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Becky L. Stewart

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Harold R. Miller

Major professor

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THE INFLUENCE OF LANGUAGE INTENSITY AND GENDER ON ATTITUDE CHANGE AND CREDIBILITY

By

Becky L. Stewart

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ABSTRACT

THE INFLUENCE OF LANGUAGE INTENSITY
AND GENDER ON ATTITUDE CHANGE
AND CREDIBILITY

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Language powerfully affects our lives. In this study it was expected that language intensity at four levels (high, medium, low, no), source gender (male, female) and respondent gender (male, female) would impact the respondent's judgment toward the source's credibility (competence, trustworthiness, dynamism) and attitude change.

Two by two by four design methodology was employed to examine the interaction of source gender, respondent's gender and message intensity. All the measures tested reliable.

Results of this study indicate that women are more persuasible then men. Unlike past research, the gender of the source did not effect the respondent's persuasibility. And in general, language intensity and gender were determined to be mostly unrelated to perceived source credibility and attitude change.

The impact of these findings for the future direction of the women's movement are addressed. Further, it is also maintained that an "optimal level" of persuasibility is needed for future research.

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CHAPTER 1

INTRODUCTION

"It's what you say, not how you say it." This "revision" of an "old" cliche expresses the power of language. A number of studies have examined variables pertaining to language. The results indicate that variations in virtually all the properties of language generate inferences in receivers. Of all the linguistic variations, this study will examine those in the lexicon. More directly, it will focus on the variable of language intensity.

Osgood (1959) discussed the idea of message intensity as the amount of deviation from evaluative neutrality in a source's statement about a concept. Most researchers have accepted Bowers (1963) similar definition of intensity as language indicating the degree to which the speaker's attitude toward the concept deviates from neutrality.

This study examined the impact of language intensity on attitudes. In the past, research on language has been viewed from many different perspectives. Bradac, Bowers and Courtright (1979) put together a comprehensive review of the important variables that affect language in communicative interactions. These researchers suggest three variables that are important in language analysis: intensity, immediacy and diversity. These three variables form the basis for a theoretical statement about language

in all communicative settings. Bradac et al.'s theoretical background was used to express 26 generalizations about language. Of these generalizations, intensity is the principal method by which language affects attitude change. Two effects of language intensity are examined in this thesis. The first is how language intensity can affect a person's attitude toward a topic; the second, how language intensity effects receivers' attitudes toward the speaker's credibility.

In three separate studies, Burgoon and Miller (1971) demonstrated that in the counterattitudinal advocacy paradigm, language intensity was a useful predictor of attitude change. McEwen and Greenburg (1970) also found a positive correlation between language intensity and attitude change.

In 1975, Burgoon extended the language intensity research by looking at the effects of communicator credibility and language intensity on persuasive effectiveness. To do this, Burgoon employed a rationale from other studies dealing with fear appeals and opinionated language. These two areas can be viewed as special operationalizations of language intensity. A strong fear appeal as well as opinionated acceptance and rejection statements can be classified as highly intense messages (Burgoon & Miller, 1985).

Source credibility interacts with language intensity in terms of its personal effect. Three studies by Miller and Hewgill (1966) examined the relationship between source credibility, fear arousal and attitude change. These studies support the hypothesis that communicators with high credibility, are successful using strong-fear language in their persuasive appeals.

Opinionated language can also be viewed as an operationalization of language intensity. Miller and Lobe (1967), and Miller and Basehart (1969) examined the persuasiveness of nonopinionated statements (i.e., statements that indicate only the communicator's attitude towards an idea) and opinionated statements (i.e., statements that indicate the communicator's attitude toward both the topic and those who agree or disagree with him or her). Results of both of these studies were consistent with those obtained by Miller and Hewgill (1966). These studies suggest that if sources have high credibility, it will be more effective for them to use stronger language when specifying the harmful consequences of failure to comply rather than using messages employing milder language. Results from these studies indicate that highly credible sources have more freedom in their language choices than low credible sources. Referring to these results, Burgoon (1975) found, as he predicted, that highly credible sources are more persuasive when using

highly intense language and low-credible sources are more persuasive using low intensity language.

One problem is that the Burgoon study, as well as most all of the other studies on fear appeals and opinionated language, is generalizable only to what is expected of male communicators, since only male speakers were used. Also, the respondent's gender has not been taken into consideration in the process of data interpretation. To make the results generalizable to the larger public one needs to consider gender differences in the studies.

Gender has a strong influence on persuasiveness and persuasibility. As early as 1915, Sapir, reporting on anthropological research on sex differences in language, labeled women's speech as "abnormal." Otto Jaspersen in 1922 had a chapter in his book called "The Women" in which he comments on women's inclination for avoiding "course and gross expressions" (Jaspersen, 1949). Other researchers have found that gender differences in the spoken language are common to many cultures, and the contrasts found are associated with assertions of masculine superiority (Furley, 1944; Haas, 1964; Trudgill, 1972). Trudgill's (1972) study found British women consciously used proper English to improve their social status, as amusingly evidenced in the popular musical "My Fair Lady". Trudgill's study suggests that women might use certain linguistic strategies as credibility-enhancing techniques.

In American society evidence also indicates that men and women are not of equal status. Studies supporting this assertion include Goldberg (1968) and Mischel's (1974) research, which reports that scholarly papers attributed to a male were more positively evaluated than when the same papers were attributed to a female. Miller and McReynolds (1973) found that receivers rated a male communicator as more competent than a female communicator when all other source qualifications and the message were held constant.

One reason for the consistency of these results may be attributed to stereotypes of men's and women's speech. Lakoff (1975) argues that the speech used by females is both a reflection and a cause of their lower status. Kramer (1974), Lakoff and others characterized female speech as "wishy-washy mommy talk." Women were expected to use more hesitation forms ("well," "ah"), more tag questions ("isn't it?"), more hedges ("kinda," "sorta"), speak more frequently, are interrupted more frequently, use more "wh" imperative constructions, use more frequent qualifiers, more apologies, more polite commands, and use more modal constructions (can, may, would, should, and ought). Liska, Mechling, and Stathas (1981) examined these characteristics but did not classify them by the gender of the speaker. Instead, these researchers adopted the term <u>deferential language</u>, as interactions are also complicated by factors such as status, power, context, prior interactions and the relationships between the

participants. The Liska, et al. study examined whether the use of deferential language is perceived as feminine; their study supported the view that deferential language users are more likely to be perceived as feminine.

Two thorough reviews have appeared combining the variables of attitude change and gender (Eagly, 1978; Rosenfeld & Christie, 1974). Both reviews examine the claim that women are more easily influenced than men. Rosenfeld and Christie (1974) selected 21 studies from the years 1930-1968 that claim women are more persuasible than men. These researchers interpreted these results as possibly having a historical cause, as talk of women's liberation was not as popular from the 30s to the 60s as it was in the late 70s. Controlling for extraneous variables such as topic, speaker, and persuasive communication, Rosenfeld and Christie reported that in nine cases, no significant differences were found in the persuasibility of men versus women; in nine other cases females were found to be significantly more persuasible than males. In several other cases, females were more persuaded than males, but the change was moderated by some other variable, such as logic in the message. In none of the studies were males found to be more persuaded by the message than females.

Rosenfeld and Christie designed a content and communicator-free task to test persuasibility, and found that males were more susceptible to influence. Rosenfeld and Christie concluded that in the past women actually

were more susceptible to persuasion because of social restraints but that "modern" women (quotes mine, this was written in 1974) do not have the same restrictions. The problem with this study lies in its questionable generalizability, for how much communication is communicator-free?

Alice Eagly (1978) reexamines the claim that women are more persuasible than men, also finding that the time period of the research is a major determinant of reporting that women are more susceptible to influence than men. Among Eagly's sample of studies published before 1970, 32% of the 22 studies yielded greater persuasibility among females as compared with only 8% of the 40 studies published in the 1970's. Two other areas of concern that Eagly mentions are the content of the influence induction and the source of the induction. Eagly points out that past research has shown that individuals are more easily persuaded if they have little information, or are not involved or interested in the topic. People are also more influenced if they lack confidence and perceive themselves as incompetent on a task. It is important to see if the informational and interest levels are different between males and females in the topics chosen for the induction.

In much of the persuasion research, the message centers on topics of social, economic, and political issues. Other areas include university policy issues, medical and health issues. The reason message topic is

important is that usually men are more knowledgeable and interested in political and economic areas than are women (Eagly, 1978). Experimental tests of the sex difference effect have tended to support the knowledge or interest hypothesis. Sistrunk and McDavid (1976) used 45 items about everyday topics that were prejudged to be masculine, feminine or neutral. These researchers found that men agreed with the majority of feminine items, but women showed more agreement on masculine items. Based on this study, many researchers agree that the gender difference in most investigations where women were found to be more persuaded then men results from the fact that women were less familiar than men with the issue in the message (Petty & Cacioppo, 1981).

Burgoon and Miller (1985) discount the topic familiarity argument. For example, Burgoon and Stewart (1975) found females to be more persuasible than males on the topic of admitting students to the university only if they had a 3.25 grade point average, a topic that seems of equal interest to men and women. The question is why so many of the other experiments in the past yielded nonsignificant results.

