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THE MEDIATION OF TELEVISION MESSAGES BY PERSONAL INFLUENCE: AN EXPERIMENTAL PARADIGM

City University of New York PH.D. 1981

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THE MEDIATION OF TELEVISION MESSAGES BY PERSONAL INFLUENCE: AN EXPERIMENTAL PARADIGM

by

Elyse Goldstein

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, the City University of New York.

1981

This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

3 March 1981
date

Stanley Milgram
Chairman of Examining Committee

March 3 1981
date

Martin L Hoffman
Executive Officer

Prof. Stephen Cohen

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Supervisory Committee

The City University of New York

Abstract

THE MEDIATION OF TELEVISION MESSAGES BY PERSONAL INFLUENCE: AN EXPERIMENTAL PARADIGM

by

Elyse Goldstein

Adviser: Professor Stanley Milgram

This thesis introduces a new experimental paradigm for the study of the social mediation of television. Two persons watch television together. One of them, a confederate of the experimenter, makes comments which agree with, or disagree with, a series of television messages (commercials, editorials, etc.) presented on the screen. Our aim was to determine whether the impact of the television messages on the naive viewer would be systematically altered by these comments.

The second issue that was raised concerned the nature of the relationship between the confederate and the subject. Are confederates who are friends of the subject vs. confederates who are strangers, differentially effective as agents of persuasion?

The third issue concerned the television messages. We asked whether a person's influence could be more effective for some types of messages and less effective for others.

An analysis of variance indicated that both the agreement statements and the disagreement statements made

by the confederates significantly altered subjects' responses to the television messages ($p < .01$). Friends were more effective than strangers as agents of influence ($p < .01$) in that friends could significantly alter subjects' responses in two directions (through agreement and disagreement comments), while strangers exerted their greatest effect through disagreement comments. Although both strangers and friends were capable of producing change in subjects' scores and thereby exerting influence, the influence of friends was stronger than that of strangers: they produced more extreme changes in subjects' scores.

In addition, the results indicated that there was no significant effect of type of message. That is, confederates could effectively alter subjects' responses to the television messages regardless of type of message. Thus, our findings indicate that the important variables in the influence process seem to be type of influence (agree, disagree) and source of influence (friend, stranger).

Although television, as the most commanding form of mass media in our time, is often thought of as having enormous influence through its direct impact on large numbers of individuals, this thesis demonstrates that social influence may remain critical: when we view television with others, their influence may significantly alter the effect of television messages.

Acknowledgments

I would especially like to thank my dissertation sponsor, Prof. Stanley Milgram, who helped make social psychological inquiry an exciting and meaningful experience, and who always found time to help me with this thesis and other academic projects that I have undertaken. Prof. Milgram was an outstanding adviser: supportive yet challenging, he provided structure but allowed freedom. His wisdom and insightful comments on this manuscript were particularly valuable.

I also wish to thank the other members of my committee: Prof. Stephen Cohen and Prof. Rolf Meyersohn for their careful reading of this thesis. I thank Prof. Glen Hass and Prof. Gaye Tuchman for serving as readers of this thesis.

Ronna Kabatznick and Joyce Wackenhut served as the two confederates in this experiment and their acting ability and efforts were greatly appreciated.

Peter Harris of the audio-visual department was most helpful in providing and setting up the equipment that was needed in this experiment and most others that I have conducted in the past several years. I thank Lincoln Walters for his technical assistance in the preparation of the edited television tapes.

Special thanks to Dr. Martin Bolton for help with the statistical analysis of the data and for his kindness and support throughout the years I spent in graduate school.

Special thanks to my parents for their support and interest.

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I. INTRODUCTION

1. The Context of Personal Influence

Historically, early media research concentrated on the question of effects and was dominated by a "powerful effects" model. According to this schema, the omnipotent media sent forth persuasive messages to the receptive and waiting masses. By the nineteen-forties and fifties, a viewpoint was offered which imputed more "limited" effects to the media (Klapper, 1960). This shift from a "powerful" to a "limited" effects model was primarily a result of the failure of researchers to obtain empirical evidence showing the effectiveness of the media in producing fundamental changes (Berelson, 1949). Research guided by this "limited effects" model sought to uncover several variables thought to modify the direct impact of the media, e.g. factors of exposure, audience predispositions, and personal influence. It is this last variable, personal influence,[1] and its relation to the mass media, that is the focus of this investigation. We will examine this issue by determining whether, and under what

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[1]It should be made clear at the outset that the use of the terms "personal influence" in this thesis does not refer specifically to the concept as used by Katz and Lazarsfeld in their well known "two step flow hypothesis." Rather, here the term "personal influence" is used in the more general sense to mean influence originating in a person, as opposed to the media.

conditions personal influence can have an effect on people's responses to media messages.

Friedson (1953) was among the first to point out that the concept of the "mass audience" with its notion of a large number of isolated individuals simultaneously subjected to a media stimulus, obscures the more complex reality of the real audience. In place of an undifferentiated mass, Friedson underscores the existence of substructures within the audience. Often people are exposed to the media while in the presence of others. Their preferences for media activity are governed by group and family life, and thus their use of radio, television, and films should not be regarded as purely individual, and socially unstructured behavior but rather as group activity involving family, friends, and the local community.

A somewhat different approach to the relationship of media and interpersonal influence was taken by Katz and Lazarsfeld, in their well known "two step flow hypothesis" of mass communication (1955). Their thinking was shaped by Lazarsfeld, Berelson and Gaudet's (1948) study of the effect of the 1940 national campaign on voting behavior. These researchers found little evidence to indicate that the media campaign directly influenced changes in people's votes. Instead, people appeared to be much more influenced in their political decisions by face-to-face contact with other people--members of their family, friends, neighbors and people with whom they worked, than by the mass media directly.

It was then that Katz and Lazarsfeld (1955) attempted to determine the comparative influence of the mass media and personal forms of influence on housewives' recent decisions concerning marketing, fashion, and moviegoing. Housewives were asked what sources (both media and personal) they were exposed to, which sources influenced their decisions, and which factors were "decisive" in their decisions. Katz and Lazarsfeld reported that personal sources seemed to play a more important role in these housewives' decisions than media sources.

Other studies which have examined the spread of innovation have also emphasized the importance of informal sources of communication in decision-making processes. For example, research concentrating on the spread of innovations among physicians, specifically the prescription of new drugs, suggested that face-to-face contact with other medical colleagues was more influential than communication through more formal channels, e.g. pharmaceutical firms, in inducing physicians to prescribe new drugs (Coleman, Katz & Menzel, 1966; Menzel & Katz, 1956). Katz (1961) reported that sixty percent of a sample of doctors named personal sources as being influential in leading to their use of a new drug. In the agricultural domain, Ryan and Gross (1943) noted that fifty percent of a sample of farmers mentioned neighbors or relatives as the most influential source in leading to their adoption of hybrid seed corn; thirty-two percent cited salesmen, while only fourteen percent named formal media

sources. Further evidence concerning the importance of informal social relationships among farmers in determining their propensity to adopt a given agricultural technique has been offered by Rogers (1962), Katz, Levin and Hamilton (1963), and Rogers and Smith (1965).

Other researchers, while still maintaining that personal influence is important have attempted to qualify its importance by specifying the conditions under which personal influence exerts its greatest effect. For example, Lionberger (1960), Rogers (1969, 1962), Rogers and Meynen (1965), Van den Ban (1965) and Beal et al. (1957), have suggested that commercial and impersonal sources play an informational role in the adoption process, and are important for increasing awareness of a given innovation, while face-to-face interchanges seem to be salient at the point of decision. Lazarsfeld and Menzel (1963) have addressed this issue in general terms: media sources play an important role in conveying information; personal sources play a role in exerting influence. In a similar vein, Coleman (1957) asserted that media sources are useful when people need to know what to do (e.g. when they need specific information to guide their actions); personal sources are important when people need to know what to think (e.g. in forming and changing opinions). Coleman, Katz and Menzel (1957) conjectured that personal influence may be more important in uncertain situations than in clear-cut ones. Chaffee, Ward and Tipton (1970) and Greenberg (1964) have suggested that

personal sources may not be as effective as media sources for producing awareness of current news events. The reason given is that the media specialize in their access to "news" information and are turned to because of this.

