

Student Work

12-1989

Cigarette Smoking and Its Effect Upon Perceptions of Source Credibility

Cari L. Tokheim
University of Nebraska at Omaha

Follow this and additional works at: <https://digitalcommons.unomaha.edu/studentwork>

 Part of the [Communication Commons](#)

Please take our feedback survey at: https://unomaha.az1.qualtrics.com/jfe/form/SV_8cchtFmpDyGfBLE

Recommended Citation

Tokheim, Cari L., "Cigarette Smoking and Its Effect Upon Perceptions of Source Credibility" (1989).
Student Work. 331.

<https://digitalcommons.unomaha.edu/studentwork/331>

This Thesis is brought to you for free and open access by DigitalCommons@UNO. It has been accepted for inclusion in Student Work by an authorized administrator of DigitalCommons@UNO. For more information, please contact unodigitalcommons@unomaha.edu.

Cigarette Smoking and Its Effect
Upon Perceptions of Source Credibility

A Thesis
Presented to the
Department of Communication
and the
Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
University of Nebraska at Omaha

by
Cari L. Tokheim
December, 1989

UMI Number: EP72955

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI EP72955

Published by ProQuest LLC (2015). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.

All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

THESIS ACCEPTANCE

Accepted for the faculty of the Graduate College,
University of Nebraska, in partial fulfillment of the
requirements for the degree Master of Arts, University
of Nebraska at Omaha.

COMMITTEE

[Signature] Communication
Name Department

[Signature] Communication
[Signature] Secretary

[Signature]
Chairman
11-29-89
Date

TABLE OF CONTENTS

	Page
ABSTRACT.....	iii
ACKNOWLEDGMENTS.....	v
CHAPTER	
I. INTRODUCTION.....	1
II. REVIEW OF LITERATURE.....	3
Research on the Attitudes Toward Smoking.....	3
Research on Physical Attractiveness.....	7
Research on Source Credibility.....	12
Statement of the Problem.....	16
Research Questions.....	18
III. METHODOLOGY.....	19
Scales for Measuring Source Credibility.....	19
Subjects.....	19
Instruments and Procedures.....	20
IV. RESULTS.....	22
V. DISCUSSION.....	26
Summary.....	26
Conclusions.....	27
Implications for Future Research.....	30
REFERENCES.....	32
APPENDIXES.....	36
Appendix A: McCroskey and Jenson Bipolar Adjectives Used in the Scales.....	36
Appendix B: Scales Used for the Study.....	37
Appendix C: Models Used for the Study.....	39

ABSTRACT

This thesis examined the effect of cigarette smoking on perceptions of source credibility. Twenty-five bi-polar adjectives were used to measure five dimensions of credibility (competency, character, sociability, composure, and extroversion) developed by McCroskey and Jenson. Subjects recruited from students enrolled at the University of Nebraska at Omaha (n = 272) were assigned one of four versions of a photograph depicting either a male or female model holding a cigarette, or those same models in identical photographs with the cigarette removed. Subjects were then asked to complete the credibility scales, based upon the person depicted in the photograph.

Results from the study indicated that overall, the models shown holding the cigarette received significantly lower credibility ratings than when photographed without the cigarette on the dimensions of competency, character, and composure. Smoking models received significantly higher credibility ratings on the extroversion dimension.

Data collected from subjects who smoked and subjects who did not smoke were then analyzed separately. Results indicated that nonsmoking subjects rated nonsmoking models significantly higher on the dimensions of competency,

character, and composure and rated smoking models significantly higher on the extroversion dimension. Smoking subjects assigned the nonsmoking model higher credibility ratings than the smoking model on all of the dimensions except extroversion. Of the four remaining dimensions which favored the nonsmoker, only composure showed a significant difference at $p < .05$.

ACKNOWLEDGMENTS

I would like to express my thanks to Dr. John Wanzenried, Dr. Chuck Powell, and Dr. Mike Sherer for contributing their time and expertise, making completion of this thesis possible. A special thank you to Dr. John Wanzenried for believing in me and giving me the encouragement and support I needed to see this project through to the end.

Thank you also to my family and friends, especially my husband Rich, whose love makes completing this thesis all the more worthwhile.

CHAPTER I

INTRODUCTION

The effect of cigarette smoking on the attitudes of others has generally been limited to studies examining the effect of smoking on perceptions of attractiveness. This research has indicated that nonsmokers are perceived to be more physically and interpersonally attractive than smokers (Bleda and Sandman, 1977; Polivy, Hackett, and Bycio, 1979; Dermer and Jacobsen, 1986).

Aside from a person's sexual identity, his or her physical appearance is the most easily observed characteristic accessible to other during social interaction (Dion, Berscheid, and Walster, 1972). The characteristics that people ascribe to others based upon their physical appearance has served as the focus of numerous studies which have indicated that physically attractive individuals are judged more positively than physically unattractive individuals (e.g., Byrne, London, and Reeves, 1968; Stroebe, Insko, Thompson, and Layton, 1971; Dion, et al., 1972). These judgements often affect how people are treated.

Physical attractiveness and its effect on source credibility has rarely been studied in the social science

research (Patzner, 1985, p. 185). Despite this, there exists both theoretical and empirical support which suggests that certain elements of source credibility may be influenced by physical attractiveness (p. 185).

