding showed that the **…ah…** anxiety of students at these universities increased by 31%. Schools without **…um…** comprehensive exams did not show an increase in student anxiety. The Board reasoned that anxiety over the exams would motivate students to study more in their courses while they were taking them.

In addition to the possible motivational component, data shows that some students favor the senior comprehensive exam policy. For example, one faculty member asked his son to survey his fellow students at a school **…um…** that recently instituted the exams. Over 55% of his son's friends agreed that the exams would be beneficial.

Another advantage that students gain by taking the comprehensive exams is that it is considered a fair practice. Graduate students have always had to take a comprehensive exam in their major area before receiving their degrees, and it is only fair that undergraduates should have to take them also. As the Dean of the Harvard Business School said, "If a comprehensive exam is considered necessary to demonstrate competence for a graduate masters or doctoral degree, by what logic is it excluded as a requirement for the bachelors degree?"

It is apparent the students that take these comprehensive exams **…uh…** benefit from the implementation of the exams. The institution of comprehensive exams would improve the effectiveness of Ball State University/ University of Pittsburgh.

Hedged Condition

Strong Arguments

One of the major purposes of a university, if not the major purpose, is to **sort of** give students an opportunity to learn. Unfortunately, many universities are not doing a good job of this. It is important to try and improve the job that universities are doing to prepare students in this regard. The President's commission does note that one solution, comprehensive examinations for seniors, has been effective.

A five-year study by the National Scholarship Achievement Board involved a survey of the effectiveness of the universities that adopted this plan. One major finding **kind of** showed that the grade point average of undergraduates at these universities increased by 31%. School without comprehensive exams did not show improvement. The prospect of a comprehensive exam clearly is effective in challenging students to

work harder and faculty to teach more effectively.

In addition to the grade point average improvement, the graduating seniors received a 20% higher salary than those seniors who came from colleges without comprehensive exams. Ninety-two percent of the students that take the comprehensive exams **sort of** have jobs upon graduation. Only 68% of the students that do not take the comprehensive exams have jobs upon graduation. Therefore, comprehensive final exams will **possibly** help students in the job market as well.

Another advantage that students gain by taking the comprehensive exams is admission to graduate and professional schools. According to the President's Council, students that take the comprehensive exams **kind of** improve their chances for admission by 20%. Admissions offices feel that if a student does well on an examination that requires four years of preparation, he or she has a good chance to succeed in a graduate or professional program.

It is apparent the students that take these comprehensive exams benefit from the preparation required from the exams. The institution of comprehensive exams would **probably** improve the effectiveness of Ball State University/ University of Pittsburgh.

Weak Arguments

One of the major purposes of a university, if not the major purpose, is to **sort of** give students an opportunity to learn. Unfortunately, many universities are not doing a good job of this. It is important to try and improve the job that universities are doing to prepare students in this regard. The President's commission does note that one solution, comprehensive examinations for seniors has been effective.

A five-year study by the National Scholarship Achievement Board involved a survey of the effectiveness of the universities that adopted this plan. One major finding **kind of** showed that the anxiety of students at these universities increased by 31%. Schools without comprehensive exams did not show an increase in student anxiety. The Board reasoned that anxiety over the exams would motivate students to study more in their courses while they were taking them.

In addition to the possible motivational component, data shows that some students **sort of** favor the senior comprehensive exam policy. For example, one faculty member asked his son to survey his fellow students at a school that recently instituted the exams. Over 55% of his son's friends agreed that the exams would be beneficial.

Another advantage that students gain by taking the comprehensive exams is that it is **possibly** considered a fair practice. Graduate students have always had to take a comprehensive exam in their major area before receiving their degrees, and it is only fair that undergraduates should have to take them also. As the Dean of the Harvard Business School said, "If a comprehensive exam is considered necessary to demonstrate competence for a graduate masters or doctoral degree, by what logic is it excluded as a requirement for the bachelors degree?"