On the whole, however, the studies reviewed thus far have emphasized the greater effectiveness of personal influence. They tell us that voters, housewives, doctors and farmers have depended upon advice from personal sources in making their decisions and that these personal sources in many cases were family members, neighbors, colleagues and friends. We have also learned that personal influence is particularly effective in some situations, and less effective in others. However, it is important to keep in mind that the majority of these studies have relied heavily on retrospective interviews in order to determine the relative importance of personal and media sources of influence. As such, they are post-hoc and we are forced to rely on and accept subjects' assessments of the relative importance of personal and media sources of information. The strength of these studies of media and personal sources is that they have emphasized and charted the flow and interrelationship of each source of communication in the natural environment. However, this falls short of a systematic analysis of the impact of personal sources of influence on the mass media.

Perhaps we should note at this point that the research to be reported in this thesis does not deal with the issue of personal influence as defined by Katz and Lazarsfeld.

Their theory, and the research stemming from it, deal with a distinct two step sequence, rather than with the simultaneous operation of two forms of influence on a person, as will be described later. However, at the broadest conceptual level, both Katz and Lazarsfeld, and the present research, both deal with two major categories of influence variables: those having their origin in media messages and those stemming from persons, and in this sense, the Katz and Lazarsfeld work must be acknowledged as a precedent of the present inquiry.

There has been some experimental work which has examined the relative persuasive impact of various media and face-to-face contact. A series of laboratory experiments conducted in the pre-television years indicate that face-to-face contact (e.g. lecture) was more persuasive than radio (or recorded messages), and that radio was in turn, more persuasive than print. The typical procedure and findings are exemplified in the work of Wilkie (1934): Wilkie exposed one group of students to printed matter on religion, war, birth control, and economic issues. The identical material was presented to a second group by a lecturer, and a third group via a wired loud speaker. The lecturer was found to be most effective in modifying opinions, the wired speaker was next in effectiveness and the printed material was least effective. Similar findings were obtained by Knower (1935, 1936) and Cantril and Allport (1935).

It must be pointed out, however, that what was termed "face-to-face" contact in these studies is not necessarily the same form of "personal influence" that we encountered in the previously mentioned studies. That is, the personal component here, "the lecturer," functions in a similar manner to the "mass media" source in that he delivers a message to numerous others simultaneously. A "lecturer," although a type of personal source, is still a more formal source of communication than is a friend, or a fellow listener.

Laboratory research on attitude change constitute another group of experimental studies relating to the issue of formal vs. informal sources of communication; they yield a somewhat different picture. In these studies "peer" influence has been pitted against "authority" influence and the results favor the persuasive impact of the "authority" (Kulp, 1934; Mausner, 1953). This appears to be inconsistent with the findings that peer influence is the more effective form of communication. Hovland (1959) suggests that these discrepant findings might be reconciled when we consider the difference between the laboratory situation and the field situation. For example, in the laboratory subjects are exposed to both peer and expert sources equally, while in field situations, subjects are more exposed to peer influence.[2] Thus, it is important to note

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[2]What is implied here is that when an "authority" source does get its message heard, it has greater impact than a "peer" source.

that most studies examining personal and media sources of influence were carried out in field settings where according to Hovland, personal sources might have a slight advantage.

Nevertheless, there seems to be a consensus concerning the greater effectiveness of face-to-face communication over media sources of communication (McGuire, 1969; Weiss, 1969; Klapper, 1950). What factors contribute to these advantages? What is unique about face-to-face communication that sets it apart from mass communication?

2. Reasons for the Effectiveness of Personal Influence

Lazarsfeld, Berelson and Gaudet (1948) and Hovland (1948) suggest five characteristics of face-to-face communication that contribute to its special effectiveness.

First, personal contacts are more casual and less purposive than mass media. Because of this, people may be less likely to attribute persuasive intent to them and then may be less likely to anticipate the content of these communications and try to avoid them. Thus face-to-face communications, while also being a more pervasive form of communication, are less self-selective than the formal media. When engaged in face-to-face communications, social constraints exist that might prevent us from leaving the room or ignoring a communication with which we are in disagreement with, or with which we are disinterested. In contrast, there is less constraint against turning the page in a newspaper or changing the channel on a television set.

Second, the face-to-face situation permits greater flexibility in the communication process. The communicator can use verbal and nonverbal cues to tailor arguments to fit the specific resistances and sensitivities of the individual and can give immediate feedback to verify and clarify misunderstandings; miscomprehensions can be minimized and arguments can be elaborated, strengthened, and timed for propitious occasions.

Third, the face-to-face situation enhances the rewards and punishments for accepting or not accepting messages. When yielding to another person, the reward, in terms of approval, is often immediate and personal. This is not so in yielding to an argument presented via the media. The benefits of social conformity and maintaining a satisfactory personal relationship may act as incentives to acceptance of a personal communication. At the least, one may experience greater discomfort in voicing disagreement with one's face-to-face contact, than with a speaker heard via the mass media.

Fourth, a receiver might develop a greater feeling of sympathy and intimacy (toward a source) when in a face-to-face encounter, than when the source is more remote. Furthermore, there is often a communality of interest between the source and receiver in face-to-face situations. The receiver might therefore place his/her trust in the judgment of this personal source, rather than in the more impersonal

mass[3] communicator who might not have his best interest in mind.

Fifth, in face-to-face communications there can be persuasion without conviction. That is, personal sources can occasionally move a person to act, without persuading him/her to adopt a new point of view. For example, in voting, a personal contact might get a voter to the polls to vote without ever affecting his comprehension of the issues, or his interest in the campaign. It is thought that this is something which the formal media can rarely do.

We have now accounted for some reasons for the effectiveness of face-to-face communications. However, no discussion of the effectiveness of personal and media sources of influence can be complete without reference to factors that might contribute to the impact of media messages.

3. Factors Contributing to the Persuasive Power of the Media

Three factors that might contribute to the persuasive power of the media and have some bearing on the present investigation will be discussed.[4]

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[3]It is interesting that many contemporary mass communicators may not be perceived as "impersonal sources." That is, it is not unusual to feel that we "know" some celebrities. The regularity with which some communicators appear on the media and the growing popularity of talk shows where we can meet the stars and observe their candid responses probably contribute to this phenomenon.

[4]A vast amount of literature has been generated concerning the effects of the media. A review of this literature can be found in Weiss (1969). We will cover those aspects of persuasiveness of the media that most pertain to this investigation.

First, the media can be perceived as a normative indicator. That is, "persuasive messages presented via the mass media may provide the appearance of consensus regarding orientation and action with respect to a given object or goal of persuasion" (DeFleur & Rokeach, 1975, p. 250). Media messages can be presented to the audience in such a way that listeners are led to believe that the offered definitions are socially sanctioned modes of orientation. Thus, the media communication can offer a social construction of reality which shortcuts the process of consensual validation. Additionally, these "social constructions" may be especially effective in cases where individuals have only limited access to the information being conveyed or where they cannot use direct experience as a check.

Second, the media are frequently perceived as if they were an objective source of information. In many cases, e.g. especially "news," media communications are structured as if they are presenting material which is both "objective" and "factual" (Tuchman, 1978).