Perhaps the explanation may be more than just familiarity with the issue, but may be based on the social roles of men and women i.e., that women are socialized to be cooperative and men to be independent (Eagly, 1978). Cacioppo and Petty (1980) hypothesized that if a person's

social role were influenced by gender it would be observed in situations that lack important consequences for the person, as when a message takes an agreeable position. But when consequences are high, as when a message takes a disagreeable position, the attitude change should be determined more by the person's ability to react to the issue-relevant information provided than by one's social role. As expected, Cacioppo and Petty's results indicated that under the high-consequences conditions men agreed more with the inaccurate opinions of others about fashions (an area in which women tested as having more interest and knowledge), but women in the high-consequences condition agreed more with the inaccurate opinions of others about football (an area in which men tested as having more interest and knowledge). In the low-consequences conditions, the subjects were exposed to accurate statements about fashions and football. In this situation there was no need to defend one's view; thus, Cacioppo and Petty hypothesized that agreement would be determined more by one's social role. Women did agree more with the opinions of others than men did for both the areas of fashion and football in the low consequences condition. Cacioppo and Petty concluded from these results that when the consequences are low, the social roles of females to be cooperative and males to be independent affect the extent of influence. When the consequences of agreement are increased, then the extent of influence is determined more

by the person's ability to process the issue-relevant information presented.

As Eagly (1978) mentions, another concern in these experiments is the source of the induction. Since most of the communicators used in persuasion studies are male, the gender of the influencing agent is very important. There is a limited amount of empirical evidence in this area. In 1935, Knower reported greater opinion change when the source and respondent were of different sex. Haiman (1949) reported a slight tendency for females to be more persuaded than males by a male communicator, but male and female respondents did not differ with a female source. The results from various experiments after this time period yield a diversity of findings ranging from no effect, same-sex combinations having more effect, and cross-sex combinations having more effect (Eagly, 1978). It is difficult to draw specific conclusions about these findings and make any generalizations when many of the studies only use one gender for the source. For these reasons, it is important to use both a male and female source presenting the induction, and both male and female respondents in the experiment. It is also imperative for this type of research that the topic of the induction is of equal interest and importance to both genders.

Using these criteria at a time when the growth of the women's movement is much more apparent, important shifts in how males and females respond to social influence and how they perceive credibility are likely to be observed:

H1: Language intensity, source gender, and respondent's gender will interact to influence respondent's attitudes toward the message.

As with past studies, a main effect will be expected for the influence of language intensity on attitude change:

H1a: More attitude change toward the position advocated in the message will result from a high-intensity message than a low-intensity message.

Because of the confusion of the research on the influence of source and respondent gender as it interacts with language intensity the following research questions will be examined:

Research Question 1a: Will there be a significant difference in attitude change between high- and low-intensity messages when the source is a female or a male?

Research Question 1b: Will there be a significant difference in attitude change between high- and low-intensity messages when the respondent is a female or a male?

In addition to persuasibility, credibility often varies in relation to language intensity. It is also likely that source and respondent gender interacts with

language intensity in the perceived credibility of the source:

H2: Message intensity, source gender, and respondent's gender will interact in the production of perceived credibility.

Based on past research a main effect for message intensity on source credibility can be expected. However, source credibility has three independent dimensions - dynamism, trustworthiness, and competence (expertise). Therefore:

H2a: The evaluation of source dynamism will be higher when the receivers are given a high-intensity message than a low-intensity message.

H2b: The evaluation of source trustworthiness will be be higher when the receivers are given a high-intensity message than low-intensity message.

H2c: The evaluation of source competence will be higher when the receivers are given a high-intensity message than a low-intensity message.

Again, due to the confusion in research the interactions of source and respondents gender with message intensity are left as research questions:

Research Question 2a: Is there a significant difference in perceived credibility from high- and low-intensity messages when the source is a male or a female?

Research Question 2b: Is there a significant difference in perceived credibility from high- and low-intensity messages when the respondent is a male or a female?

CHAPTER 2

METHODS

Pilot Studies for Message Construction

Choosing the topic of the message. The purpose of this pilot study was to isolate a gender-neutral topic for the experimental message. Past research (Eagly, 1978; Rosenfeld & Christie, 1974) has indicated that a message topic can affect attitude change if men and women differentially perceive its importance, have varying knowledge on the topic, or are differentially favorable toward the topic. Since the focus of the experiment was to explore effects of gender on attitude change, the topic of the message was selected in a way that sought to prevent it confounding the results. Six controversial issues were generated as potential topics for the experimental message: annual mammograms for detecting breast cancer, development of nuclear power facilities, engaging in daily exercise, Mothers against Drunk Driving, the war on terrorism, and mandatory testing for AIDS (Appendix A).

Fifty-eight persons were asked to report their attitudes toward the six topics in terms of four measures: (1) personal importance of the topic to the respondent, (2) general importance of the topic to men and women, (3) amount of knowledge on the topic, and (4) favorability towards the topic. Personal importance and knowledge were measured on 6-point Likert scales, general importance on a

7-point Likert scale, and favorability by four items on 7-point semantic differential scales. In all instances, a "1" indicates a low level of importance or knowledge while a "6" or "7" indicates a high level. Favorability was measured using the adjectives of good/bad, valuable/worthless, wise/foolish, and useless/useful. The favorabilty measure had high reliability across topics as can be seen in Table 1. Table 1 also reports the results of the analysis of the topics.

Only two topics exhibited no differences between men and women on the topics of favorability, knowledge, personal importance, and general importance: AIDS testing and exercise. As the mean responses of males and females were closer and the variance in responses smaller in the exercise topic, the AIDS topic was rejected in favor of the exercise topic. Hence, the exercise topic was selected for the experimental message.

The intensity of the message. High and low intensity messages were initially constructed for the topic of exercise by regulating the use of metaphors (Bowers, 1963), levels of adverbial qualification (Burgoon & Miller, 1971), and differential words (Liska et al., 1981). The message was written with ideas drawn from an article in The Physician and Sports Medicine (Mohahan, 1986). Multiple iterations of testing and rewriting of the messages occurred, yielding two significantly different messages in terms of intensity (Appendix B).

Message intensity was measured by 11, 7-point (1=low, 7=high) semantic differential items (Appendix C). The high intensity message (M=61.7, SD=8.8) was found to be significantly more intense than the low-intensity (M=41.2, SD=13.6) message (t=5.82, df=43, p<.001). As the intensity measure has a possible range of 11-77 with a theoretic mean of 44, these results indicate the messages are really of high and moderate intensity. Perhaps this is an indication that there is no such thing as "low"-intensity messages, that all messages are perceived as moderately to highly intense. Before the experiment was run, one last attempt was made to obtain a third message, one that was lower than the high- and moderate-intensity messages already produced. Although not pretested, this message was included in the experiment.

In conclusion, this experiment has a topic that is gender neutral and minimally two messages varying in intensity with potential for a low intensity message. All three messages are in Appendix B.

Participants in the Experiment

Participants in the study were 519 student volunteers in an introductory communication course at Michigan State University. Of the 390 participants whose surveys were used, 229 (58%) were females and 161 (41.3%) were males. The percentage of group members declined as class level increased: freshman 46.7%, sophomores 23.3%, juniors 20.5%

and seniors 9.5%. Most of the participants were from 17-20 years of age (79%), with 97.4% being 24 years old or under.

Experimental Description

Participants were randomly assigned to one of three experimental groups or a control group. Participants in the experimental conditions read an introduction and a message of either high, medium or low intensity. Participants were then asked to fill out measures of their attitude toward the topic, their attitude toward the speaker's credibility, and the intensity of the message. The control group read the introduction but received no message. The control group was then asked to provide their attitude toward the topic, and their attitude on the speaker's credibility.

Development of Measures

Attitude measure. Respondents' attitudes toward vigorous exercise programs were measured by 11, 7-point (1=low, 7=high) semantic differential items (Appendix D). In this measure a unidimensional scale was expected. The scale was factor analyzed using principal components factor analysis with a varimax rotation. The average item mean was 4.97 and the average standard deviation for the items was 1.29. The attitude measure has a possible range of 1-7 for each item; the theoretic center is 4. The results indicate that it has a good range of response though it was not perfect as the mean was a bit off the theoretic center. One factor was obtained and all the items loaded

highly on this factor (see Table 2). The lowest item loading was .597, the average loading was .793, and the highest loading was .863. The eigenvalue of Factor 1 was 7.09 accounting for 64.5% of the variance in attitudes. From this information it can be concluded that this scale is a unidimensional measurement of attitudes toward vigorous exercise. As all items tap the worth of exercise (positive or negative), this measure is reflective of individuals' attitude toward exercise.

The overall mean of the attitude measure was found to be 54.69 (which is above the theoretic mean of 44,) with a variance of 128.74 (indicating good variance). As coefficient alpha is high (alpha=.94), the scale is internally consistent. All items had high item-total correlations. Removal of any items would decrease the reliability of the scale; hence, all items were retained (see Table 2).

Language intensity measure. Message intensity was measured by 11, 7-point (1=low, 7=high) semantic differential items (see Appendix C). In this measure a unidimensional scale was expected. The scale was factor analyzed using principal components factor analysis with a varimax rotation. Each item on the message intensity scale had a moderate mean and an adequate variance. The average mean was 4.28, and the average standard deviation was 1.59, indicating a good range and variance. One factor was extracted with an eigenvalue of 6.88, accounting for 62.6%

of the variance. As seen in Table 3, all items have very high and relatively even loadings. All of the items in the measurement for the intensity of the message were highly reliable (Cronbach's alpha=.94).