The lack of research examining the effect of physical attractiveness upon source credibility make this a viable area for study. The purpose of this thesis is to explore the relationship between cigarette smoking (which influences perceptions of attractiveness) and its effect upon source credibility.

CHAPTER II

REVIEW OF THE LITERATURE

A. Research on Attitudes Toward Smoking

Within the last twenty years attitudes toward smoking and smokers have undergone a dramatic change (Dermer and Jacobsen, 1986, p. 702; Gonzales and Edmonson, 1988). Once thought of as socially acceptable behavior, smoking is now seen as deviant, especially among upper-middle-class people (Gonzales and Edmonson, 1988).

Despite the shift in attitudes toward smoking, due in large part to the Surgeon General's report on the health risks associated with it, the tobacco industry continues to peddle its wares, spending over \$2 billion a year on advertising alone (Altman, Slater, Albright, and Maccoby, 1986, p. 96). While surveys show that overall, Americans are smoking less, smoking among the less affluent and less educated appear to be on the rise (Gonzales and Edmonson, 1988, p. 36). Contrary to what the tobacco advertisers would have one believe, that smokers are socially affluent and well educated, the average cigarette consumer is oftentimes neither of these (Gonzales and Edmonson, 1988).

Nonetheless, public opinion has definitely shifted against smoking. This is evident by increases in the number of organizations, airlines, and restaurants which have gone "smoke-free."

The shift in public sentiment against smoking has produced what appears to be a certain amount of prejudice against smokers by nonsmokers (Bleda and Sandman, 1977; Shor and Williams, 1978; Polivy, et al., 1979). This prejudice may be due in part to the adverse physical reactions many nonsmokers experience in the presence of smokers (Jones, 1978).

Nonsmoking subjects who are exposed to secondary smoke show significantly greater anxiety levels than when exposed to clean air conditions (Jones, 1978, p. 126). Subjects report feeling more worried, tense, high strung, and easily rattled when exposed to smoke-filled conditions (p. 126). Coupled with this, many nonsmokers feel at an interpersonal disadvantage in the company of smokers because they fear that smokers will become angry or perceive them as social oddballs if asked to refrain from smoking (Shor and Williams, 1978, p. 271).

While research exploring the physical effects of smoking upon both participants and those exposed to it

second-hand is plentiful, research that looks at attitudes toward smokers themselves is somewhat limited (Polivy, et al., 1979, p. 401). The research that has been done, however, indicates that nonsmokers are perceived more favorably than smokers (e.g., Bleda and Sandman, 1977; Hofstra, 1978; Polivy, et al., 1979; Dermer and Jacobsen, 1986).

Attitudes toward smokers were initially studied by Bleda and Sandman (1977). In staged encounters with both smoking and nonsmoking partners, nonsmoking subjects rated their nonsmoking partners to be more attractive than their smoking partners. Conversely, smoking subjects rated their smoking partners to be more attractive than their nonsmoking partners (p. 455).

These findings were later supported by Polivy and his associates (1979). In identical photographs depicting models once with a cigarette and again in the same pose without a cigarette, nonsmoking subjects rated models without cigarettes significantly more attractive than those with cigarettes and visa versa (Polivy, et al., 1979, p. 402).

Similar results were obtained in a study employing like methods (identical photographs with and without smoking material) conducted by Dermer and Jacobsen (1986). In their

initial study using college students as subjects, the researchers found that models previously judged to be of average attractiveness were judged to be less attractive when photographed with smoking material (p. 712). In addition, the college student participants also judged the smoking models to be less considerate, calm, disciplined, honest, healthy, well-mannered, and happy (p. 719). It should be noted that these attributes are similar to those used to measure source credibility (i.e., calm - anxious, reliable - unreliable, believable - unbelievable, sociable - unsociable, cheerful - gloomy) (Berlo, Lemert, and Mertz, 1969, pp. 568, 569, & 571; McCroskey and Jenson, 1975).

A follow-up experiment was later conducted using subjects recruited from a municipal airport in order to gather data from subjects who were older than the subjects used in the university study (Dermer, et al., 1986). Results from the airport study indicated that differences in attractiveness ratings for smokers and nonsmokers were considerably less significant than those obtained from the university study (p. 719). Dermer and Jacobsen posit that this difference may be because the subjects used in the university study have had more exposure to anti-smoking information, while many of the subjects who participated in the airport study may have been exposed to more advertising,

etc., which has glamorized smoking. (p. 720).

Dermer and Jacobsen recognized the "handicapping effect" of smoking in that it reduces the positivity of interpersonal evaluations on the part of nonsmoking subjects (1986, p. 720). The researchers findings support those of their predecessors who concluded that the presence of smoking material has a detrimental effect on nonsmoking subject's evaluations of smokers. Similar results were obtained by Delaney in his study looking at childrens' perceptions of adult smokers (1978). Delaney found that children also perceive smokers less positively than they do nonsmokers (p. 1539-B).

B. Research on Physical Attractiveness

Physical attractiveness is one of the most visible traits easily accessible to others during social interaction. Often, people use physical attractiveness as an informational cue in formulating judgements about others.

The effects of physical attractiveness has been a popular area of research since the mid-1960's (Patzner, 1985). Developing out of this research has come the physical attractiveness stereotype--that "what is beautiful is good" (Dion, Berscheid, and Walster, 1972). Generally, the more physically attractive a person is, the more positively he or she is perceived.