Third, a source regarded as credible, trustworthy, or high in prestige apparently abets persuasion (Klapper, 1950; Hovland & Weiss, 1951; Kelman & Hovland, 1953). The media can be perceived as sources with these characteristics (Lazarsfeld & Merton, 1948; Klapper, 1950; Waples, Berelson & Bradshaw, 1940). Klapper (1950) points out: "The mass media are themselves widely regarded with awe and apparently confer status on the persons and concepts for which they are

a vehicle" (p. 129). Lazarsfeld and Merton (1948) speak of the status conferral function of the mass media: "For some, the editorial view of The Times represents the considered judgments of a group of experts, thus calling for the respect of laymen. But this is only one element of the status conferring function of the mass media, for enhanced status accrues to those who merely receive any attention in the media, quite apart from any editorial support" (p. 101). Waples, Berelson and Bradshaw (1940) have concluded that "an attitude changes from a subordinate to a dominant position when it is justified by the authority of print" (p. 119). Klapper (1950) suggests we would be justified in ascribing similar power to the other media.

In summary, we have seen that "personal influence" can be an effective mode of communication and we have considered some of the reasons for its effectiveness. We have also learned where the persuasiveness of the media might lie. The field studies reviewed tried to indicate the importance of personal influence by asking subjects what factors affected their decisions. Although they lack the control of experimental research, these studies are important because they have examined the interrelationship between mass media and personal sources of influence in the natural environment. The laboratory studies, on the other hand, have assessed and compared the impact of personal and media sources separately; that is, while each source operates independently of each other. The present study offers a new paradigm that

tries to wed both of these approaches: we try to incorporate from the field studies some aspect of the interrelationship between these two sources, but we study this within the controlled environment of the laboratory. We will examine the effect of personal sources of influence upon the media when both sources are present in the immediate situation.

4. The Paradigm and Overview of the Design

The present study differs from other studies of media and face-to-face influence in that it will examine the relative impact of these sources while they operate within the same situation. The first issue we address is whether personal influence can affect people's responses to media presentations, that is, can people modify the impact of a media message? We start with the assumption that media messages have some impact and we then ask about two types of modifications people might make. First, can a person inhibit the impact of a media message and counteract its effect? To examine this, a situation will be constructed where the media source will be pitted against the personal source as a persuasive agent. Subjects will view various television messages while they are in the presence of a confederate who will openly disagree with the message. The extent of the subject's agreement with the given message will constitute the dependent measure.

Second, can comments made by a confederate to a subject enhance the impact of the media message? If a confederate

agrees with the media message and communicates this to the subject, will this facilitate the subject's agreement with the message? It has been suggested by Klapper (1950) and Staudohar and Smith (1956) that media messages supplemented by face-to-face contact is a particularly effective technique of persuasion. Yet, there have been few experimental investigations of this point. Here, we will be able to assess the possible additive or facilitative component of personal influence.

Our control condition will consist of the responses of those subjects who view the television messages in the presence of a confederate who does not make any comments. By comparing subjects' responses in the "disagree" condition and the "agree" condition with responses in the "control" condition, we can ascertain the possible inhibitory and facilitating effects of personal forms of influence. By comparing the extent of influence in the "disagree" condition with the amount of influence in the "agree" condition we will find out if agreement and disagreement comments made by the confederate are equally effective as forms of influence.

The second issue we raise concerns the nature of the relationship between the confederate and the subject. As noted previously, the literature on "personal influence" has indicated that those who exercise influence are often friends, neighbors, relatives and coworkers. Additional findings from investigations of factors facilitating attitude change have also suggested the enhanced persuasiveness of communications stemming from acquaintances (McGuire, 1969)

and those with whom one shares some similarity (Berscheid, 1966; Mazen & Leventhal, 1972; Goethals & Nelson, 1973). Thus, our second concern is to examine how the degree of acquaintanceship between the confederate and the subject affects the influence process. Are confederates who are friends of the subject vs. confederates who are strangers differentially effective as agents of persuasion? Can the comments of a mere stranger during the course of television viewing affect one's response to the message?

The third question we raise is one which concerns the television messages. We have mentioned earlier that the relative impact of personal influence has been known to vary from one topic to another. It is because of this that a heterogenous mix of television messages will be used in this study. The messages will consist of editorials, commercials, health information, and play and movie reviews. We will try to determine whether personal influence is differentially effective across these four topics.

5. Rationale for the Use of this Paradigm

The paradigm for research described here is of scientific value for several reasons. First, Hovland (1959) pointed out that while mass media effects have been tested primarily in the field, studies of personal forms of persuasion have been tested in the laboratory and that differences in the outcomes of these studies may be attributable to incidental methodological differences. The

situation constructed here enables us to bring both media and personal sources of influence together in a controlled environment.

Second, the use of television rather than radio or the print media brings us more up-to-date on the issue of the impact of media and face-to-face sources of influence. Earlier experimental studies did not use televison, as many were conducted in the pre-television years. Yet, it has been speculated by some (Klapper, 1960) that television is the media form which most closely resembles face-to-face communication.

Last, this study introduces an important element of ecological validity because it parallels a situation that often occurs in real life, that is, we are often in the presence of others while watching television. For example, according to the Nielson Television Index (1971) approximately 54% of the people viewing television are viewing in the presence of others. The social nature of television viewing has been emphasized by several researchers (Chaffee, 1972; Friedson, 1953; Riley & Riley, 1951; Steiner, 1963; McLeod et al., 1971; Belson, 1967) who have noted that television watching is often a group rather than a solitary activity and that people are frequently engaged in interactions during the course of a program.

Despite the advance in conceptualizing television watching as having a social component, relatively little research has been carried out which has directly studied

this factor. McQuail (1969) has noted that the social setting in which television is watched has been largely ignored by the adherence to the use of sample surveys of large populations as a tool of research. Such surveys have tended to abstract individuals from their group setting. Ennis (1961) has also suggested that this omission stems from the fact that many of these surveys were undertaken on behalf of American business, whose focus was on the habits of the individual and not on the social setting in which the communication was received.

One study that has attempted to deal with the social context of television viewing was done by Prasad, Rao and Sheikh (1978). They examined the effect of parental advice given to children after watching television commercials. Children, eight to ten years of age, were shown a television commercial for a toy and were then given counter-information concerning the toy by their mothers. Two types of counter-information were offered: reasoning or power-oriented statements. (Unfortunately these statements were never described by the authors.) In the control group, the mother offered no advice. Children saw commercials for one of two toys (toy X or toy Y). The dependent variable consisted of the child's choice of toy (advertised or unadvertised toy). The findings of this study were equivocal: for toy X, there was no significant effect of the mothers' interventions; in all three conditions more children chose the advertised toy rather than the unadvertised toy. For toy Y, an effect was

found. Children in the reasoning condition were affected by the information given to them by their mothers, and were less likely to choose the advertised toy. Paradoxically, children in the power condition were more likely to choose the advertised toy rather than the unadvertised toy and thus disregarded what their mothers had told them.

The authors claim that the differential finding for toy X and for toy Y was due to the fact that the commercial for toy X was more attractive than that for toy Y.

They concluded that when the product was perceived as being moderately attractive, maternal counter-information was a relevant variable (toy Y). However, when the product was highly attractive (toy X), all forms of counter-influence failed.

Thus, the work of Prasad, Rao and Sheikh (1978) has a direct bearing on the present study in that it has investigated the impact that one individual might have on another's response to a television message. However, unlike the present study, Prasad's study has examined personal influence in the context of the parent-child relationship. In addition, the influence attempt of the parent did not occur during the act of television viewing; parents did not watch the television messages with their children.