It is **kind of** apparent the students that take these comprehensive exams benefit from the implementation of the exams. The institution of comprehensive exams would **probably** improve the effectiveness of Ball State University/ University of Pittsburgh.

APPENDIX B: Introductory Script

High relevance condition

First of all, I'd like to thank you for participating in this research project. Please read the Informed Consent form you have just received. I'll give everyone a few minutes to do that.

Every year the Psychology Department at Ball State University assists the College of Communication, Information, and Media in evaluating radio editorials that are sent in by colleges and universities around the country. Your task in this research project is to listen to one of these editorials and give the department some feedback about the editorial. I will read a background statement concerning the editorial and will then play the editorial. When the editorial is over, I will hand out a brief questionnaire for you to complete. Are there any questions?

(COLLECT INFORMED CONSENT SHEETS)

As a result of a recent academic evaluation, the President of Ball State University has recommended a number of changes to begin the next academic year. One of these changes will include the implementation of comprehensive final exams for all seniors in every major at Ball State University. The editorial you are about to hear is a proposal in favor of instituting this change within the next academic year. Please try to understand the message as best you can; it will be played only one time.

(PLAY MESSAGE)

Low relevance condition

First of all, I'd like to thank you for participating in this research project. Please read the Informed Consent form you have just received. I'll give everyone a few minutes to do that.

Every year the Psychology Department at Ball State University assists the College of Communication, Information, and Media in evaluating radio editorials that are sent in by colleges and universities around the country. Your task in this research project is to listen to one of these editorials and give the department some feedback about the editorial. I will read a background statement concerning the editorial and will then play the editorial. When the editorial is over, I will hand out a brief questionnaire for you to complete. Are there any questions?

(COLLECT INFORMED CONSENT SHEETS)

As a result of a recent academic evaluation, the President of the University of Pittsburgh has recommended a number of changes to begin in ten years. One of these changes will include the implementation of comprehensive final exams for all seniors in every major at the university. The editorial you are about to hear is a proposal in favor of instituting this change in ten years. Please try to understand the message as best you can; it will be played only one time.

(PLAY MESSAGE)

APPENDIX C: Questionnaire for all Participants

We would now like you to answer some questions about the editorial you have just heard. Please keep in mind there are no right or wrong answers, we simply want to get your opinions.

Because your own views on the desirability of instituting a comprehensive exam may influence they way you rate the broadcast quality of the editorial, we would like to obtain a measure of how you feel about the idea of a comprehensive exam.

1. Rate how you feel about requiring college seniors to take a comprehensive exam as a requirement for graduation on the scales below.

Harmful						Beneficial
1	2	3	4	5	6	7
Foolish						Wise
1	2	3	4	5	6	7
Bad						Good
1	2	3	4	5	6	7
Unfavorable						Favorable
1	2	3	4	5	6	7

2. To what extent do you agree with the proposal requiring college seniors to take a comprehensive exam before graduating?