The importance we place on physical attractiveness influences many aspects of our daily lives. Certainly it influences our buying habits when we succumb to advertisers who influence us to use the products that will make us "beautiful." If we are dissatisfied with our appearance, plastic surgeons are there to give us that change which will make a difference in the way we feel about ourselves. The influence of physical attractiveness can even be seen in the partners we choose to date and marry or the people we hire to work for us (Walster, Aronson, Abrahams, and Rottmann, 1966; Bardack and McAndrew, 1985; Dipboye, Arvey, and Terpstra, 1977; Snyder, Berscheid, and Matwychuk, 1988).

Walster and her associates examined the importance of physical attractiveness in dating behavior and found that an individual's level of attractiveness played an important role in the selection of partners he or she chooses to date (1966). Their data suggests that the more attractive and personable a person is, the more attractive he or she expects his or her date to be (1966, p. 511). Additionally, they concluded that physical attractiveness appears to be the overriding determinant of liking. This was later corroborated by Stroebe, Insko, Thompson, and Layton (1971); Green, Buchanan, and Heuer (1984); and Krebs and Adinolfi (1975).

The influence of physical attractiveness not only plays an important role in who we choose to spend the rest of our lives with, but also who we choose to spend an 8-hour workday with as well. In a study designed to assess the influence of physical attractiveness in personnel selection, Bardack and McAndrew found that an attractive person was hired significantly more often than an unattractive person (1985, p. 778).

Prior to the study conducted by Bardack and McAndrew, Dipboye, Arvey, and Terpstra examined the effect of physical attractiveness on resume' evaluations, and subsequently job selection (1977). The researchers found that a certain amount of discrimination against unattractive individuals seemed to emerge as attractive individuals were preferred over unattractive ones in personnel selection (p. 293). Heilman and Saruwatari, however, found physical attractiveness to be more advantageous for men than women especially when seeking nonmanagerial positions (1979). Dipboye, et al., proposed that this discrimination may be partly caused by the tendency for subjects to attribute more favorable personality traits to attractive people (1977).

The effects of physical attractiveness on interpersonal attraction has been widely accepted by the scientific community. Byrne, London, and Reeves took this one step

further (1968). Their initial finding, that interpersonal attraction was greater toward unattractive strangers, is in line with the findings of many of their colleagues. In a second experiment, Byrne, et al., found that both attitude similarity-dissimilarity and physical attractiveness influenced interpersonal attraction. This was later supported by Stroebe, et al. (1971). Their conclusions suggest that we are more attracted to individuals with attitudes similar to our own.

The work by Byrne et al. and Stroebe, et al. is helpful in understanding the research dealing with attitudes toward smokers discussed in the previous section. The research indicated that smokers tend to perceive other smokers more favorably than nonsmokers and nonsmokers favor other nonsmokers over smokers. If one has a negative attitude toward smoking it may influence his attraction to people who smoke.

The tendency for people to make judgements about others based upon certain visible characteristics has been addressed in much of the social science literature. Thorton originally explored the effect of eyeglasses on perceptions of personality traits (1943 & 1944). He found that subjects rated people wearing eyeglasses to be more intelligent, dependable, industrious, and honest than when they were not

wearing glasses (1943, p. 146, 147). Nearly fifty years later in a related study, Edwards found that people who wore eyeglasses were still perceived to be more intelligent but less attractive (Edwards, 1987, p. 590).

A study by Kenny and Fletcher looking at bearded men showed that men with beards were judged more favorably than those without beards. Men with beards were judged to be more enthusiastic, sincere, generous, extroverted, masculine, inquisitive, and stronger than nonbearded men (1973, p. 413). Additionally, men who sport beards were described as being more intelligent, individualistic, outspoken, sensitive, and concerned about social problems than those without beards (p. 414).

Physical attractiveness is yet another characteristic often used to attribute personality traits to others. Research by Dion, et al., provided support for the physical attractiveness stereotype--the "what is beautiful is good"(1972). They found that physically attractive individuals were perceived to possess personality traits which would make them socially desirable and were expected to lead more fulfilling lives (p. 288). They were also perceived to be more successful (Dion, et al., 1972; Barnes and Rosenthal, 1985). Additional support for the "what is beautiful is good" phenomenon can be found in research

conducted by Saladin, Saper, and Breen (1988). Results from this study indicate that subjects rated unattractive individuals as more likely to commit murder and armed robbery than attractive individuals (p. 251).

Physically attractive persons are perceived to be more sexually warm and responsive, sensitive, kind, interesting, strong, poised, modest, sociable, intelligent, and outgoing than those of less attractiveness (Berscheid and Walster, 1977; L. Berkowitz [Ed]). Miller found that the physically attractive were judged to more likable, friendly, confident, sensitive, and flexible than the physically unattractive (1975). Many traits attributed to the physically attractive are similar to those used in scales to measure source credibility. [See Appendix A].

C. Research on Source Credibility

Source credibility and its effect upon communication has been an area of frequent study by researchers in the fields of psychology, speech, sociology, and education (Anderson and Clevenger, 1963). Source credibility is thought of by many to be the single most important element in communication because, in many cases, an individual's acceptance of information is based in part on his or her impression of the source (Berlo, Lemert, and Mertz, 1969; McCroskey, Larson, and Knapp, 1971).