Credibility. The source's perceived credibility was measured by 15, 7-point (1=low, 7=high) semantic differential items (see Appendix E). In this measure, a three dimensional scale was expected for dimensions of competence, trustworthiness, and dynamism. The scale was factor analyzed using principal components factor analysis with varimax rotation. Each item on the scale has a moderate mean and an adequate variance: The average item mean is 4.97 and the average standard deviation is 1.24. This information indicates the 15 items differentiate responses allowing a valid factor analysis. As three factors are predicted, in the unrotated factor matrix all loadings should not be high on the initial factor; rather there should also be some items loading highly on other factors. In the unrotated matrix, two items loaded nowhere, five items loaded highly on factors other than the first, and seven of the 14 items do not fit with the unidimensional representation; i.e., the items load below .4. Because the structure was found not to be unidimensional the solution from the rotated matrix was examined. Three factors were extracted explaining 66.2% of the total variance in credibility (Table 4). After

rotation, eigenvalues were 6.01 for Factor 1, 2.08 for Factor 2 and 1.19 for Factor 3.

Factor 1 describes competence: items 1-5 were intended to measure it and are the only ones that load on that factor. Even though Item 5 has a secondary loading, it is still highly reliable for competence; thus this item was retained (Cronbach's alpha for competence=.895).

Factor 2 describes dynamism: items 6-10 were intended to measure it. Since Item 6 had a low factor loading, the reliability was checked with and without this item. It was found that if Item 6 was removed, the alpha goes up (Cronbach's alpha with items 6-10=.839, Cronbach's alpha with Items 7-10=.871). Consequently, Item 6 was deleted.

Factor 3 describes trustworthiness: items 11-15 were intended to measure it. Item 13 (ethical/unethical) was deleted as there was a typing error in the experimental packet. It was also recognized that Items 11 and 15 have high secondary loadings, though all items show a high reliability (Cronbach's alpha=.773). Direct measures of credibility were also obtained and correlate highly with the scales developed in this study (competence r=.68, p<.001; trustworthiness r=.49, p<.001; dynamism r=.56, p<.001). These results indicate that there is convergent validity. To summarize, the measures used do tap the construct of source credibility and its dimensions, as predicted.

Construction of Survey

The surveys were constructed so as to have variation in the sources (male and female) and in message intensity (high, medium, low, no message). The surveys were also split so approximately one-half of the respondents would be males and one-half would be females. The first page of the experimental packet contained a purpose statement and instructions (Appendix F). The next page introduced the lecturer and established his/her credibility. The message was represented as an excerpt from a lecture given at a health symposium held at the University of Wisconsin-Milwaukee in late 1985. In each case, the source was identified as a Ph.D. in exercise physiology from the University of North Carolina, Chapel Hill (Appendix G).

Manipulation

Source gender. In the male source condition, the communicator was identified as "Dr. Richard Pelletier" and in the rest of the introduction the masculine pronoun "he" or "his" occurred. In the female source condition, the source was identified as "Dr. Mary Pelletier," with the feminine pronoun "she" or "her" inserted in the appropriate spots in the rest of the introduction. All the other elements of the introduction were identical (Appendix G).

Message intensity. Each experimental group received one version of the message, either low, medium, or high intensity. As noted earlier, the medium and high intensity messages had been pretested for intensity. The control group received no message and moved right into the measurements.

Respondents' gender. Depending on the available participants, the respondents were self-selected. The purpose was to try and have approximately equal numbers of male and female respondents.

Experimental Procedures

The surveys were randomly given to participants. The participants were then told to read all the information in their packets carefully. Participants first read the purpose statement and the instructions, then the introduction of the speaker, and then the message (except for the control group who did not have a message), which were followed by the measures. The measures included the 11-item attitude scale on vigorous exercise programs, the 15-item measure on source credibility and the 11-item measure on the intensity of the message. Five manipulation checks in the form of semantic differential-type questions were also included: one on the doctor's attitude toward vigorous exercise programs (favorable/unfavorable), one to make sure the respondents knew the source's gender (male, female, I don't know), and three checks (for the three dimensions) on the source's

credibility (see Appendix H). The last page had measures regarding the respondents' feelings toward exercise that mirrored the pilot study questions concerning knowledge, personal importance, and general importance of the topic. The respondents then gave demographic information of their year in college, their age range, and their gender (Appendix I).

Design

A 2 (Male, Female) x 2 (Male, Female) x 4 (No, Low, Moderate, High) design was employed for examining the interaction of source gender, respondent's gender and message intensity.

CHAPTER 3

RESULTS

Manipulation Checks

Respondent's gender. All the surveys were first checked to make sure the respondent's gender was the same as the indicated gender on the form for the respondent. Any participants not stating their gender or indicating one different from the experimental packet was removed from all other analyses.

Source gender. The manipulation check for the source's gender was then examined. Participants were asked to indicate the gender of the lecturer. Of 519 participants, 126 (25%) either made the wrong indication (wrongly said male, n=12 (9.5%), wrongly said female n=19 (15.1%)) or indicated they did not know (n=93 (73.8%)). Since source gender was an important variable in this study, the results reported here include only the participants who correctly identified the gender of the source.

Message Intensity. Three messages of varying intensity were used: high, medium, and low. The messages were assessed for their intensity by participants on the 11-item intensity measure. All three messages were found to be significantly different in items of intensity (F=91.27, df=2/276, p<.001). Newman-Keuls tests indicate that low intensity messages (M=38.66, SD=11.78) were less intense than moderate messages (M=44.7, SD=10.07) which were

less intense than high intensity messages (M=60.8, SD=9.9). It can be noted that the medium group falls close to the theoretic mean of 44, and the high group is 17 points from the theoretic "high" score of 77. While the low intense message is less intense than the moderately intense message, it is really not "low" in intensity; it is, however, "lower-moderate" in intensity. Furthermore, no 3-way interactions (F=1.12, df=2/276, p<.33) or 2-way interactions occurred (source's gender by the respondent's gender, F=.55, df=2/276, p<.46; source's gender by the intensity of the message, F=.93, df=2/276, p<.40; respondent's gender by the intensity of the message, F=.33, df=2/276, p<.72). Thus, the intensity of the messages was successfully manipulated without confounds due to gender.

Tests for Confounding Variables

The exercise topic was chosen for the experimental message because pilot testing indicated that such variables as favorability towards the topic, its general and personal importance, and participants' knowledge on the topic did not vary by gender. Furthermore, the messages were written so that the source's attitude toward the topic was held constant. These variables were controlled so that a test for the effect of language intensity and gender on attitude change and perceived credibility would not be confounded.

Checks were made of the experimental participants to assure that pilot test results held for the experimental sample. Prior to reporting the results of these checks, it

should be noted that any differences discovered are differences that are NOT desired and hold no theoretic interest in this experiment. Thus, any differences are reported solely to identify variables that need to serve as covariates in the analyses that test the hypotheses.

When the dependent variable was the respondent's knowledge of the topic there was a main effect for the gender of the respondent ($F=18.51$, $df=1/372$, $p<.001$). When the dependent variable was the importance of the topic to the respondents personally, there again was a main effect for the gender of the respondent ($F=7.30$, $df=1/372$, $p<.007$). And when the dependent variable was the importance of the topic of exercise to men and women generally, there was a 3-way interaction reported ($F=4.24$, $df=3/372$, $p<.006$). When the respondents were asked about the source's attitude toward the topic of vigorous exercise there was a main effect for message intensity ($F=126.72$, $df=3/372$, $p<.001$). Since these were all assumed relatively equal at the beginning of this research, these variables were used as covariates in all further analyses.

Test of Hypotheses and Questions

Effect on Attitude Change. Hypothesis 1 predicted a three-way interaction between language intensity, source gender and respondent gender on attitude change. This three-way interaction was not found. However, the analysis of variance reveals a two-way interaction of respondent's gender and message intensity on attitudes toward vigorous

exercise (F=5.44, df=3/368, p<.001). When the respondent is a male the intensity of the message does not affect attitudes toward the benefits of exercise (F=1.96, df=3/157, p<.122), but when the respondent is a female the intensity of the message does (F=17.36, df=3/225, p<.001). Newman-Keuls tests indicate that female respondents exposed to high- and medium- intensity messages see exercise as being less beneficial than those exposed to the low intensity message. All the female message groups see exercise as less beneficial than the control group (see Table 5).

When the message is of high or moderate intensity, males find exercise more beneficial than females (high, F=8.84, df=1/80, p<.004; moderate, F=31.82, df=1/104, p<.001). When the message intensity is low, males and females perceive exercise as being equally beneficial (F=2.315, df=1/102, p<.1313). When there is no message, men and women again think that exercise is equally beneficial (F=.115, df=1/96, p<.735). In other words, research question 1b should be answered in the affirmative: language intensity interacts with respondent's gender to produce attitude change. Specifically females' attitudes change in response to variations in language intensity whereas males' attitude do not. Moreover, for females, moderate intensity is as persuasive as high intensity and low intensity is no different than receiving no message at all.