Very Strongly Disagree						Very Strongly Agree
1	2	3	4	5	6	7

3. How sound were the arguments used in the message?

Not Very Sound						Very Sound
1	2	3	4	5	6	7

4. How strong were the arguments used in the message?

Not Very Strong						Very Strong
1	2	3	4	5	6	7

5. How logical were the arguments in the message?

Not Very Logical						Very Logical
1	2	3	4	5	6	7

6. How well reasoned were the arguments in the message?

Not Very Well Reasoned						Very Well Reasoned
1	2	3	4	5	6	7

7. How relevant to you was the editorial?

Not Very Relevant						Very Relevant
1	2	3	4	5	6	7

8. How comprehensible was the editorial?

Not Very Comprehensible						Very Comprehensible
1	2	3	4	5	6	7

9. How clear was the editorial?

Not Very Clear						Very Clear
1	2	3	4	5	6	7

10. How distracted did you feel while listening to the speaker?

Not Very Distracted						Very Distracted
1	2	3	4	5	6	7

11. The speaker stammered often.

Strongly disagree						Strongly agree
1	2	3	4	5	6	7

12. The speaker frequently add questions to the remarks (e. g., "right?", "isn't it?").

Strongly disagree						Strongly agree
1	2	3	4	5	6	7

13. The speaker frequently used the terms "kind of" and "sort of" in the editorial.

Strongly disagree						Strongly agree
1	2	3	4	5	6	7

14. How powerful was the language that the speaker used?

Not Very Powerful						Very Powerful
1	2	3	4	5	6	7

15. How intelligent was the speaker?

Not Very Intelligent						Very Intelligent
1	2	3	4	5	6	7

16. How confident was the speaker?

Not Very Confident						Very Confident
1	2	3	4	5	6	7

17. How knowledgeable was the speaker?

Not Very Knowledgeable						Very Knowledgeable
1	2	3	4	5	6	7

18. How competent was the speaker?

Not Very Competent						Very Competent
1	2	3	4	5	6	7

19. How trustworthy was the speaker of the message?

Not Very Trustworthy						Very Trustworthy
1	2	3	4	5	6	7

20. How energetic was the speaker of the message?

Not Very Energetic						Very Energetic
1	2	3	4	5	6	7

21. How likable was the speaker of the message?

Not Very Likable						Very Likable
1	2	3	4	5	6	7

22. Should the editorial be broadcast on an appropriate radio station?

Definitely Should not be Broadcast						Definitely Should be Broadcast
1	2	3	4	5	6	7

APPENDIX D: Cognitive Response Measure

Instructions: We are also interested in what you were thinking about while listening to the message. You may have had some thoughts that may have been in favor, opposition, neutral, or irrelevant of the speaker's recommendation, or a mixture of all of these. We would like you to please list what it was you were thinking about while listening to the message. On the remainder of this page and the following page are lines provided for your thoughts and ideas. Write down the first idea that comes to your mind on the first line, begin on a separate line for the second thought/idea, a separate line for the third idea, etc. You should only try to write down only those ideas you were thinking about while listening to the message. Please write your thoughts and ideas a complete as possible…a phrase is sufficient. Don't worry about spelling and grammar. You will have 3 minutes to write down your thoughts. We have provided more space than we think most people will need to ensure that everyone would have plenty of room to write all of their ideas down, so don't' worry if you don't fill every line. Just write down whatever your thoughts while listening to the message. Please be completely honest and list all of the thoughts you had.

_____

_____

_____

_____

_____

_____

Now what we would like you to do is indicate whether your thoughts you have listed on the previous page were positive, negative, or neutral or irrelevant. If your thought was positive with respect to the speaker's recommendation (such as, "The speaker has a good point"), please place a "+" next to it in the left-hand margin. If your thought was negative with respect to the speaker's recommendation (such as, "The speaker doesn't understand the issue"), place a "-" next to it on the left-hand margin. If your thought was neutral or irrelevant with respect to the speaker's recommendation (such as, "I need to do laundry tonight") place a 0 next to it on the left-hand margin. Please remember that there are no right or wrong answers.

APPENDIX E: Tables

Table 1.
Linguistic Power Ratings for the Seven Message Types Used by Bradac and Mulac (1984).

Message Type	Mean Power Rating
Powerful	5.52[a]
Polite	5.31[a]
Intensifier	4.56[b]
Deictic	3.87[c]
Hedge	2.73[d]
Tag question	2.50[d]
Hesitation	1.87[e]

Note. Means with a common superscript are not significantly different.

Table 2.
Mean Ratings of Participant's Attitudes Toward the Proposal as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Tag Questions	Total	Control	Tag Questions	Total
Arguments						
Strong	4.73	5.48	5.10	5.74	4.30	5.04
Weak	4.07	4.70	4.38	4.67	4.74	4.70
Total	4.40	5.09	4.75	5.20	4.52	4.86

Table 3.