The term source credibility is used to represent the attitude of the receiver toward the source (McCroskey, et al., p. 80, 1971). Because attitudes are often subject to change, it is important to note that perceptions of credibility may also change over time, from receiver to receiver, or from topic to topic (p. 83, 84).

Source credibility has been recognized to be a multidimensional attitude, and thus, attempts to pinpoint the elements which comprise it have often been controversial. One of the earliest attempts to isolate the dimensions of source credibility can be traced to Aristotle. Good sense, good moral character, and good will were qualities that Aristotle felt could help enhance a communicator's persuasiveness (Whitehead, 1968). Hovland, Janis, and Kelley proposed that credibility was the product of two different components--a source's expertness and his trustworthiness (1953, p. 21). Still, attempts by other researchers to index the components of source credibility by using a series of semantic differential scales have yielded somewhat different results. McCroskey identified authoritativeness and character as the two significant components comprising source credibility (1966). In an extension of Hovland's earlier work, Berlo, Lemert, and Mertz isolated the dimensions of safety, qualification, and

dynamism as the elements that comprise source credibility. Currently, researchers who study source credibility often use the credibility scale developed by McCroskey and Jenson which isolate the factors of competence, extroversion, composure, character, and sociability as the components of source credibility (1975).

Factors which affect source credibility have been studied in a variety of different contexts across a wide range of disciplines (Anderson and Clevenger, 1963). Much of the credibility research has concentrated on factors which affect initial credibility, or the credibility of the source before any communication occurs. McCroskey and his associates distinguish initial credibility from either derived or terminal credibility. Derived credibility is the credibility of the source produced during communication. Finally, terminal credibility is the source's credibility once the communication ceases (McCroskey, et. al., 1971, p. 84, 85).

The literature dealing with physical attractiveness shows that a person's level of attractiveness has an effect on certain aspects of his or her perceived credibility. Very few studies, however, have used scales designed specifically for measuring credibility to examine the relationship between physical attractiveness and perceptions

of credibility overall (Patzner, 1985). What limited research there is generally does not link physical attractiveness and "credibility."

In a study designed to look at the effects of physical attractiveness on persuasive communication, Aronson and Mills found that an attractive communicator who openly states his or her desire to influence the views of the audience actually increase the effectiveness of his or her communication (1955, p. 175). Aronson and Mills suggest that the attractive communicator may be perceived as more exuberant, vivacious, and lively which may increase his or her perceived attractiveness and thus, increase his or her influence over the audience p. 177).

Attire is often used as a means by which receivers make inferences about others. Judgements about our age, socioeconomic status, occupation, group affiliation, social and political attitudes, religious beliefs, and cultural identification are often made on the basis of the clothes and artifacts we adorn ourselves with. Recognizing the impact that clothing has upon others' impression of us, Basset examined the influence of source attire on perceptions of credibility (1979). Both male and female sources dressed in high status clothing scored higher on the competency factor than when dressed in low status clothing.

Ratings on the composure factor, however, were unaffected. The results of Basset's study indicate that judgements about a source's credibility are often made on the basis of dress (1979). While much remains unknown about the effect of physical attractiveness on source credibility one study by Patzer suggests that a sources level of attractiveness may affect how he or she is perceived by receivers (1983). Patzer hypothesized that communicators of higher levels of physical attractiveness would be perceived to be more trustworthy and of higher expertise, as well as better liked by receivers (p. 231).

Results of Patzer's study indicated that indeed, physical attractiveness did have an effect on a communicator's perceived trustworthiness and expertise. Additionally, the attractive communicator was better liked by receivers than was the unattractive communicator (p. 238).

Statement of the Problem

While Patzer's research provides a very worthwhile beginning for research studying the effect of physical attractiveness upon source credibility, much more research in the area is still needed. Because source credibility is based upon receiver impressions, a relationship between the two appears plausible.

The physical attractiveness literature clearly shows that physical attractiveness has an impact on impression formation. The more physically attractive a person appears, the more positively he or she is perceived by others. Research by Byrne, et al., however, indicates that impression formation is oftentimes not based upon physical attractiveness alone, but is a product of both physical attractiveness and attitude similarity-dissimilarity (1968). Thus, a person's perception of a smoker may be influenced by his or her attitude toward smoking as well as his or her perception of the smoker's level of physical attractiveness. If a person who does not smoke and has a negative attitude toward smoking were to compare a non-smoker to a smoker, he or she may perceive the smoker to be less physically attractive than the nonsmoker. Likewise, a person who smokes and has a positive attitude toward smoking may perceive other smokers to be more physically attractive than non-smokers. The literature which has examined the effect of smoking on perceptions of physical attractiveness has indicated that smokers will indeed be judged less attractive than non-smokers. Perceived attractiveness plays an important role in impression formation. The physically attractive are perceived to possess more positive personality traits than the physically

unattractive. Many of these traits are similar to those used to measure source credibility. Thus, a connection may be drawn between smoking, which influences perceptions of attractiveness, and its effect upon perceptions of credibility. Based upon the research presented up to this point, the following research questions are proposed:

Statement of Research Questions

1. Will subjects rate nonsmoking models higher than smoking models on each of the five dimensions of source credibility (competency, character, composure, extroversion, and sociability) as developed by McCroskey and Jenson?
2. Will subjects who smoke rate smoking models higher than nonsmokers on each of the five dimensions of source credibility?
3. Will subjects who do not smoke rate nonsmoking models higher than smokers on each of the five dimensions of source credibility?