The present study, then, is designed to answer three questions: 1. whether people can inhibit or facilitate the effect of media messages, 2. whether it is necessary that we be acquainted with a person in order for them to have

such an effect and 3. whether a person's influence can be particularly effective for some types of media messages and less effective for others. If we find that people cannot counteract or enhance the effects of a media message, then the variable of "personal influence" may not have quite as much impact as implied by many researchers. This might indicate a more powerful model of media effects than is assumed at the present time.

The study is not designed to measure the absolute impact of media vs. personal sources of influence. (How important this issue is, is questionable, in light of the fact that both sources operate in conjunction with each other.) Nor can this investigation exhaustively examine the reasons for the effectiveness of personal influence or mass media influence. Another limitation may be that we are examining only the short term effects of personal influence upon the media. But, this does not pose a great problem since others have demonstrated that personal influence seems to have an effect in the natural environment over more prolonged periods of time. In addition, we reason that if personal influence is a variable of major importance, then it should be able to exert its impact in the microcosm we have constructed.

We shall now proceed to a description of the methods employed in the investigation.

II. METHOD

1. Subjects

Subjects consisted of 60 adult females; thirty in the group where the confederates were friends of the subject, and thirty in the group where the confederates were strangers to the subject. Subjects were recruited from a local university (weekend and night classes), a local medical center, and from gatherings in public places, e.g. concerts, art exhibits.

Subjects were called on the telephone to arrange a session and every alternate subject contacted was asked if they had a friend who might also be interested in participating because "the experimenter needed many people."

The mean age for subjects in both the friend and the stranger group was identical: 31.4. Thirty-three percent of the subjects were between the ages of 18 and 25; 38% were between 26 and 35; 19% between 36 and 45; 6% between 46 and 55; and 4% between 56 and 69. Twenty-two percent of the subjects reported their occupation as "student," the remaining 78% was comprised of the following: nurse, secretary, social worker, physical therapist, lab technician, lawyer, economist, personnel worker, administrative positions, waitress, librarian, writer, teacher, stewardess.

Only one subject was excluded from our analysis; an additional subject was run as a substitute. This occurred

in the "stranger" group and was due to a procedural mishap: the tape of the television messages was shut off prematurely.

Confederates

The two confederates in this experiment were two adult female graduate students. Their ages were 28 and 35. If asked their occupation by the subjects, they reported that they were an "assistant to an architect" or that they worked in "computers."

2. Setting, Equipment, Material

The experiment was conducted in a small corner of a larger laboratory that could best be described as a "comfortable homelike niche." There were paintings on two of the walls, and beige drapery covered another wall. Various decorative props such as plants, sculptures, pillows and a telephone contributed to the homelike ambiance. A small table top lamp and a standing lamp provided very soft lighting, while still furnishing enough light for the subjects and the confederate to fill out the questionnaire. The video recorder that fed video material into the television set was situated in an adjacent room.

The subject and the confederate sat in two chairs which were placed about three and one-half feet away from each other. The 19" black and white television set was positioned in one corner of the niche in a position that was equidistant from both chairs. The set rested on a small low table and was about four feet away from the subjects. Appendix III

and Appendix IV contain a diagram and a photograph of the experimental setting.

3. Procedure

Subjects (one subject and either the pretrained confederate or the friend of the subject who was to become a confederate) entered the laboratory and were greeted by an experimenter who told them she was interested in people's general responses to different television presentations. They were to view "television messages that were selected from the regular television shows on the air." They were told that each day a "different group of messages are shown to people in this study so that we can get people's responses to a broad range of programs." Later, they would get a chance to view some of the television messages, but first, the experimenter was interested in learning about their preferences for television shows, and how much they remembered about their favorite shows. They were told that they would be asked to recall their favorite television shows and plots, and that they would also be asked to construct a plot for a television show that they would like to see aired on television as a weekly series. The experimenter then told subjects that in the past, she found that "people were more creative and they could concentrate better on remembering this kind of information when they had no distractions," therefore, one of them would be placed in a

separate room during this part of the experiment.[5] The confederate was then taken to another room while the subject remained in the laboratory to perform the required tasks. This first stage of the experiment was part of the cover story and was used for two reasons: 1. by calling attention to an interest in preferences for television shows, it was hoped that subjects would not become suspicious concerning the true nature of the experiment, and 2. the separation of subjects into different rooms provided the experimenter with the opportunity to train the friend of the subject to become a "confederate." (The procedure is the same for the stranger-confederate group, however the confederate will have been pretrained.) Ten minutes later, the experimenter returned to the main room and told the subject that the "time was up" and that she (the experimenter) would be right back because she had to go and get the other subject (the confederate).

The experimenter returned with the confederate and then explained the task that followed. Subjects would be shown seventeen different television messages. The experimenter gave a questionnaire to the subjects and explained what was required. They were to answer questions about the seventeen messages immediately after viewing each message. They would be given a rest period of about one minute after each message

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[5]The person chosen to be the confederate in the "friend" condition was the person who sat in the seat on the right, when the subject number was even, and the person who sat on the left, when the subject number was odd.

so that they could fill out the questionnaire. (The confederate's "agreement," or "disagreement," or "no comment" was made during each of the television messages prior to the subject's response to the questionnaire.) Subjects were told that this part of the experiment would last about forty-five minutes. The experimenter then told subjects that she would leave the room and get the tape (of the television messages) started for them and then return when they were finished viewing.

During the period of television viewing, the experimenter remained in an adjoining room where she could monitor the discussion of the subject and the confederate (a hidden microphone had been placed in the laboratory which was hooked up to a loudspeaker in the adjoining room). This monitoring was done for two reasons: 1. to be certain that the "friend-confederate" would not reveal the purpose of the experiment and 2. as a check on adherence to the rules for discussion between the subject and the confederate.

At the end of the viewing session, the experimenter returned to pick up the questionnaire and to debrief the subject. Subjects were questioned to determine their interpretation of the situation in which they had just participated. The purpose of the experiment was then explained to the subjects.

Responses to the questionnaire items were analyzed in two analyses: a 2x3 factor analysis of variance design with repeated measures on the second factor, and a 4x3x2 analysis

of variance design with repeated measures on the second and third variable.

4. The Experimental Design

The first two issues we raised concerned the effect of the confederates' influence statements (agree, disagree, no comment) on subjects' responses to television messages, and the relative effectiveness of friends and strangers as agents of influence. The design we used to investigate these two issues was a mixed 2x3 analysis of variance with repeated measures on the second variable. There were two main groups in this study: the stranger group where the confederate was a total stranger to the subject (30 subjects), and the friend group, where the confederate was a friend (30 subjects). The three conditions of influence were the "agree" condition, the "disagree" condition and the "no comment" control condition. This second factor, type of influence was the repeated measures factor. Thus, each subject received an equal number of "agreement" statements, "disagreement" statements, and "no comments" on the various television messages. The influence statements were counter-balanced so that each subject within each of the two main groups (friend and stranger) received a different order of "agrees," "disagrees," and "no comments"; and so that each type of influence statement would not be followed by the same type of influence statement. In other words, if on message one, the confederate agreed, on message two, the

confederate either disagreed or made no comment, and so forth. The reason for this was twofold: first, to control for any cumulative effect of two agreements or two disagreements in a row, and second, so that in the process of making the influence statements, the confederate would not lose credibility by seeming to constantly agree or always disagree with the television messages. It is also important to note that each individual message (there were twelve messages of interest) had in total, twenty agreement statements made by the confederates, twenty disagreements, and twenty "no comments."

The second question we wished to examine is whether the confederates' influence was particularly effective in altering subjects' responses to some types of television messages, and less effective for other types. Four types of messages were used. The analysis of variance we used to investigate this issue was a 4x3x2 factorial in which we collapsed across subjects and treated messages as the random variable. Thus, the first factor was the four levels of type of message (commercial, editorial, play, and health). The second and third variables were repeated measures: type of influence (agree, disagree, no comment) and confederate (friend, stranger).