Mean Ratings of Participant's Perceptions of the Speaker as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Tag Questions	Total	Control	Tag Questions	Total
Arguments						
Strong	5.01	5.19	5.10	5.23	4.65	4.95
Weak	4.36	4.00	4.19	4.87	4.14	4.52
Total	4.68	4.60	4.64	5.05	4.40	4.73

Table 4.

Mean Ratings of Participant's Perceptions of the Message as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Tag Questions	Total	Control	Tag Questions	Total
Arguments						
Strong	5.35	5.61	5.48	5.74	5.08	5.42
Weak	4.10	4.29	4.19	4.74	4.37	4.56
Total	4.71	4.95	4.83	5.24	4.73	4.99

Table 5.

Mean Ratings of Participant's Cognitive Responses as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Tag Questions	Total	Control	Tag Questions	Total
Arguments						
Strong	0.95	0.67	0.81	2.00	-0.41	0.82
Weak	-2.50	-2.05	-2.28	-1.30	-1.95	-1.61
Total	-0.81	-0.69	-0.75	0.35	-1.16	-0.41

Table 6.

Mean Ratings of Participant's Attitudes Toward the Proposal as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Hesitations	Total	Control	Hesitations	Total
Arguments						
Strong	4.73	5.10	4.92	5.74	3.85	4.84
Weak	4.07	4.58	4.34	4.67	4.21	4.44
Total	4.40	4.83	4.62	5.20	4.03	4.62

Table 7.

Mean Ratings of Participant's Perceptions of the Speaker as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Hesitations	Total	Control	Hesitations	Total
Arguments						
Strong	5.01	4.33	4.66	5.23	3.80	4.55
Weak	4.36	3.93	4.14	4.87	3.71	4.30
Total	4.68	4.12	4.40	5.05	3.75	4.40

Table 8.

Mean Ratings of Participant's Perceptions of the Message as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Hesitations	Total	Control	Hesitations	Total
Arguments						
Strong	5.35	5.13	5.23	5.74	4.46	5.13
Weak	4.10	4.33	4.22	4.74	3.91	4.33
Total	4.71	4.71	4.71	5.24	4.18	4.71

Table 9.

Mean Ratings of Participant's Cognitive Responses as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Hesitations	Total	Control	Hesitations	Total
Arguments						
Strong	0.95	-0.77	0.07	2.00	-0.81	0.66
Weak	-2.50	-2.25	-2.37	-1.30	-3.18	-2.22
Total	-0.81	-1.54	-1.18	0.35	-2.02	-0.84

Table 10.

Mean Ratings of Participant's Attitudes Toward the Proposal as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Hedges	Total	Control	Hedges	Total
Arguments						
Strong	4.73	4.83	4.78	5.74	4.62	5.18
Weak	4.07	4.77	4.42	4.67	4.00	4.34
Total	4.40	4.80	4.60	5.20	4.31	4.76

Table 11.

Mean Ratings of Participant's Perceptions of the Speaker as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Hedges	Total	Control	Hedges	Total
Arguments						
Strong	5.01	4.24	4.62	5.23	3.93	4.58
Weak	4.36	4.36	4.36	4.87	3.87	4.38
Total	4.68	4.30	4.49	5.05	3.90	4.48

Table 12.

Mean Ratings of Participant's Perceptions of the Message as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Hedges	Total	Control	Hedges	Total
Arguments						
Strong	5.35	3.99	4.67	5.74	3.86	4.80
Weak	4.10	4.17	4.14	4.74	3.35	4 .06
Total	4.71	4.08	4.40	5.24	3.61	4.43

Table 13.

Mean Ratings of Participant's Cognitive Responses as a Function of Relevance, Argument Strength and Linguistic Power.

	Relevance					
	Low			High		
	Control	Hedges	Total	Control	Hedges	Total
Arguments						
Strong	0.95	-1.24	-0.14	2.00	-0.74	0.63
Weak	-2.50	-2.45	-2.48	-1.30	-1.91	-1.60
Total	-0.81	-1.86	-1.34	0.35	-1.31	-0.48