CHAPTER III

METHODOLOGY

A. Scales for the Measurement of Source Credibility

Because source credibility is a multidimensional construct, attempts to measure it have often been controversial. Throughout the years several different scales to measure credibility have been developed. As McCroskey points out, however, many of the dimensions of credibility identified in some literature may correspond with those labelled differently in other literature (McCroskey, 1966, p. 66). For the purposes of this study, the semantic differential scales used to measure credibility employed by McCroskey and Jenson will be used. The McCroskey and Jenson scales use 25 bi-polar adjectives to measure five dimensions of credibility: competency, character, sociability, composure, and extroversion (1975). [See Appendix A]

B. Subjects

The subjects used for the present study were recruited from a sample of students enrolled at the University of Nebraska at Omaha. Because of easy access to a college student population, this sample was selected primarily as a

matter of convenience. A total of 272 subjects were used in order to insure an equal distribution of subjects for each experimental condition. The sample used in the study consisted of both smokers and nonsmokers. In the initial pool of subjects the number of nonsmokers severely outweighed the number of smokers.

As a result, additional smoking subjects were needed. These subjects were solicited from the smoking section of the school cafeteria where the subject's smoking status was clearly visible and the researcher did not have to inquire about it.

C. Instrument and Procedures

For the experiment, four 3 x 5 black and white photographs of one male and female model were used. Models were photographed with a lit cigarette in their hand. As a control there were identical photographs of each model with the cigarette removed. Both models were well-dressed in conservative, business-like attire (i.e., dark suit, tie, hair neatly combed).

Prior to the experiment, the investigator introduced herself as graduate student in the communication department conducting research for a thesis. Participants were then allowed to ask questions regarding the experiment. Once this was completed, students were asked to refrain from

talking until all subjects had completed the scales.

Twenty-five semantic differential scales using bi-polar adjectives measuring the five dimensions of source credibility developed by McCroskey and Jenson were administered to the 272 subjects. The scales were later given a numerical value between 1 and 5 with "1" representing the lowest rating and "5" representing the highest. [Appendix B]

Each scale was set up so that the highest value alternated between the "high" and "low" position. For example, on question #1 the "high" position was located on the far right end of the scale while on question #2, the "high" position was located to the far left of the scale. This was done to prevent subjects from simply going down the set of scales and assigning either all high or all low values based only upon their position on the scales.

unqualified _____ qualified
 expert _____ inexperienced

Each participant in the study was given one of the four versions of the photograph. [Appendix 3] The subjects were then asked to complete 25 semantic differential scales based upon the person depicted in the photograph. Each participant was allowed as much time as needed in order to complete the scales.

CHAPTER IV

RESULTS

The scales completed by subjects who looked at one of the two photographs depicting non-smoking models (male and female) were compared to those completed by subjects who viewed one of two photographs depicting the same models with a cigarette in their hand. [Appendix C] T-Tests were used to determine significant difference between the ratings for the nonsmoking models and the smoking models. For the first research question, "Will subjects rate non-smoking models higher than smoking models on each of the five dimensions of source credibility?," mean scores were significantly higher for the non-smoking models on the dimensions of competency ($p < .01$), character ($p < .01$), and composure ($p < .001$). On the dimension of extroversion, mean scores were higher for the smoking model at a significance level of $p < .01$. Smoking models were also rated higher on the sociability dimension, however, the difference was not significant. [TABLE 1]

TABLE I

Group Perceptions of Female and Male Nonsmokers (FMNS)
and Female and Male Smokers (FMS):
Mean Values and F Values as Measured by
Scales Constructed From McCroskey and Jenson
Bipolar Adjectives

Scales		\bar{x}	F Value
Competency	FMNS	31.8*	2.40
	FMS	30.3	
Character	FMNS	13.1**	3.13
	FMS	12.0	
Sociability	FMNS	12.2	-.19
	FMS	12.3	
Composure	FMNS	14.7***	4.67
	FMS	13.0	
Extroversion	FMNS	16.3	-3.10
	FMS	17.6**	

*p<.05

**p<.01

***p<.001

FMNS n = 138

FMS n = 134

Little support was obtained for the second research question, "Will subjects who smoke rate smoking models higher than nonsmoking models on each of the five dimensions of source credibility?" Mean scores taken from smoking subjects were higher for the smoking models on only 2 of the 5 dimensions--sociability and extroversion. Neither of the differences were significant.