The interaction explored in research question 1a between source gender and language intensity on attitude change did not occur (F=1.05, df=3/368, p<.369). Furthermore, no main effect for source gender on attitude change occurred (F=1.02, df=1/368, p<.314). However, the main effect for language intensity on attitude change predicted in Hypothesis 1a did occur (F=4.58, df=3/368, p<.004). Because language intensity interacts with respondent's gender, this main effect will not be considered further. The earlier results imply, however, that the influence of language intensity on attitude change is restricted to female respondents. This finding agrees with past research that females are more persuadable than males when intense language is used. But this research also indicates that it does not matter if the source is a male or a female.

Influence on Credibility

Competence. Hypothesis 2 predicted a three-way interaction between message intensity, source gender, and respondent gender on perceived source credibility, in this case, competence. This three-way interaction did not occur (F=.71, df=3/368, p<.549). There also were no 2-way interactions, either for the gender of the source by the respondent's gender on perceived competence (F=.02, df=1/368, p<.889), the gender of the source by the intensity of the message (F=.51, df=3/368, p<.676) or the respondent's gender by the intensity of the message (F=.46,

df=3/368, p<.714). In other words, research questions 2a and 2b are rejected. Hypothesis 2c predicted a main effect for message intensity on perceived source competence, a prediction that is denied by the results (F=2.17, df=3/368, p<.001).

As no other main effects materialized for the gender of the source (F=.01, df=1/368, p<.924), or the gender of the respondent (F=1.10, df=1/368, p<.295), the only conclusion possible is that message intensity and gender are irrelevant to perceptions of source competence. All of hypothesis 2 is rejected for source competence. These results indicate that there are no significant effects and the hypothesis that the evaluation of source competence will be high when the receivers are given a high intensity message is not found to be true.

Dynamism. Hypothesis 2 also predicted a three-way interaction for message intensity, source gender, and respondent gender on perceived dynamism; a 3-way interaction occurred (F=2.68, df=3/368, p<.047). When the message is of high intensity both the respondent and the source genders matter (F=6.566, df=1/78, p<.012). Follow-up tests couldn't identify the interaction, but examining the means suggested the interaction may occur when a respondent's and source's gender is the same versus opposite, and consequently this contrast was tested. When the source and respondent are of the same gender, the source is perceived as more dynamic (M=24.16, SD=3.02) than

when the source and respondent are of opposite genders (M=21.53, SD=6.01) (F=6.55, df=1/81, p<.012).

When the message intensity is medium there is no effect on perceived dynamism of the source, for source gender by respondent's gender. (F=.006, df=1/102, p<.937). When the message intensity is low there is no effect of dynamism of the source reported by either gender of respondents (F=1.017, df=1/100, p<.316). When there isn't any message, again, there is not any effect for either the respondent's gender, or the source's gender (F=3.188, df=1/94, p<.077).

When the respondent is a male there is a main effect reported for message intensity on perceived dynamism (F=8.607, df=3/153, p<.001). Newman-Kuels tests indicate that male respondents perceive the source as most dynamic when the message is of high intensity, equally dynamic with a moderately intense or nonexistent message, and least dynamic with a low intensity message (see Table 6). As message intensity increases, males perceive the source to be more dynamic. However, the source's credentials alone (i.e., no message) leads male respondents to assess the source as being as dynamic as if the message were of moderate intensity. And when the respondent is a female, there is also a main effect for message intensity on perceived dynamism (F=6.359, df=3/221, p<.001). Newman-Kuels tests indicate that female respondents perceive the source as more dynamic when the message is of high

intensity than at any other time (see Table 6). Females seem less responsive to message intensity in terms of perceived dynamism than males. When the source is a male there is a main effect reported for message intensity on perceived dynamism (F=9.383, df=3/194, p<.001). Newman-Kuels test indicate that a male source is perceived as most dynamic when the message is of high intensity, equally dynamic with a moderately intense or nonexistent message, and least dynamic with a low intensity message (see Table 6). When the source is a female there is a main effect for message intensity on perceived dynamism (F=5.632, df=3/180, p<.001). Newman-Kuels tests indicate that a female source is perceived as more dynamic when the message is of high intensity than at any other time.

In general, then, Hypothesis 2 and 2a are supported by these results on dynamism. High intensity messages result in perceptions of the source as being more dynamic, especially when the respondent and the source are of the same gender. Research question 2a and 2b are not supported in that opposite versus same gender between source and respondent is more important that the actual gender of either.

Trustworthiness. Hypothesis 2 predicted a three-way interaction between message intensity, source gender, and respondent gender on perceived source credibility, in this case trustworthiness. This 3-way interaction did not occur (F=1.12, df=3/368, p<.343). There also weren't any 2-way

interactions: for the gender of the source by the respondent's gender (F=1.14, df=1/368, p<.287); when the gender of the source is by the intensity of the message (F=.12, df=3/368, p<.95); and when the respondent's gender is by the intensity of the message (F=.197, df=3/368, p<.90). Analysis of variance also indicates there aren't any main effects on trustworthiness for the source's gender (F=2.68, df=1/368, p<.102), the gender of the respondent (F=.505, df=1/368, p<.477) or for the intensity of the message (F=1.90, df=3/368, p<.129).

These results indicate that hypothesis 2 (as a whole) is not supported; the source is not seen to be more trustworthy when the receivers are given a high intensity message.

Summary

In general, language intensity and gender are unrelated to perceived source credibility, particularly in terms of competence and trustworthiness. Only perceived dynamism is influenced by these variables and, to a large degree, in the expected manner: as intensity increases, perceived dynamism increases.

Language intensity and gender are mostly unrelated to attitude change, particularly when the respondent is a male, and regardless of the gender of the source. There is more attitude change and responsiveness to language intensity when the respondent is a female: as intensity increases, attitude change is more likely to occur.

CHAPTER 4

DISCUSSION

The purpose of this study was to examine two effects of language intensity. The first was how language intensity could affect a person's attitude toward a topic, the second, how language intensity effects receivers' attitudes toward the speaker's credibility. Three dimensions of speaker credibility were investigated: competence, trustworthiness and dynamism. The effects of language intensity were also examined with respect to the gender of the source of the message and the respondent to the message.

For both perceptions of credibility and one's attitude on a topic, gender of both the source and the respondent were expected to matter. Interestingly enough, a male speaker is perceived to be as competent and trustworthy as a female speaker regardless of the gender of the respondent or the intensity of the message. People are not judging others by discriminating whether the source is a male or a female. One-fourth of the respondents used in this study did not even cue to the gender of the source. This was after the gender was clearly specified in the introduction, calling the source "Mary" or "Richard", and following with the appropriate "he", and "she". Perhaps this manipulation is still weak. However, these results show people are not cueing in to gender and its effect on a speaker's credibility, when they have scholarly papers attributed to

them. Unlike Goldberg (1968), Mischel's (1974) and Miller and McReynolds (1973) which reported that scholarly papers attributed to a male were more positively evaluated than when the same papers were attributed to a female. Rather, in this study, speakers are being viewed in terms of gender as equally credible.

Traditionally, males have been perceived as more competent than females. Most of the studies on source competence were done in the 60s and early 70s, at the beginning of the women's movement. Also many of these studies examining competence used male sources, topics that were stereotyped as male-oriented, and/or sources were presented in a career position that was male-oriented (Rosenfeld & Christie, 1974, Eagly, 1978). It perhaps may be an effect of the women's movement that people perceive speakers today as equally credible regardless of their gender.

It is unclear, though, how perceptions of source credibility have changed. Has females' perceived credibility increased over time, or has males' credibility decreased? Females may be rising in their perceived position of credibility as people are socialized differently. Or perhaps the standards held for males has just decreased. Possibly, males' and females' credibility have both changed directions a bit, with males' perceived credibility decreasing and females' increasing. This is an

area for future research, investigating perceptions of gender credibility and comparing results to past findings.

In this study, only for dynamism did the gender of the respondent and the source matter: When the respondent's and source's gender were the same, the source was seen as more dynamic. This effect is only found, however, for the high intensity message. Both males and females perceive sources of high intensity messages as being more dynamic than sources of moderate or low intensity messages. However, females are less responsive to message intensity than males in terms of perceived dynamism.

It is interesting that for years dynamism was not considered a dimension of credibility or ethos (McCroskey & Young, 1981). Credibility was originally thought of in two dimensions, that of reputation (trustworthiness) and competence. Maybe dynamism <u>is not</u> part of source credibility. The only place credibility varies in this study is in terms of perceived dynamism; no differences between male and female sources of messages occur in terms of perceived competence and trustworthiness.

It would make sense that as message intensity increases the source is perceived as more dynamic, for dynamism is represented by factors like: aggressive, emphatic, and bold (Berlo, Lemert & Mertz, 1969). A speaker perceived as more dynamic might use more concrete visual images, ones that are specific as opposed to vague. An example of vague versus specific images in the messages

used in this study is: "Suggesting exercise are the exercise equipment manufacturers" (low intensity message) versus "Promoting this torture and mass murders are the pimps and panderers who manufacture the exercise equipment" (high intensity message, see Appendix B). Dynamism also appears to tap into an evaluative dimension referred to by Berlo, et al. (pg. 575) as "disposable energy." In other words, energy that can be used to emphasize, augment, and implement suggestions. Berlo, et al. also calls it an "intensifier," meaning that given an evaluation of a source as kind/cruel or experienced/inexperienced the polarity or intensity of these evaluations of the source is intensified through perceptions of high dynamism.