5. The Influence Conditions

There were three conditions of influence: (1) a condition in which the confederates agreed with the television

messages (AGREE), (2) a condition in which the confederates disagreed with the television messages (DISAGREE), and (3) a condition in which the confederate made no remarks about the television messages (NO COMMENT).

The Agree Condition

The agreement statements were designed to agree with the main point of the television message. For example, the camera commercial we used presented the Konica FS-1 as an admirable camera to own, not only because it "took perfect pictures every time," but because it featured an automatic self-winding device that made it easy to use. Our confederates' agreement statement was "that's a great camera, it's very easy to use." As another example, an editorial we used argued that more money should be spent to publicize the "train to the plane" (public transportation to JKF airport) because it is a very convenient service. Our confederate agreed: "they really should advertise it more, that train is really convenient." We tried to formulate influence statements that would imply the confederates' personal experience with the issue involved, e.g. use of the camera, use of the train to the plane. The influence statements for all of the messages can be seen in Appendix I.

The Disagree Condition

The "disagree" statements were designed to contradict or oppose the viewpoint presented in the television messages. For example, for the camera commercial, the confederate

commented: "That's a terrible camera, it wasn't easy to use at all." And, for the train to the plane editorial: "It doesn't matter how much they advertise it, it's still not going to make it convenient." We tried to preserve the format of the "agree" statements when we designed the "disagree" statements. Thus, we tried to use equally strong adjectives and approximately the same length sentences for both the agrees and the disagrees whenever possible. However, the disagreement statements were not always the exact opposite of the agreement statements, because to do so, for some of the messages, resulted in a loss of meaning and persuasive impact.

The No Comment Condition

For the "no comment" condition, the confederates merely made no remarks about the television messages.

The confederates were told to deliver their "lines" during the middle portion of each of the television messages, after the main point of the message was made, but before the end of the message.[6] The confederates were instructed to wait for certain "cues" within each of the messages and told to deliver their lines soon after these cues. For example, the confederate was told to wait until after the "auto-winder" device was mentioned in the camera commercial before delivering the influence statement.

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[6]We decided to ask the confederates to deliver their statements during each message rather than at the end of each message because this timing seemed more casual, and less contrived.

The confederates followed five rules we had established for their interactions with the subjects. First, if the subject spoke spontaneously during the television message at a time close to which they were supposed to deliver their "lines," they could deliver their line as if in response to the subjects' verbalization. This rule was introduced because it seemed to help create the impression that both parties were contributing to a conversation in which there was a natural exchange of comments. Second, if after the confederates delivered their lines and the subjects argue back (i.e. express disagreement with the confederate), then the confederates were instructed to repeat the influence statement either in part, or in its entirety. In the event that subjects responded to the confederates' comments with an "agreement" of their own, the confederates were told to make a mild affirmative response, such as "yeah" or "I know what you mean."[7] Third, the confederates were told not to speak to the subjects during the messages for which there was "no comment." If the subject openly expressed an opinion on this message, the confederate was to respond with "um" or "um-hum." Fourth, the confederate and the subject were free to converse during filler messages (those entertainment messages that were included in our tape, but not the focus of this study), with the provisions that the subject initiate

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[7]The subjects did not however engage in any lengthy debates with the confederates because they seemed to be afraid that they would miss the content of the message and be unable to respond to the questions we asked.

the discussion and that they do not discuss any of the previous messages they had seen. At the outset we had assumed that in order to keep the conversation standardized, it would be best if the confederates spoke only when they delivered their lines (the influence statements). However, after running the pilot study, we decided that the lack of conversation was too stilted--the silence made the confederate's influence attempts seem too intrusive and unnatural. Fifth, subjects had one minute to answer the questions concerning each individual television message. If they finished answering the questions before the end of the minute, they often wanted to engage in brief conversation. The confederates were told that they could hold a conversation with the subjects during this time period, as long as they discussed issues that were unrelated to the television messages. The discussions that the subjects held during this time period consisted primarily of small talk since they had only about fifteen seconds to converse. For example, the subject would comment to her confederate-friend: "What did you eat for lunch?" or "Let's go shopping after this," or "Did you speak to Tom last night?" Examples of small talk between the confederate-stranger and the subject were: "Did you have trouble finding this place?" or "That's a nice-looking plant over there." It is important to note that the confederates did not seem to have any problems in steering the conversations away from the issues raised in the television messages.

If the subjects did want to engage in further conversation concerning the television messages, the confederates either looked down at their questionnaire as if they hadn't yet completed it, or they simply changed the topic of conversation.[8]

These procedural rules were important in that they contributed to the maintenance of a naturalistic tone throughout the experiment, while they allowed us some degree of standardization.

6. The Television Messages

The Twelve "Trial" Messages

The twelve trial messages were recorded from the television fare on major television networks. Four types of messages were used and there were three variant messages of each type.

(1) Commercials

The first type of message was commercials. We used commercials for a fabric softener (Bounce), Paul Masson Emerald Dry Wine, and the Konica FS-1 camera. We tried to select products that were not used by every household in America, and that might also be of interest to our subjects. We tried to span the range of everyday household concerns

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[8]It should be noted that many of the confederates used this extra time to study their "lines"; their agreement and disagreement statements were typed on the bottom of the appropriate page in their questionnaires.

(fabric softener) to more expensive leisure products (camera).

(2) Editorials

A second type of message we used was editorials which usually last about two minutes and occur as part of news presentations. The format of the taped editorials included an announcement of the editorial, the channel, and the name of the person presenting the editorial. The editorial message followed this information. The editorials we used were an editorial about "the train to the plane" which argued that more money should be spent to publicize this service; the South Street Seaport editorial which argued in favor of restoration of the South Street Seaport; and, an editorial about the owners of Studio 54--the commentator claimed that it was a sign of immorality for famous celebrities to attend the going away party that Steve Rubell threw for himself before going to prison for tax evasion. The two criteria we used in selecting the editorials were that they be straightforward and simple enough for all subjects to understand, and that they concern an issue of some relevance for New Yorkers.

(3) Movie and Play Reviews

The third type of message was movie and play reviews which often occur at the end of news presentations. They usually last about two minutes, and consist of the reviewer's brief summary of the plot and acting, a brief excerpt from the actual play, and a recommendation of whether the viewer

should see it. We used play reviews of Talley's Folly, a popular comedy, The Lady From Dubuque, a drama by Edward Albee, and the movie Gizmo, which featured humorous film clips of old inventions. We tried to select plays that had received somewhat positive reviews for two reasons. First, this would be in keeping with the other three types of messages, all of which basically argued that the product (commercial), idea (editorial), health innovation, or health tip was one which should be adopted. Second, if the play review had been negative, then the "agreement" statement made by the confederate would have to be a negative statement and the disagreement would have to be a positive statement. For these reasons, we thought it simpler to use play reviews that were somewhat positive.

(4) Health Information

The last type of message dealt with health information. For this, we included a message informing the audience of a new gadget devised by an obstetrician for calming and soothing a crying newborn baby. This gadget was a stuffed teddy-bear that played a recorded tape to the baby of the actual sounds that the baby heard when it was in its mother's womb. This was recorded from the "Today Show."

The second health message was a report by Earl Ubell (Channel 2 News) reviewing the latest study which examined the link between the use of saccharin and cancer. Saccharin, the audience was told, was safe to use.

The third message was a health tip (FYI, For Your Information) that concerned the use of certain food products for aiding sleep. The presenter said that "Warm milk, nuts, chicken, tuna, etc. all contain the essential amino acid, tryptophan, which has the side effect of making one sleepy; next time you have trouble falling asleep at night you should try a glass of warm milk."

These health messages were chosen because they were interesting, brief, and not overly technical.