Mean scores on the remaining three dimensions,

competency, character, and composure, remained higher for the nonsmoking model, with composure the only dimension to show a significant difference at the $p < .05$ level. [TABLE 2]

TABLE II

Group Perceptions of Female and Male Nonsmokers (FMNS) and Female and Male Smokers (FMS) by Smoking Subjects as Measured by Scales Constructed by McCroskey and Jenson Bipolar Adjectives

Scales		\bar{x}	F Value
Competency	FMNS	31.3	1.13
	FMS	30.2	
Character	FMNS	12.8	.53
	FMS	12.6	
Sociability	FMNS	12.3	-.69
	FMS	12.7	
Composure	FMNS	14.5*	2.25
	FMS	13.3	
Extroversion	FMNS	16.8	-.92
	FMS	17.4	

* $p < .05$ ** $p < .01$ *** $p < .001$

FMNS n = 64
FMS n = 54

The third research question, "Will subjects who do not smoke rate nonsmoking models higher than smoking models on each of the five dimension of source credibility?" was partially supported. Mean scores by nonsmoking subjects were higher for the non-smoking model on 4 of the 5 credibility dimensions. The dimensions which showed

significant differences were competency ($p < .05$), character ($p < .001$) and composure ($p < .001$).

Nonsmoking models were assigned a higher mean score than the smoking models on the sociability dimension, however, the difference was not significant. On the extroversion dimension, nonsmoking subjects rated the smoking model higher than the nonsmoking model with a mean difference of $p < .001$. [TABLE 3]

TABLE III

Group Perceptions of Female and Male Nonsmokers (FMNS) and Female and Male Smokers (FMS) by Non-smoking Subjects as Measured by Scales Constructed by McCroskey and Jenson Bipolar Adjectives

Scales		\bar{x}	F Value
Competency	FMNS	32.3*	1.13
	FMS	30.4	
Character	FMNS	13.2***	3.67
	FMS	11.6	
Sociability	FMNS	12.2	.25
	FMS	12.0	
Composure	FMNS	14.9***	4.19
	FMS	12.9	
Extroversion	FMNS	15.9	-3.25
	FMS	17.8***	

* $p < .05$ ** $p < .01$ *** $p < .001$

FMNS n = 73
FMS n = 81

CHAPTER V
DISCUSSION
Summary

The effect of cigarette smoking upon perceptions of source credibility was the focus of this study. Twenty-five bi-polar adjectives were used to determine the effect of smoking on each of the five dimensions of source credibility as developed by McCroskey and Jenson.

The results indicate that overall, nonsmokers were perceived to be more credible than smokers on the dimensions of competency, character, and composure. Smokers, on the other hand, were rated significantly higher on the dimension of extroversion.

When data collected from nonsmoking subjects were analyzed separately from that collected from smoking subjects, nonsmoking subjects rated nonsmoking models significantly higher than smoking models on the dimensions of competency, character, and composure. Once again, however, nonsmoking subjects rated smoking models significantly higher on the extroversion dimension.

Like their nonsmoking counterparts, subjects who smoked rated nonsmoking models higher on 4 of the 5 dimensions of credibility. Only one dimension, composure, showed a

significant difference at $p < .05$. Smoking subjects also rated the smoking model higher than the nonsmoking model on the dimension of extroversion. The difference, nonetheless, remained non-significant.

Conclusions

Cigarette smoking appears to have an effect on perceptions of credibility. Based upon the findings of this study, people who smoke cigarettes are perceived to be less credible, overall, than people who do not smoke. In light of increasing negative public sentiment against smoking and smokers, the results do not appear surprising.

Little support was obtained for the second research question which proposed that smoking subjects would perceive the smokers to be more credible than the nonsmokers. Smoking subjects assigned higher credibility ratings to the nonsmokers than they did the smokers. This particular finding appears surprising when one considers the theory by Byrne and his associates which proposes that impression formation is a product of both perceptions of attractiveness and attitude similarity-dissimilarity (1968).

Prior studies have indicated that smokers perceive other smokers to be more physically attractive than nonsmokers. Likewise, nonsmokers perceive other nonsmokers to be more physically attractive than smokers (Bleda and

Sandman, 1977; Polivy, et al., 1979; Dermer and Jacobsen, 1986). Subjects who identified themselves as smokers were expected to assign higher credibility ratings to the smokers because they would judge the smokers more physically attractive than the nonsmokers and perceive the smokers as possessing attitudes similar to their own concerning smoking. Surprisingly, this was not the case as the subjects who smoked assigned higher credibility ratings to the nonsmoking models.

Nonsmoking subjects, nonetheless, did assign higher credibility ratings to the nonsmoking models as expected. In light of the theory posited by Byrne and his associates, one might speculate that the nonsmoking subjects assigned higher credibility ratings to the nonsmokers not only because they found them more physically attractive, but also because they identified more with the nonsmokers due to perceived attitude similarity toward smoking. The differences in credibility ratings they assigned to the smokers and nonsmokers may be reflective of this.

Smoking models received a higher rating on the extroversion dimension. In the November/December 1989 issue of Phillip Morris Magazine, a reader writes, "A couple of years ago, we [my wife and I] booked passage on an Alaskan cruise. Shortly after we made the reservation, we received

a questionnaire asking for our preferences as to size of dining table and whether we wanted smoking or nonsmoking accommodations. When we arrived at our first dinner, we noticed that one of the four couples was not engaged in smoking, so we asked them if an error had been made in their table location. We were highly amused at their response: 'We made reservations at a smoker's table, because smokers are much more interesting conversationalists than nonsmokers.'