However, it was found that males were more sensitive to changes in language intensity than females in terms of perceived dynamism of the source. Perhaps men are more observant of these intensifications than females, which seems counterintuitive because it is often presumed that women are the ones socialized to be more observant. It may be that women cue more to nonverbal language, things like facial expressions, intonation of the voice, gesticulations; details they could not evaluate from a written message. Patterson (1984) suggests a high level of nonverbal involvement would indicate a high positive intimacy. Intimacy focuses on the experience and quality of a relationship. Intimate exchanges would be characterized by openness, receptivity, harmony, concern

for the other person, and a surrender of manipulative control over the other person (McAdams & Powers, 1981). To the extent that intimacy, (positive or negative) determines an interaction, nonverbal involvement should approximate that intimacy (Patterson, 1984). This leads one to question whether there is really differential sensitivity, or whether the sensitivity is based on the channel. Perhaps men have been taught to be rational, to cue in on rational appeals and women to cue in more on nonverbal behavior. These areas of sensitivity and message channels are territories for future research.

Supportive of this reasoning are the effects of language intensity on persuasibility: As language intensity increased, persuasibility increased, although gender did make a difference. While Burgoon and Stewart (1975) predicted men would be more persuasive when they used highly intense language and women more persuasive when they used language of lower intensity, the results in this study indicate that it is the intensity of the language that positively correlates with attitude change disregarding the gender of the source. These results of finding no source gender affect on credibility, also reject Knower (1939) and Haiman's (1949) findings. There does, though, seem to be a gender difference in terms of the persuasibility of respondents. Eagly (1978) and Rosenfeld and Christie (1974) all indicated that women are not really more persuasible than men; they concluded that past studies

had some extraneous factors that influence the data. The results of this research, however, indicate that women are more persuasible than men, even controlling for the extraneous factors (i.e. under the assumptions that the topic used was gender-neutral and the gender of the source was varied among the respondents.) Perhaps this indicates that women are being perceived as equally credible today by both males and females, but that females are still viewing themselves personally as less competent and thus are more easily persuaded than the males.

Nevertheless, even though an issue might be gender-neutral and equally important to males and females, women still are more easily persuaded than men, especially when intense language is used. Researchers in the past (Eagly, 1978; Sistruck & McDavid, 1976) hypothesized that the gender difference in most investigations of past research where women were found to be more persuaded then men were due to the fact that women were less familiar than men with the issue in the message. This is not the case in this study, that familiarity with the topic alone governs persuasibility, for on this gender-neutral topic, women were still more persuasible. The results of this research support Burgoon and Miller (1985) which also discounts the topic familiarity argument. Perhaps in the socialization of children, males and females are being presented as equal genders, but females are still being socialized to react more to emotions than males. Studies support that parents

engage in differential child-rearing behavior depending on whether the child is a girl or a boy (Ross, 1987). When language is more intense, it is more emotionally laden. The women's movement has made great strides in teaching people not to judge others by their gender, but no one seems to talk about how individuals cue to emotional language. It seems in the American society that it is more acceptable for women to cue into emotional language while it is not as acceptable for men. A new focus for the women's movement could be to help teach people to be aware of persuasibility and how to think more for themselves. Many times people are not even aware of their actions or reactions. If the respondents were asked how persuasible they saw themselves, there may not be a gender difference in this perception. People may just need to have the issue of persuasibility drawn to their attention.

It is interesting that throughout all the persuasibility research there seems to be a negative undertone that it is not good to be persuasible. Is there an optimum level of persuasibility? While women are more persuasible than men, both could be too persuasible or perhaps neither men nor women are persuasible enough. If it is the case that it is good to be open to persuasion, then women are better off then men. In the area of decision making and judgment research, there is evidence that individuals do not revise their opinions enough; they do not make full use of the information given to them. (see,

e.g., Kahneman, Slovic, & Tversky, 1982; Nisbett & Ross, 1980). The conservatism effect deals with the willingness of individuals to alter their opinions when presented with new information; this alteration is in the "right" direction though it does not go "far enough" (Edwards, 1968). It is also known that people tend to arrive at their opinions by starting from an initial value that is adjusted; these adjustments are typically insufficient (Slovic & Lichtenstein, 1971). In other words, different starting points give different estimates that are biased toward the initial values; this phenomenon is called anchoring (Tversky & Kahneman, 1974). An example of anchoring is symbolic sexism. Applying this to female-male relations, symbolic sexism is: "(1) a general, positive attachment to the political, economic, and social (including sexual) status quo, together with the belief that existing societal arrangements should be maintained; and (2) a vague apprehension that public policies designed to promote sexual equality, somehow pose a threat to the status quo, and by implication, to those cherished values which serve to maintain the 'American way of life'" (Del Boca, 1982, pp. 19-20). One shouldn't make <u>evaluative</u> judgments about persuasibility until an optimal level is known.

The topic of gender differences is currently so value-laden and emotionally charged that it makes it cannot be approached with total objectivity (Ross, 1987).

Researchers like Rosenfeld and Christie (1974) and Eagly (1978) were trying to support the idea that women were not more persuasible than men. The decision to look at this area may have been because persuasibility has always been seen as very negative. Perhaps persuasibility needs to be looked at from a positive side, that it is " good" to be open-minded and willing to change one's opinions. Perhaps men are just more egocentric than women and less likely to listen to other's opinions. Ashmore and Del Boca (1986) found 75% of both genders agree that men are autocratic. Ashmore (1981) also found that men are perceived by both genders as harsh, critical, outspoken, argumentative, cautious and egotistical; they are considered "hard" on a hard versus soft (potency) dimension. Other literature suggests men are not persuasible enough (i.e., by being egotistical, etc.) and that people in general are not persuasible enough (i.e., conservatism and anchoring). As females are more persuasible than males, it could very well be that the presumed negative evaluation of this gender-based characteristic is really a "positive" characteristic representing adaptiveness and openness. Future research on this characteristic would be useful to be able to find the optimal level of persuasibility.

Another way to look at the areas of persuasibility and credibility instead of by gender, may be to examine a person's role. In this study the speaker used had a high status role (i.e., by their credentials). Any variations

in this role could alter the results. Hewgill and Miller's study (1966) is probably the best example of the experimental manipulation of this variable, showing the contrast between a high status versus a low status source. In Hewgill and Miller's study, they contrasted a professor of nuclear research with a high school student. However, in this study, when the role is held constant, there is no source gender effect on credibility. This is because both speakers (whether male or female) are in the same role (i.e. have the same credentials). This concept is the "equal within rank" idea. It is a change from the past, where before gender was perceived as different within the same role, now, perhaps, only the role matters. If the role is the same, the the credibility of the source will be perceived as the same. According to Burgoon (1975) the high status role results would probably be more persuasive due to high credibility, and the low status role results would probably be reversed due to the decrease in perceived credibility. If it is true, that only the role matters, this only applies to the gender of the source and not the recipients. In this case, where the male role is different than the female role or whatever role people are using does matter to the respondent.

Summary

Unlike prior studies (e.g. Eagly, 1978; Rosenfeld & Christie, 1974). This study indicates that the gender of a source of a message does not matter in regards to perceived

credibility. The intensity of the message does make a difference. If one is speaking to both males and females it is best to use language with high intensity. For male respondents, a low intensity message could actually be counterproductive. The source described apart from a message was seen as more credible than the same source poised with a low intensity message. This difference between the source poised with a low intensity message and the source judged apart from a message is not true for females; in terms of perceived dynamism, it is the same for both the low intensity message and the no message group. For males it could actually do harm to one's credibility to use a low intensity message. So a person is better off not saying anything at all if he/she speaks with low intensity messages.

These results were obtained by using a counterattitudinal message. It needs to be considered though, how central or peripheral the topic is in terms of being counter-attitudinal. There is a cultural truism about exercise, that everyone feels it is good, though that does not necessarily mean that they personally engage in exercise. According to the expectancy theories and the counterattitudinal theories research (Burgoon & Miller, 1971; Burgoon & Miller, 1985; Burgoon & Stewart, 1975) indicated that when people argue in a counter normative position they lose credibility. Language intensity might only matter with counterattitudinal messages; one may need

to be intense to get an attitude changed. Low intensity messages are not persuasive and can do active harm to the source's credibility.

It was discovered while doing this research that it is very difficult to get an actual "low" intensity message; it is really a gradation of moderate to high intensity. Even when someone is doing something as "nonintense" as giving a greeting, they are still sharing opinions, giving points of view. And when someone is trying to be very evasive, language intensity is hard to hide. Ambiguity is the main strategy of people trying to be evasive, and even hearing ambiguity still creates intensity (Berger & Kellerman, 1985).

These results may also be limited to using gender neutral topics. The topic of exercise was previously tested to assure gender neutrality. Eagly (1978) points out that one of the problems with many of the studies in the past is that the topics are ones that males are more knowledgeable about than females (i.e. political and economic areas). Topics which females may be more interested and knowledgeable in could be areas like fashion and childcare. There is also a caution that the topic may be time bound.