These four types of messages (commercial, editorial, play review, health) were chosen because they allowed us to present a range of messages that were part of the regular television fare and were concerned with persuasion or evaluation.

All of the messages were pretested to insure that a range of opinions on each issue was possible, and that ceiling effects would not be a problem.

"Filler Messages"

Interspersed between our twelve trial messages were five filler messages. The filler messages were excerpts from regular television fare: a segment from the "Muppet Show," the muppets sang "You Ain't Nothin' But a Hound Dog," a rock singer on the Mike Douglas Show, a Johnny Carson monologue, two news stories, one concerning test tube babies, and the other about Lawrence Ehrlich who had escaped from a mental asylum. Subjects responded to the questionnaire

items for these "filler" messages, but they were unaware that this information was not the concern of the experiment.

The filler messages served three purposes. First, they were used so that the confederates would not seem to be offering their opinions on every message. Second, the filler messages tended to be longer in length than the trial messages. By viewing these longer messages, the act of television viewing for subjects would more closely resemble the natural state of viewing. Thus, the inclusion of "fillers" was important because the messages we were interested in are brief and are usually seen in conjunction with some other longer presentation. Third, by including some entertainment material, the cover story for the experiment became more believable; we directed attention from the question of "disagreement" and "agreement" with the particular messages by emphasizing an interest in general reactions to different types of television messages.

The Sequence

The sequence we have designed tries to maintain a natural order of presentation. Two different tapes were used in order to allow us to vary the order of presentation of messages to subjects. The material presented in the two tapes was identical: however, the second tape reversed the order of the messages. Half of the subjects in each of the two groups (friend and stranger) saw tape one (forward), the other half saw tape two (reverse). The order listed below is the order of the forward tape.

Type of Message	Length of Message
filler Muppets	2 min. 35 sec.
trial Commercial-Wine	30 sec.
trial Editorial-train to the plane	1 min. 43 sec.
trial Health-teddy bear baby gadget	1 min. 49 sec.
filler News-mental patient escapes	2 min. 24 sec.
trial Play Review-Talley's Folly	46 sec.
trial Health-saccharin	1 min. 53 sec.
trial Editorial-South Street Seaport	1 min. 35 sec.
trial Commercial-fabric softener	42 sec.
filler News-test tube babies	1 min. 2 sec.
trial Play Review-The Lady From Dubuque	1 min. 10 sec.
trial Editorial-Studio 54	1 min. 5 sec.
filler Johnny Carson	2 min. 18 sec.
trial Commercial-camera	31 sec.
filler Singer	2 min. 55 sec.
trial Health-tryptophan	1 min. 48 sec.
trial Movie-Gizmo	1 min. 35 sec.

After each message (both trial and filler), the subjects were given one minute to fill out the questionnaire. After each of the seventeen messages, words appeared on the television screen that read "Please Answer Questions Now." These words remained on the screen for the duration of the minute that subjects used for filling out the questionnaire.

6. The Dependent Measure

Three questions served as our dependent measures. The first dependent measure question attempted to tap the subjects' general agreement or disagreement with the television message. The second question was intended to measure the subjects' intent to act based on their agreement or disagreement with the message (for some messages, this would imply use of the product or service). The third question involved the recommendation of the product, the viewpoint, etc., to a friend. Some examples of the three dependent measure questions follow. (Subjects were asked to indicate the extent of their agreement/disagreement with the statements concerning the television message.)

For the Camera Commercial:

(1) The Konica FS-1 would be a wonderful camera to own. (General Agreement)

(2) If I were to purchase a camera within this price range, I would buy this one. (Intent to Act)

(3) If some friends were interested in buying a camera, I would tell them to buy this one. (Recommendation to a Friend)

For the "Train to the Plane" Editorial:

(1) More money should be spent to publicize the "train to the plane." (General Agreement)

(2) If I were going to JFK airport, I would use the "train to the plane." (Intent to Act/Use)

(3) If some of my friends were going to JFK, I would recommend that they take the "train to the plane." (Recommendation to Friend)

The dependent measures we used for each individual message can be found in Appendix II.

The three dependent measures were embedded within three other questions. These were questions which checked whether the subject was attending to the message and questions which probed prior usage of the product, service, etc.

In total, there were six questions (three dependent measure questions and three other) for each of the seventeen television messages presented. The subjects answered the questions immediately after viewing each of the television messages. The questions for each message were on a separate page and the pages were ordered according to the presentation order of the messages. The rating scale used was a 7-point scale with endpoints of strongly disagree (1) to strongly agree (7).

In addition to this paper and pencil measure, we obtained a behavioral measure that concerned subjects' attitudes toward one of the plays, Talley's Folly. At the end of the procedure, before debriefing subjects, the experimenter casually said that there would be a special lottery conducted for subjects in the experiment: "Oh, by the way, I forgot to mention, we're having a lottery for the people who have participated in this study . . . someone will win two tickets to a Broadway show." The subjects

were then asked to indicate whether they would prefer tickets to Talley's Folly, or for the play, Strider. We wanted to know whether the confederates' influence statements would be taken into account by the subjects when they made their decisions concerning the play they would like to see. This information was analyzed using the Chi-Square Test of Association.

III. RESULTS

1. Results for the Effect of Type of Influence and Friends vs. Strangers

The first issue we addressed is whether people can reduce or enhance the impact of media messages. We asked whether the influence statements made by confederates could affect subjects' responses to the television messages. The second important issue is whether friends were more effective than strangers as agents of influence. The first analysis of variance we performed (the 2x3, friend vs. stranger x type of influence) was used in addressing these two issues.

Results for Question One: General Agreement with the Television Messages

The effect of the confederates' agreement statements and disagreement statements upon subjects' responses to the television messages can be seen by examining subjects' "agreement" scores and "disagreement" scores and comparing these with the scores for "no comment." The influence statements delivered to the subjects by confederates significantly altered subjects' responses to the television messages. The "agree" condition had the highest scores $M = 5.36$; for "no comment" $M = 4.69$; the "disagree" condition had the lowest scores $M = 3.41$ (Table 1). This main effect of type of influence was significant, $F(2,116) = 102.88$, $p < .01$ (Table 2).

Table 1

Mean Response of Subjects to Question One:

General Agreement

		Type of Influence		
Confederate		Agree	No Comment	Disagree
Stranger		5.192	4.842	3.758
Friend		5.533	4.542	3.058
	Mean	5.363	4.692	3.408

Table 2

Analysis of Variance of Question One: General Agreement of Subjects With the Television Messages

Source	SS	df	F
Friend vs. Stranger	2.167	1	N.S.
Error	46.534	58	
Influence	118.315	2	102.883** (2,116)
Friend/Stranger X Influence	8.284	2	7.203** (2,116)
Error	66.737	116	

** $p < .01$

* $p < .05$

Tukey post-hoc analyses were performed in order to determine the extent to which the agreement and disagreement conditions individually contributed to this significant overall main effect. The results indicate that both agreement and disagreement conditions differ significantly, $p < .01$, from the no comment condition. However, while both agreement and disagreement are effective as forms of influence, the difference between the means for "disagree" and "no comment" (1.28) constitutes a larger difference than that for "agree" and "no comment" (0.67). This would indicate that while both agreement and disagreement are effective forms of influence, disagreement was the more effective of the two.

The second important issue is whether friends are more effective than strangers as agents of influence. Friends appear to be more effective as revealed by the significant interaction of Friend/Stranger with Type of Influence (agree, no comment, disagree) $F(2,116) = 7.203$, $p < .01$ (Table 2). Subjects in the friend group had higher scores for "agree" $M = 5.53$, than subjects in the stranger group $M = 5.19$; subjects in the friend group had lower scores on "disagree" $M = 3.06$ than did subjects in the stranger group $M = 3.76$. The "no comment" means were 4.54 for friend and 4.84 for stranger (Table 1). A graph of this interaction can be seen in Figure 1.