This example represents one view of what might be considered an "extroverted" smoker--that of an interesting and outgoing conversationalist. The bi-polar adjectives that McCroskey and Jenson use to measure extroversion are: meek-aggressive, quiet-verbal, introverted-extroverted, timid-bold, and silent-talkative. It is difficult, however, to determine which of these adjectives represent the "positive" and which represent the "negative." While some subjects may have had a positive image of an "extroverted" smoker in mind, similar to that of the reader, other subjects may have had a more "negative" image in mind, more along the lines of overbearing and "pushy." Thus, it would be difficult to draw any conclusions from this particular finding.

Implications for Future Research

The results of this study support that of past research which has indicated that many of the non-verbal artifacts we carry with us (in this case, cigarettes), as well as our level of attractiveness, impact on how we are perceived by others. Sometimes the impact is felt greater by one sex than it is by the other (Dipboye, et al., 1977).

In light of this, further research could study the effect of cigarette smoking on perceptions of credibility between men and women. By doing so, it may be possible to determine whether cigarette smoking has a greater or less impact on one sex than it does the other.

Another area for future research might examine the differences between credibility ratings of smokers by subjects over the age of 40 and those under the age of 40. Taking into account that people under the age of 40 have been exposed to a barrage of anti-smoking material preaching the dangers of tobacco, a difference might exist between the ratings given by subjects over 40 who grew up in an era when the dangers of smoking were virtually unknown.

There seems to be a gap in research dealing with the psychological effect of cigarette smoking. Future research could explore areas that this study has only brushed against. With many organizations now going "smoke-free" and

smokers and nonsmokers battling it out over their "rights" the controversy will probably continue to escalate until one side becomes exhausted. If those who speculate that we will be living in a smoke-free environment by the year 2000 are right, the time for research is now, for who knows, in 10 years, smoking may be a thing of the past...

REFERENCES

- Altman, D., Slater, M., Albright, C., & Maccoby, N. (1986). How an unhealthy product is sold: cigarette advertising in magazines, 1960-1985. Journal of Communication, 37, pp. 95-106.
- Anderson, K. and Clevenger, T. (1963). A summary of experimental research in ethos. Speech Monographs, 30, 59-78.
- Aronson, E. and Mills, J. (1965). Opinion change as a function of the communicator's attractiveness and desire to influence. Journal of Personality and Social Psychology, 1, 173-177.
- Bardack, N. and McAndrew, F. (1985). The influence of physical attractiveness and manner of dress on success in a simulated personnel decision. The Journal of Social Psychology, 125, 777-778.
- Barnes, M. and Rosenthal, R. (1985). Interpersonal effects of experimenter attractiveness, attire, and gender. Journal of Personality and Social Psychology, 48, 435-446.
- Berlo, D.K., Lemert, J.B., & Mertz, R.J. (1969). Dimensions for evaluating the acceptability of message sources. Public Opinion Quarterly, 33, 536-576.
- Berscheid, E. and Walster, E. (1974). Physical attractiveness. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology, 7, 158-215.
- Bleda, R.R. and Sandman, P.H. (1977). In smoke's way: Socioemotional reactions to another's smoking. Journal of Applied Psychology, 62, 452-458.
- Byrne, D., London, O., & Reeves, K. (1968). The effects of physical attractiveness, sex and attitude similarity on interpersonal attraction. Journal of Personality, 36, 259-270.
- Carll, E.K. (1978). Perception of the personal attributes of male and female smokers as a function of the sex and smoking status of the observer. Dissertation Abstracts International, 38, 5641-B.

- Delaney, J.W. (1978). Perception of adult smokers by school children. Dissertation Abstracts International, 39, 1539-B.
- Dermer, M.L. and Jacobsen, E. (1986). Some potential negative social consequences of cigarette smoking: Marketing research in reverse. Journal of Applied Social Psychology, 16, 702-725.
- Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. Journal of Personality and Social Psychology, 24, 285-290.
- Dipboye, R., Arvey, R., & Terpstra, D. (1977). Sex and physical attractiveness of raters and applicants as determinants of resume' evaluations. Journal of Applied Psychology, 62, 288-294.
- Edwards, K. (1987). Effects of sex and glasses on attitudes toward intelligence and attractiveness. Psychological Reports, 60, 590.
- Gonzales, M. and Edmonson, b. (1988). The smoking class. American Demographics, 10, 34, 35, 58.
- Green, S., Buchanan, D., & Heuer, S. (1984). Winners, losers and choosers: A field investigation of dating initiation. Personality and Social Psychology Bulletin, 10, 502-511.
- Heilman, M. and Saruwatari, L. (1979). When beauty is beastly: The effects of appearance on job applicants in managerial and nonmanagerial jobs. Organizational Behavior and Human Performance, 23, 360-372.
- Hovland, C.I. and Weiss, W. (1951-52). The influence of source credibility on communicator effectiveness. Public Opinion Quarterly, 15, 635-650.
- Hovland, C.I., Janis, I.L., & Kelley, H.H. (1953). Communication and Persuasion. New Haven, CT. Yale University Press.
- Jones, J.W. (1978). Adverse emotional reactions of nonsmokers to secondary cigarette smoke. Environmental Psychology and Nonverbal Behavior, 3, 125-127.