This study could be time bound as a result of cultural and sociological levels of information. This information shifts in populations, where there are stereotype shifts over time. Somethings which maybe be perceived as extremely

important now, like being tan and physically fit, may not be as important 20 years from now. Knowing this information, though, helps individuals to communicate better (Miller & Steinberg, 1975).

Some of the cultural/sociological information of this group of respondents is that they are mostly college educated, 18-21 year olds from the Midwest. Coming from the Midwest, this age group will tend to be a conservative group of students, and if this group is exhibiting changes in attitudes from previous research it will probably be true already in most other geographic areas. Since these are all educated participants, it can be assumed that most of them will have more liberal attitudes toward women. Etaugh and Spandikow (1981) indicated that college students show more liberal attitudes toward women with increasing years of college attendance. And the fact that most of these participants are between 18-21 is a consideration. Participants from many of the original studies, many of which were done in the 60s, would be in their 40s now. If they were retested it would be interesting to find out if their attitudes have changed at all toward gender.

From these results, if a speaker where to address an audience with both males and females and was presenting a counterattitudinal message, he/she would be best to use a message of high intensity such is the case because as language intensity increases, persuasibility increases for female respondents, and perceived dynamism of the source increases for males.

TABLES

Table 1. Pilot Study Analysis

TOPIC	GENDER	FAVORABILITY MEAN	FAVORABILITY SD	REL	KNOWLEDGE MEAN	KNOWLEDGE SD	PERSONAL IMPORTANCE MEAN	PERSONAL IMPORTANCE SD	GENERAL IMPORTANCE MEAN	GENERAL IMPORTANCE SD
Mammograms	Overall	25.50_{a}	3.26	.83	3.72_{a}	1.39	4.00_{a}	1.27	1.88_{b}	1.11
	Males	25.16^{a}	3.33		3.48^{a}	1.46	3.39^{a}	1.12	2.29^{b}	1.30
	Females	25.89^{a}	3.19		4.00^{a}	1.27	4.70^{b}	1.07	1.52^{a}	.70
Nuclear Power	Overall	18.22_{c}	6.98	.96	3.98_{c}	1.18	4.28_{c}	1.18	4.07_{c}	.49
	Males	20.74^{c}	5.57		4.39^{b}	1.09	4.42^{c}	1.06	4.10^{c}	.65
	Females	15.33^{b}	7.40		3.52^{b}	1.12	4.11^{c}	1.31	4.04^{c}	.19
Exercise	Overall	26.55_{d}	2.42	.93	5.21_{d}	.81	4.86_{d}	1.10	3.86_{d}	.40
	Males	26.26^{d}	2.70		5.16^{d}	.97	4.84^{d}	1.32	3.80^{d}	.48
	Females	26.89^{d}	2.06		5.26^{d}	.59	4.80^{d}	.80	3.93^{d}	.27
Drunk Driving	Overall	23.78_{e}	5.13	.97	4.09_{e}	1.25	4.12_{e}	1.30	3.86_{e}	.93
	Males	22.52^{e}	4.46		4.13^{e}	1.20	3.84^{e}	1.37	3.94^{e}	1.06
	Females	25.22^{f}	5.55		4.04^{e}	1.32	4.44^{e}	1.15	3.78^{e}	.75
Terrorism	Overall	21.22_{h}	6.69	.97	4.28_{f}	1.06	4.57_{f}	1.04	4.29_{f}	.84
	Males	23.55^{h}	5.20		4.77^{f}	.88	4.87^{f}	.81	4.26^{f}	.97
	Females	18.56^{g}	6.69		3.70^{g}	.95	4.22^{g}	1.19	4.33^{f}	.68
AIDS Testing	Overall	22.74_{i}	6.46	.96	3.57_{h}	1.09	4.17_{h}	1.35	4.76_{g}	.92
	Males	23.32^{i}	5.46		3.58^{h}	1.15	4.03^{h}	1.38	4.97^{g}	1.02
	Females	22.07^{i}	7.50		3.56^{h}	1.05	4.33^{h}	1.33	4.52^{g}	.75

Notes: The same letter in the "mean" column (for each topic) indicates males and females respond similarly; different letters (for each topic) indicate males and females respond differently ($p<.05$).

Table 2. Attitude Measure Analysis

ITEMS	FACTOR LOADING	MEAN	SD	ITEM-TOTAL CORRELATION	ALPHA IF ITEM DELETED
bad/good	.856	5.18	1.31	.83	.93
worthless/valuable	.796	5.36	1.22	.77	.94
foolish/wise	.811	4.90	1.35	.78	.94
useless/uselful	.800	5.44	1.20	.78	.94
harmful/beneficial	.821	5.18	1.46	.79	.94
dangerous/safe	.703	4.32	1.20	.69	.94
unpleasant/pleasant	.597	3.93	1.51	.58	.95
unhealthy/healthy	.814	5.27	1.21	.79	.94
negative/positive	.863	5.29	1.23	.83	.93
destructive/constructive	.825	5.19	1.31	.80	.94
awful/wonderful	.673	4.62	1.18	.67	.94

Table 3. Message Intensity Analysis

ITEMS	FACTOR LOADING	MEAN	SD	ITEM-TOTAL CORRELATIONS	ALPHA IF ITEM DELETED
Intensity	.77	4.43	1.68	.75	.93
Activity	.73	4.34	1.55	.70	.94
Strength	.70	5.41	1.54	.68	.94
Extremity	.80	4.09	1.56	.78	.93
Forcefulness	.78	4.16	1.74	.76	.93
Feeling	.78	3.95	1.65	.76	.93
Vividness	.69	4.29	1.57	.66	.94
Vigorousness	.75	4.19	1.61	.74	.93
Powerfulness	.84	3.92	1.54	.81	.93
Aggressiveness	.80	4.40	1.63	.78	.93
Potency	.77	3.97	1.53	.75	.93

Table 4. Credibility Measure Analysis

ITEMS	FACTOR LOADING FACTOR 1	FACTOR 2	FACTOR 3	MEAN	SD	ITEM-TOTAL CORREL-ATION	ALPHA IF ITEM DELETED
inexperienced/experienced	.71	-.20	-.30	4.99	1.33	.62	.88
uninformed/informed	.77	-1.81	-.28	5.03	1.38	.70	.88
ignorant/expert	.72	-.24	-.30	4.83	1.20	.65	.88
incompetent/competent	.74	-.26	-.19	5.12	1.17	.68	.88
logical/illogical	.76	-.17	.00	5.01	1.33	.70	.88
introverted/extroverted	.35	.22	.04	4.43	1.30	.35	.89
unsure/confident	.67	.41	.03	5.42	1.35	.63	.88
meek/aggressive	.63	.60	.05	5.05	1.28	.59	.88
timid/bold	.60	.64	.04	4.92	1.29	.54	.88
reserved/frank	.52	.45	.10	5.15	1.30	.48	.89
unjust/just	.66	-.27	.22	4.60	1.16	.60	.88
cruel/kind	.37	-.35	.47	4.65	.97	.31	.89
dishonest/honest	.57	-.24	.38	5.02	1.07	.53	.88
contemptible/admirable	.61	-.21	.16	4.54	1.06	.56	.88

Table 5. Message Intensity by Respondents' Gender

	RESPONDENTS' GENDER			
	MALE		FEMALE	
MESSAGE INTENSITY	MEANS	SD	MEANS	SD
High 55.06	12.52 47.20[a]	11.36	[c]	
Medium	59.81[a]	8.05	47.23[c]	12.20
Low	57.48[a,d]	10.54	54.50[b,d]	9.33
No	60.02 [a]9.62	59.37	9.31 [a]	

Notes: The same letter = means equal; different letters = means significantly different ($p<.05$). The message in this study advocated that exercise was <u>not</u> beneficial to one's health. It was indicated in the pilot study results, that both males and females were favorable towrds exercise. Therefore, respondents who indicated that exercise is beneficial are not being persuaded by the message. (Respondents who indicate that exercise is not beneficial are being persuaded by the message.)

Table 6. Influences on Perceived Dynamism

			Message Intensity			
		Respondent's Gender	High	Moderate	Low	No
Source Gender	Male	Male	24.56[a] (2.91)	18.72[c] (4.44)	17.73[d] (4.57)	19.08[c] (6.48)
		Female	21.45[b] (6.18)	19.50[c] (3.45)	17.94[c,d] (4.95)	21.07[c] (3.56)
	Female	Male	21.61[b] (5.99)	19.63[c] (3.29)	17.72[d] (5.78)	21.80[c] (2.97)
		Female	23.88[a] (3.12)	20.55[c] (5.52)	19.86[c,d] (4.08)	20.22[c] (5.56)

Notes: The same letter = means equal; different letters = means significantly different ($p<.05$).

APPENDICES

Appendix A

OPINIONNAIRE

The purpose of this study is to see how you feel about certain issue by having you judge each issue on a series of descriptive scales. In completing these scales, please make your judgements on the basis of how you feel about the issues.