These results indicate that friends are more effective in altering subjects' responses to television messages

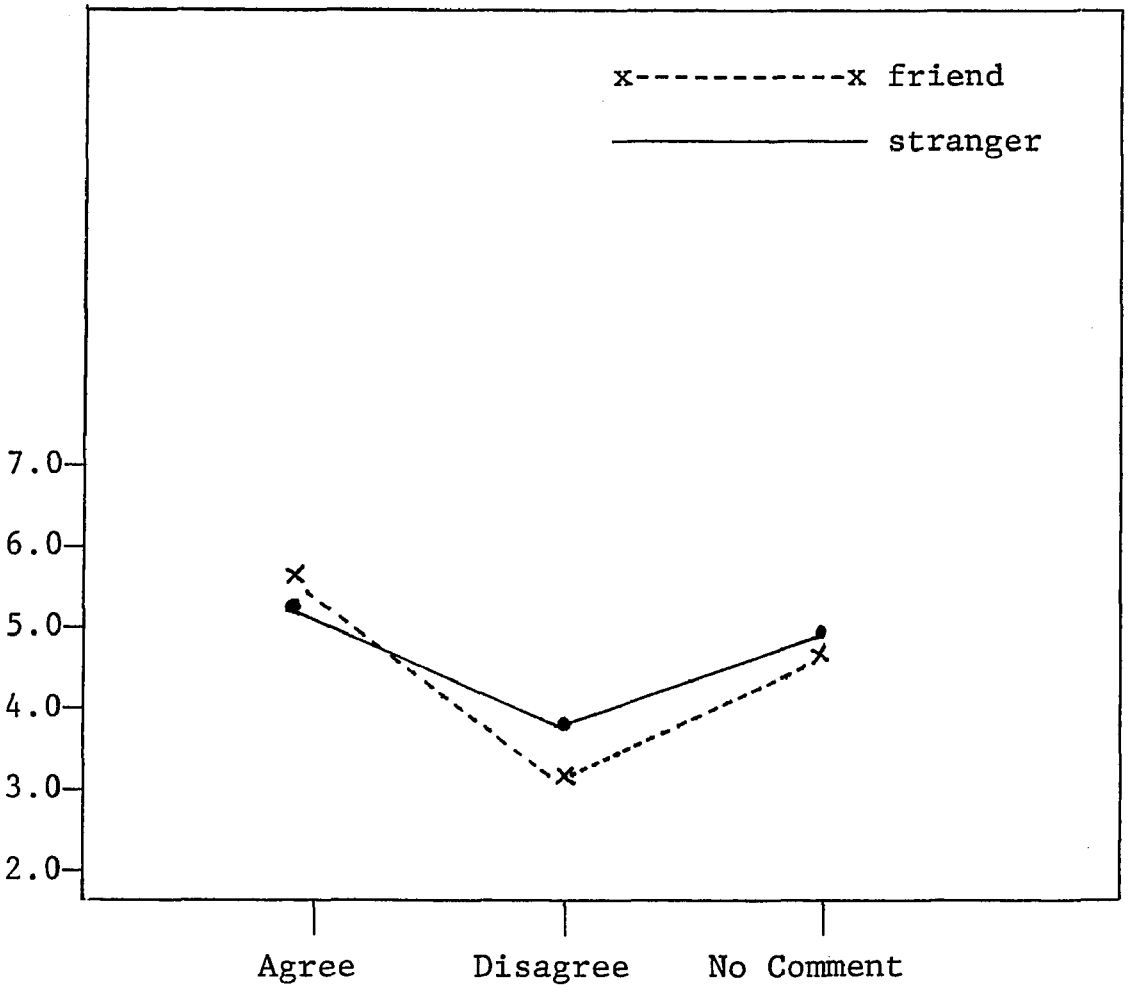

Figure 1. Graph of the Interaction of Friend/Stranger X Type of Influence for Question One: General Agreement

whether this alteration be an enhancement effect, that is, elevating scores in the "agree" condition, or an inhibiting effect, decreasing scores in the "disagree" condition.

To understand this interaction further it is necessary to examine the effect of the different forms of influence upon the friend and stranger groups individually. The Tukey method for post-hoc comparisons was used. In the stranger group, a significant difference was found between the "disagree" scores M = 3.76 and the "no comment" scores M = 4.84, $p < .01$. However, the difference between "agree" M = 5.19 and "no comment" M= 4.84 did not reach statistical significance. In contrast, for friends, both "agree" M = 5.53 and "disagree" M = 3.06 differed significantly, $p < .01$, from "no comment" M = 4.54[9] (Table 1). Thus, friends seem to be more effective as agents of influence in that both their agreement and disagreement statements significantly altered the response of subjects, while it was primarily the disagreement statements made by the strangers that affected subjects' responses.

T-tests were also used to compare the responses of subjects in the friend and stranger groups in each of the three influence conditions (agree, disagree, no comment) separately. No significant differences were found between

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[9]Note however that in both groups "agree" differs from "disagree" $p < .01$ (Tukey). This implies that the treatment effect of "agree" and "disagree" cause significant differences, however we choose to compare each condition to the "no comment" condition in order to have a baseline and thus a more stable indicator of influence.

strangers and friends on "no comment," M = 4.84 vs. M = 4.54 (this finding is of consequence, however, because it means that both groups, stranger and friend, responded to the messages in a similar manner in the absence of influence). The difference between strangers and friends on "agree" M = 5.19 vs. M = 5.53, did not reach a level of statistical significance. However, a significant difference was found between stranger and friend on "disagree," stranger M = 3.76 vs. friend M = 3.06, $t(58) = 3.555$, $p < .01$. This finding indicates that even though friends and strangers were both able to produce a "disagreement" effect, the strength of the disagreement effect produced by friends was significantly greater than that produced by strangers.

Results for Question Two: Intent to Act/Use of the Product

Subjects' intent to use the product (e.g. a commercial) or see the play (e.g. play review), etc., was affected by the confederates' statements. The main effect for Type of Influence was significant, $F(2,116) = 75.777$, $p < .01$ (Table 3). The "agree" condition had the highest scores, M = 5.14; for "no comment" M = 4.33; the "disagree" condition had the lowest scores M = 3.07 (Table 4).

Tukey post-hoc analyses revealed that both "agree" and "disagree" means differed significantly $p < .01$ from "no comment." Thus, for this second question both agreement and disagreement were effective as forms of influence: agreement statements made by the confederates encouraged subjects to

Table 3

Analysis of Variance of Question Two: Intent to Act/Use

Source	SS	df	F
Friend vs. Stranger	.001	1	N.S.
Error	61.420	58	
Influence	130.639	2	75.777^{**} (2,116)
Friend/Stranger X Influence	4.279	2	N.S.
Error	99.999	116	

** $p < .01$

* $p < .05$

Table 4

Mean Response of Subjects to Question Two:

Intent to Act/Use

	Type of Influence		
Confederate	Agree	No Comment	Disagree
Stranger	5.025	4.217	3.283
Friend	5.250	4.433	2.850
Mean	5.138	4.325	3.067

use the product, see the play, etc., and disagreements by the confederate lowered subjects' intent to act. However, we again see that the difference between the "disagree" and "no comment" mean (1.26) is higher than the difference between the "no comment" and the "agree" mean (0.81). This indicates that of the two forms of influence, disagreement is somewhat more effective.