- Kassay, L.E. (1978). Perception of the personal attributes of male and female smokers as a function of the sex and smoking status of the observer. Dissertation Abstracts International, 5641-B.
- Kenny, C.T. and Fletcher, D. Effects of beardedness on person perception. Perceptual and Motor Skills, 37, 413-414.
- Knapp, M.L. (1978). Nonverbal Communication in Human Interaction, second edition. New York. Holt, Rinehard, and Winston.
- Krebs, D. and Adinolfi, A. (1975). Physical attractiveness, social relations, and personality style. Journal of Personality and Social Psychology, 31, 245-253.
- McCroskey, J.C. (1966). Scales for the measurement of ethos. Speech Monographs, 33, 65-72.
- McCroskey, J.C., Larson, C.E., & Knapp, M.L. (1971). An Introduction to Interpersonal Communication. Englewood Cliffs, New Jersey, Prentice-Hall, Inc., pp. 80-91.
- McCroskey, J.C. and Jenson, T.A. (1975). Images of mass media news sources. Journal of Broadcasting, 19, 241-243.
- Patzer, G.L. (1983). Source credibility as a function of physical attractiveness. Journal of Business Research, 11, 229-241.
- Patzer, G.L. (1985). The Physical Attractiveness Phenomena. New York: Plenum Press.
- Philip Morris Magazine, 4, 25, (1989).
- Polivy, J., Hackett, R., & Bycio, P. (1979). The effect of perceived smoking status on attractiveness. Personality and Social Psychology Bulletin, 5, 401-404.
- Poll, A. (1976). Through a glass darkly. Dun's Review, 107, 77-78.
- Saladin, M., Saper, Z., & Breen, L. (1988). Perceived attractiveness and attributions of criminality: What is beautiful is not criminal. Canadian Journal of Criminology, 30, 251-259.

- Shor, R.E. and Williams, D.C. (1978). Normative beliefs about tobacco smoking on campus in relation to an exposition of the viewpoint of the nonsmoker's rights movement. Journal of Psychology, 100, 260-274.
- Snyder, M., Berscheid, E., & Matwychuk, A. (1988). Orientations toward personnel selection: Differential reliance on appearance and personality. Journal of Personality and Social Psychology, 54, 972-979.
- Stroebe, W., Insko, C., Thompson, V., & Layton, B. (1971). Effects of physical attractiveness, attitude similarity, and sex on various aspects of interpersonal attraction. Journal of Personality and Social Psychology, 18, 79-91.
- Thorton, G.R. (1943). The effect upon judgments of personality traits of varying a single factor in a photograph. Journal of Social Psychology, 18, 127-148.
- Thorton, G.R. (1944). The effects of wearing glasses upon judgments of personality traits of persons seen briefly. Journal of Applied Psychology, 28, 208-207.
- Walster, E., Aronson, V., Abrahams, D., & Rottmann, L. (1966). Importance of physical attractiveness in dating behavior.
- Weir, J.W. (1967). Male student perceptions of smokers. In S.V. Zagona (Ed.), Studies and Issues in Smoking Behavior (151-155). Tucson, Arizona, University of Arizona Press.
- Whitehead, J.L. (1968). Factors of source credibility. Quarterly Journal of Speech, 54, 59-63.

APPENDIX A

McCroskey and Jenson Bipolar Adjectives
Used in the Scales.Competency

unqualified-qualified
inexpert-expert
unreliable-reliable
unbelievable-believable
incompetent-competent
narrow-intellectual
worthless-valuable
uninformed-informed

Character

cruel-kind
unsympathetic-sympathetic
selfish-unselfish
sinful-virtuous

Sociability

unfriendly-friendly
gloomy-cheerful
irritable-good natured
unsociable-sociable

Composure

excitable-composed
anxious-calm
tense-relaxed
nervous-poised

Extroversion

meek-aggressive
quiet-verbal
introverted-extroverted
timid-bold
silent-talkative

APPENDIX B

1.	unqualified	_____	_____	_____	_____	_____	qualified
2.	expert	_____	_____	_____	_____	_____	inexpert
3.	unreliable	_____	_____	_____	_____	_____	reliable
4.	believable	_____	_____	_____	_____	_____	unbelievable
5.	incompetent	_____	_____	_____	_____	_____	competent
6.	intellectual	_____	_____	_____	_____	_____	narrow
7.	worthless	_____	_____	_____	_____	_____	valuable
8.	informed	_____	_____	_____	_____	_____	uninformed
9.	cruel	_____	_____	_____	_____	_____	kind
10.	sympathetic	_____	_____	_____	_____	_____	unsympathetic
11.	selfish	_____	_____	_____	_____	_____	unselfish
12.	virtuous	_____	_____	_____	_____	_____	sinful
13.	unfriendly	_____	_____	_____	_____	_____	friendly
14.	cheerful	_____	_____	_____	_____	_____	gloomy
15.	irritable	_____	_____	_____	_____	_____	good natured
16.	sociable	_____	_____	_____	_____	_____	unsociable
17.	excitable	_____	_____	_____	_____	_____	composed
18.	calm	_____	_____	_____	_____	_____	anxious
19.	tense	_____	_____	_____	_____	_____	relaxes
20.	nervous	_____	_____	_____	_____	_____	poised
21.	aggressive	_____	_____	_____	_____	_____	meeek
22.	verbal	_____	_____	_____	_____	_____	quiet
23.	introverted	_____	_____	_____	_____	_____	extroverted

24. bold _____ _____ _____ _____ _____ timid
25. silent _____ _____ _____ _____ _____ talkative

APPENDIX C