Here is how you are to use these scales:

If you feel very favorable or unfavorable about the issue, you should place your check-mark as follows:

fair_X___:_____:_____:_____:_____:_____:_____unfair

or

fair_____:_____:_____:_____:_____:_____:__X__unfair

If you feel favorable or unfavorable, but not extremely so, you should place your check-mark as follows:

strong_____:_X___:_____:_____:_____:_____:_____weak

or

strong_____:_____:_____:_____:_____:__X__:_____weak

If you feel only slightly favorable or unfavorable, then you should place your check-mark as follows:

active_____:_____:__X__:_____:_____:_____:_____passive

or

active_____:_____:_____:_____:__X__:_____:_____passive

If you feel neutral about the issue or if you feel a particular scale does not apply to the issue, then you should place your check-mark in the middle space:

safe_____:_____:_____:__X__:_____:_____:_____dangerous

IMPORTANT: (1) Place your check-marks in the middle of spaces, not on the boundaries

this_____:__X__:_____:_____:_____:_____:_____

not this_____X_____:_____:_____:_____:_____:_____

(2) Be sure you check every scale for every concept, do not omit any.

(3) Never put more than one check-mark on a single scale.

Do not try to remember how you checked similar items earlier; make each item a separate and independent judgement. Work at fairly high speed through these issues. Do to worry or puzzle over individual items. It is your first impressions, the immediate "feelings" about the issues, that we want.

Thank you for participating.

Annual mammograms for detecting breast cancer

good	_____	_____	_____	_____	_____	_____	bad
worthless	_____	_____	_____	_____	_____	_____	valuable
wise	_____	_____	_____	_____	_____	_____	foolish
useless	_____	_____	_____	_____	_____	_____	useful

Development of nuclear power facilities

good	_____	_____	_____	_____	_____	_____	bad
worthless	_____	_____	_____	_____	_____	_____	valuable
wise	_____	_____	_____	_____	_____	_____	foolish
useless	_____	_____	_____	_____	_____	_____	useful

Engaging in daily exercise

good	_____	_____	_____	_____	_____	_____	bad
worthless	_____	_____	_____	_____	_____	_____	valuable
wise	_____	_____	_____	_____	_____	_____	foolish
useless	_____	_____	_____	_____	_____	_____	useful

Mothers Against Drunk Driving

good	_____	_____	_____	_____	_____	_____	bad
worthless	_____	_____	_____	_____	_____	_____	valuable
wise	_____	_____	_____	_____	_____	_____	foolish
useless	_____	_____	_____	_____	_____	_____	useful

War against terrorism

good	_____	_____	_____	_____	_____	_____	bad
worthless	_____	_____	_____	_____	_____	_____	valuable
wise	_____	_____	_____	_____	_____	_____	foolish
useless	_____	_____	_____	_____	_____	_____	useful

Mandatory testing for AIDS

good	_____	_____	_____	_____	_____	_____	bad
worthless	_____	_____	_____	_____	_____	_____	valuable
wise	_____	_____	_____	_____	_____	_____	foolish
useless	_____	_____	_____	_____	_____	_____	useful

Now that you have expressed your feelings about the issues themselves, we would like to get your impressions about certain matters relating to them. Again, there are no "correct" answers to these items; just mark the response that best represents your judgement.

Annual mammograms for detecting breast cancer

How knowledgeable do you consider yourself to be on this issue?

Very Knowledgeable_____
Knowledgeable_____
Slightly Knowledgeable_____
Slightly Unknowledgeable_____
Unknowledgeable_____
Very Unknowledgeable_____

How personally important is this issue to you?

Very Important_____
Important_____
Slightly Important_____
Slightly Unimportant_____
Unimportant_____
Very unimportant_____

Consider the implications of this issue for men and women in general. How do you rate the relative importance of this issue for women and men?

Much more important to men than to women_____
More important to men than to women_____
Slightly more important to men than to women_____
Equally important to men and women_____
Slightly more important to women than to men_____
More important to women than to men_____
Much more important to women than to men_____

Development of nuclear power facilities

How knowledgeable do you consider yourself to be on this issue?

Very Unknowledgeable_____
Unknowledgeable_____
Slightly Unknowledgeable_____
Slightly Knowledgeable_____
Knowledgeable_____
Very Knowledgeable_____

How personally important is this issue to you?

Very Unimportant_____
Unimportant_____
Slightly Unimportant_____
Slightly Important_____
Important_____
Very Important_____

Consider the implications of this issue for men and women in general. How do you rate the relative importance of this issue for women and men?

Much more important to women than to men_____
More important to women than to men_____
Slightly more important to women than to men_____
Equally important to men and women_____
Slightly more important to men than to women_____
More important to men than to women_____
Much more important to men than to women_____

Engaging in daily exercise

How knowledgeable do you consider yourself to be on this issue?

Very Knowledgeable_____
Knowledgeable_____
Slightly Knowledgeable_____
Slightly Unknowledgeable_____
Unknowledgeable_____
Very Unknowledgeable_____

How personally important is this issue to you?

Very Important_____
Important_____
Slightly Important_____
Slightly Unimportant_____
Unimportant_____
Very Unimportant_____

Consider the implications of this issue for men and women in general. How do you rate the relative importance of this issue for women and men?

Much more important to men than to women_____
More important to men than to women_____
Slightly more important to men than to women_____
Equally important to men and women_____
Slightly more important to women than to men_____
Much more important to women than to men_____

Mother Against Drunk Driving

How knowledgeable do you consider yourself to be on this issue?

Very Unknowledgeable_____
Unknowledgeable_____
Slightly Unknowledgeable_____
Slightly Knowledgeable_____
Knowledgeable_____
Very Knowledgeable_____

How personally important is this issue to you?

Very Unimportant_____
Unimportant_____
Slightly Unimportant_____
Slightly Important_____
Important_____
Very Important_____

Consider the implications of this issue for men and women in general. How do you rate the relative importance of this issue for women and men?

Much more important to women than to men_____
More important to women than to men_____
Slightly more important to women than to men_____
Equally important to men and women_____
Slightly more important to men than to women_____
More important to men than to women_____
Much more important to men than to women_____

War against terrorism

How knowledgeable do you consider yourself to be on this issue?

Very Unknowledgeable_____
Unknowledgeable_____
Slightly Unknowledgeable_____
Slightly Knowledgeable_____
Knowledgeable_____
Very Knowledgeable_____

How personally important is this issue to you?

Very Unimportant_____
Unimportant_____
Slightly Unimportant_____
Slightly Important_____
Important_____
Very Important_____

Consider the implications of this issue for men and women in general. How do you rate the relative importance of this issue for women and men?

Much more important to women than to men_____
More important to women than to men_____
Slightly more important to women than to men_____
Equally important to men and women_____
Slightly more important to men than to women_____
More important to men than to women_____
Much more important to men than to women_____

Mandatory testing for AIDS

How knowledgeable do you consider yourself to be on this issue?

Very Unknowledgeable_____
Unknowledgeable_____
Slightly Unknowledgeable_____
Slightly Knowledgeable_____
Knowledgeable_____
Very Knowledgeable_____

How personally important is this issue to you?

Very Unimportant_____
Unimportant_____
Slightly Unimportant_____
Slightly Important_____
Important_____
Very Important_____

Consider the implications of this issue for men and women <u>in general</u>. How do you rate the relative importance of this issue for women and men?

Much more important to women than to men_____
More important to women than to men_____
Slightly more important to women than to men_____
Equally important to men and women_____
Slightly more important to men than to women_____
More important to men than to women_____
Much more important to men than to women_____

Finally, we need a few items of information about you. (Circle the appropriate response).

Your age: (1) Under 20 (2) 20-29 (3) 30-39 (4) 40-49 (5) 50 or over

Your year in school: (1) Freshman (2) Sophomore (3) Junior (4) Senior

Your gender: (1) Female (2)Male

APPENDIX B

Low intensity message

Engaging in Daily Exercise

There seems to be an interest in America at times, the trying of sporadic exercise. Some Americans may begin to think about the aim of having bodies in somewhat better condition; people sometimes try a little in an attempt to possibly move a bit more toward slightly better physical form. The number of "sports medicine" clinics and the number of sports-related discomforts may have gone up a slight degree in the past few years or so. A possible thing that some might occasionally take into consideration in this situation may be to think about normal activity rather than minor exercise that is moderate.

However, Americans are sometimes being requested to "exercise" by the media, physicians, friends, and family; at times, they may begin running, biking, or swimming a little bit. A few of these exercises might have some minimal side effects on the body over time, seemingly contributing more discomfort than benefits. Jogging, for example, could possibly be related to leg annoyances and knee creaking.

Suggesting exercise are the exercise equipment manufacturers. They receive money as people occasionally choose to use their equipment and clothes to try to appear in slightly better shape.

Some people may be without instruction in exercise and at times might have feelings of passing discomfort. When they have instructions they occasionally might follow them a bit more than they may should since "if a little bit is o.k., a little bit more might possibly be better."

There might be aerobic instructors who sometimes have a little less information than they possibly could, and organizers of races and triathalons who might occasionally use slightly less than ideal safety precautions. Some participants in these races may not be completely trained, and there could be cases of individuals experiencing minor annoyances which may be related to slightly improper training techniques with some idea of maybe trying to be a bit more in condition. Why do a few not seem to mind the minor annoyances and give a small fraction of time to exercise in order to try for a better condition that may not be clearly define, for one's condition is at times a somewhat subjective state.

At times people who live long lives have mixed exercise histories--they sometimes lead a normally active life-style. For some Americans, normal activity might be enough for a long, healthy life. By "normal activities," I mean things such as possibly walking from the car to the office, sometimes using a push lawn mower, maybe walking the dog, occasionally shopping, and at times using stairs rather than the elevator. In view of these occasional activities, there may be little need for some people to

think about possibly working a bit for a moderate period of time, for exercise may possibly be related to insignificant discomfort.

Activity may be a possible answer to a longer life, not that exercise couldn't. You may not have to exercise to see improvements in your health.

Medium Intensity Message

Engaging in Daily Exercise

There seems to be a new matter for thought in America today, the use of exercise. Some Americans may begin to follow the dream of obtaining physically ideal bodies; people are spending some time and resources in an attempt to achieve physical fitness. The number of "sports medicine" clinics and the number of sports-related injuries have increased in the last five years. An alternative to this situation may be to support the pursuit of normal activity rather than exercise that is effortful.

However, there are some Americans being encouraged to "exercise" by the media, physicians, friends, and family; sometimes, they begin running, biking, or swimming a little too much. Some of these exercises have rather poor effects on the body over time, occasionally causing more harm than good. Jogging, for example, could possibly cause leg or back problems.

Other promoters of exercise are the exercise equipment manufacturers. They are receiving money while people use their equipment and clothes for personal fitness.

Some people may not get proper instruction in exercise and perhaps could sustain injuries. When they do get proper instructions they might overdo; since "if a little bit is good, a lot could be better."

There are people who may not be well-informed about the effects of exercise, and organizers of races and triathalons who are using less than desirable safety precautions. Participants in these races may not be properly trained, and there have been cases of individuals having physical problems due to improper training techniques in hopes of becoming physically fit. Why have these effects, and use time in hope of getting something that may not be clearly defined, for "physical fitness" is a subjective term.

Many people who live long lives have little exercise history--they lead a normally active life-style. For most Americans, normal activity is enough for a long healthy life. By "normal activities", I mean things such as walking from the car to the office, using a push law mower, walking the dog, shopping, and using stairs rather than the elevator. In view of these activities, there is little need for people to work harder, for such exercise may have side effects.

Activity may be an acceptable key to long life, rather than exercise. You need not strain yourself to improve your health.

High Intensity Message

Engaging in Daily Exercise

There is a festering epidemic in America today, the overuse of exercise. Americans are becoming obsessed with the goal of obtaining physically ideal bodies; people are literally dying in an attempt to achieve physical fitness. The number of "sports medicine" clinics and the number of sports-related fatalities have tripled in the last five years. An alternative to this devastating situation is advocating normal activity rather than exercise that is death defying.

Unfortunately, many Americans are practically being forced to "exercise" by the media, physicians, friends, and family; as a result they naively begin running, biking, and swimming themselves to exhaustion. Many of these exercises have terrible effects on the body over time, actually causing more harm than good. Jogging, for example, can cause the bones to become as brittle as twigs and the knees to become a spongy mass of cartilage and ligaments.

Promoting this torture and mass murders are the pimps and panderers who manufacture the exercise equipment. They are raking in several billion dollars while people are seduced into using their equipment and clothes in pursuit of personal fitness.

Many duped and misled people never get proper

instruction in exercise and become permanently damaged. When they do get proper instructions they go overboard, since "if a little bit is good, a lot is better."

There are aerobic instructors who are virtually illiterate about the effects of exercise, and organizers of races and triathalons who are using terrible safety precautions. Participants in these races are horribly trained, and there have been cases of individuals dying from heat exhaustion and heart attacks due to terrible training techniques, all in the line of trying to achieve physically fit bodies. Why go through all this pain and agony and use up valuable time in hopes of achieving something that is illusive, for "physical fitness" is a subjective state.

Many people who live long lives have no exercise history--they lead a normally active life-style. For most Americans normal activity is all that is need for a long, healthy life. By "normal activities," I mean things such as waling from the car to the office, using a push lawn mower, walking the dog, shopping, and using the stairs rather than the elevator. In view of these activities, there is no need for people to work up a sweat and work at maximum heart rate for a prolonged period of time, for these things actually have terrible side effects.

Activity is the best of all answers to long life, not strenuous exercise. You don't have to kill yourself to improve your health.

APPENDIX C

Message Intensity Scale

INSTRUCTIONS:

We would like to know how you feel about the message. Please mark how you feel about each question in the space provided. Mark the one response for each question that best describes your judgment.

1. How intense (strong, extreme, etc.) is the position presented in this lecture?

   not at all ____:____:____:____:____:____:____ very intense

2. How active is the language in the message?

   very ____:____:____:____:____:____:____ not at all active

3. How strongly does Dr. Pelletier feel about this issue?

   very ____:____:____:____:____:____:____ not at all strongly

4. How extreme do you think the language was in the message?

   very ____:____:____:____:____:____:____ not at all extreme

5. How forcefully does Dr. Pelletier argue this postion?

   not at all ____:____:____:____:____:____:____ very forcefully

6. To what extent is this position argued with feeling or emotion?

   not at all ____:____:____:____:____:____:____ very much

7. How vivid is the language used in the message?

   very ____:____:____:____:____:____:____ not at all vivid

8. How vigorously is the position argued?

   not at all ____:____:____:____:____:____:____ very vigorously

9. How powerful is the language in the message?

   not at all ____:____:____:____:____:____:____ very powerful

10. How aggressive or assertive is Dr. Pelletier in defending this position?

    very much ____:____:____:____:____:____:____ not at all

11. How potent is the language used in the message?

    not at all ____:____:____:____:____:____:____ very potent

APPENDIX D

Attitude Measurement Scale

INSTRUCTIONS:

In this section, we are interested in learning how you feel about vigorous exercise programs.

For each scale, please check the interval that most closely represents your feelings.

Place your check-marks in the middle of lines, not on the boundaries. Be sure you check every scale for every concept; do not omit any. Never put more than one check-mark on a single scale.

Do not try to remember how you checked similar items earlier; make each item a separate independent judgment.

Vigorous Exercise programs are:

good____: ____: ____: ____: ____: ____: ____bad

worthless____: ____: ____: ____: ____: ____: ____valuable

wise____: ____: ____: ____: ____: ____: ____foolish

useless____: ____: ____: ____: ____: ____: ____useful

beneficial____: ____: ____: ____: ____: ____: ____harmful

safe____: ____: ____: ____: ____: ____: ____dangerous

pleasant____: ____: ____: ____: ____: ____: ____unpleasant

healthy____: ____: ____: ____: ____: ____: ____unhealthy

positive____: ____: ____: ____: ____: ____: ____negative

constructive____: ____: ____: ____: ____: ____: ____destructive

awful____: ____: ____: ____: ____: ____: ____wonderful

APPENDIX F

Purpose Statement and Instructions

QUESTIONNAIRE

The purpose of this study is to learn about impressions of a speech and a speaker. You will have the opportunity to read an excerpt from a lecture and then to express your feelings regarding the topic, the way the message was presented, and about the lecturer. There will be instructions from time to time in the survey. Please READ EACH SET OF INSTRUCTIONS CAREFULLY.

We appreciate your help in this study. Thank you for your participation.

APPENDIX G

Introduction

On the next two pages are an excerpt from a lecture. The excerpt is part of a lecture given by Dr. Richard Pelletier at the 1985 Fall Health Symposium at the University of Wisconsin-Milwaukee. Dr. Richard Pelletier is an exercise physiologist. He received his Ph.D. from the University of North Carolina, Chapel Hill. His lecture was presented to physicians, physical therapists, athletic trainers, and other health care practitioners as a part of a new exercise awareness program.

Please read this excerpt and then follow the instructions that come after it.

APPENDIX H

Manipulation Checks

INSTRUCTIONS

Please answer the next questions about the lecturer Dr. Pelletier. Mark the answer that best describes your feelings.

1. How would you characterize Dr. Pelletier's attitude toward vigorous exercise programs?

very favorable____:____:____:____:____:____:____ very unfavorable

2. Do you think Dr. Pelletier is:

( ) Male
( ) Female
( ) I don't know

3. How knowledgeable do you think Dr. Pelletier is about the subject of exercise?

very knowledgeable___:___:___:___:___:___:___ not at all knowledgeable

4. To what extent would you trust Dr. Pelletier?

not at all____:____:____:____:____:____:____ very much

5. How dynamic of a speaker do you think Dr. Pelletier would be?

very dynamic____:____:____:____:____:____:____ not at all dynamic

APPENDIX I

Demographics

INSTRUCTIONS:

Last, we would like to ask you a few questions about yourself and your feelings. Please check the appropriate blanks that best describe you feelings.

1. How knowledgeable do you consider yourself on the issue of exercise?

very knowledgeable ___:___:___:___:___:___:___ not at all knowledgeable

2. How personally important is this issue to you?

very important ___:___:___:___:___:___:___ not at all important

3. Consider the impolications of this issue for men and women in general. How do you rate the relative importance of this issue for women and men?

much more important to men than to women ____:____:____:____:____:____:____ much more important to women than to men

4. What year are you in college?
   - ( ) Freshman
   - ( ) Sophmore
   - ( ) Junior
   - ( ) Senior

5. What is your age range?
   - ( ) 17-18 yrs.
   - ( ) 19-29
   - ( ) 21-22
   - ( ) 23-34
   - ( ) other

6. What is your gender?
   - ( ) Male
   - ( ) Female

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