Concerning the effectiveness of friends and strangers as agents of influence, friends seemed to be more effective than strangers in both raising subjects' scores in the "agree" condition and lowering subjects' scores in the "disagree" condition (Table 4). However, this difference did not reach statistical significance.[10]

Results for Question Three: Recommendation to Friend

Again, the influence statements delivered to the subjects by the confederates significantly altered subjects' responses to the television messages. The "agree" condition had the highest scores $M = 4.81$; for "no comment" $M = 4.15$; the "disagree" condition had the lowest scores $M = 2.94$ (Table 5). This main effect of type of influence was significant, $F(2,116) = 71.7$, $p < .01$ (Table 6). Tukey post-hoc analyses revealed that both the "agree" condition and the "disagree" condition differed significantly, $p < .01$, from the "no comment" condition. However, while both agreement

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[10]Further post-hoc tests are not indicated in the absence of a significant interaction.

Table 5

Mean Response of Subjects to Question Three:

Recommendation to Friend

		Type of Influence		
Confederate		Agree	No Comment	Disagree
Stranger		4.533	4.117	3.183
Friend		5.083	4.175	2.692
	Mean	4.808	4.146	2.938

Table 6

Analysis of Variance of Question Three: Recommendation to Friend

Source	SS	df	F
Friend vs. Stranger	.068	1	N.S.
Error	106.447	58	
Influence	107.980	2	71.700** (2,116)
Friend/Stranger X Influence	8.146	2	5.409** (2,116)
Error	87.375	116	

** $p < .01$

* $p < .05$

and disagreement were effective as forms of influence, the difference between the means for the "disagree" condition and the "no comment" condition (1.21) constitutes a larger difference than that between the "agree" condition and the "no comment" condition (0.67). This indicates that disagreement, as a form of influence remains somewhat more effective than agreement, a finding we have seen across all three questions.

Friends were more effective than strangers as agents of influence. The interaction of Friend/Stranger with Type of Influence was significant, $F(2,116) = 5.409$, $p < .01$ (Table 6). Subjects in the friend group had higher scores on "agree" M = 5.08 than subjects in the stranger group, M = 4.53; subjects in the friend group had lower scores on "disagree" M = 2.69 than did subjects in the stranger group M = 3.18. The means in the "no comment" condition were 4.18 for subjects in the friend group, and 4.12 for subjects in the stranger group (Table 5). Figure 2 presents a graph of this interaction effect.

Tukey post-hoc comparisons were made across the three levels of influence within the friend group and within the stranger group. For the stranger group, a significant difference was found between "disagree" M = 3.18 and "no comment" M = 4.12 conditions, $p < .01$; no significant difference was obtained between the "agree" condition M = 4.53 and "no comment" M = 4.12. However, within the friend group both "agree" M = 5.08 and "disagree" M = 2.69 conditions

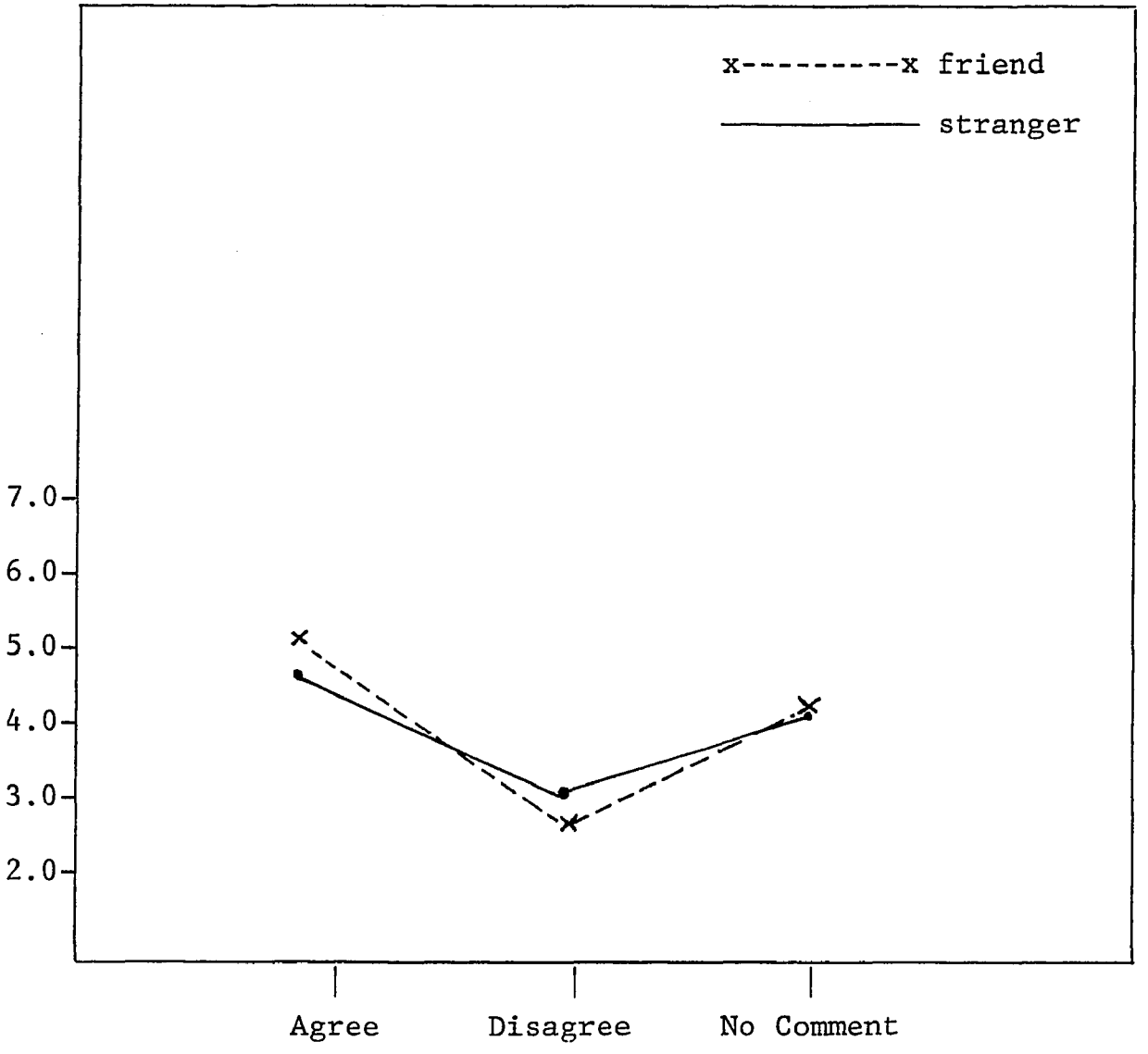

Figure 2. Graph of the Interaction of Friend/Stranger X Type of Influence for Question Three: Recommendation to Friend

differed significantly, $p < .01$, from "no comment" M = 4.18. Thus, as we also found in question one, while strangers seem to be effective primarily in influencing subjects in terms of disagreement, friends seem to be more effective in that they are influential both in their agreement and disagreement statements.

Furthermore, t-tests that compared the responses of subjects in the stranger and friend groups for the "agree" condition only, showed that the scores for subjects in the friend group M = 5.08 were significantly higher than those for subjects in the stranger group M = 4.53, $t(58) = 2.015$, $p < .05$. In addition, the scores of subjects in the friend group were also significantly lower on "disagree" M = 2.69, than those in the stranger group M = 3.18, $t(58) = 2.263$, $p < .05$. There was no significant difference found between friend and stranger groups for the "no comment" condition. Thus, the findings of these t-tests also indicate that friends were more effective than strangers as agents of influence: the friends' influence was stronger than that of the strangers for both "agree" and "disagree."

2. Summary

Effect of Type of Influence

Other people, even strangers, can effectively alter subjects' responses to television messages by comments they make while viewing. Confederates were able to counteract the impact of media messages through their disagreement with the

television messages. Confederates were also able to facilitate subjects' agreement with television messages by communicating their own agreement with the messages. Furthermore, it was found that although both agreement and disagreement were significantly effective forms of influence, disagreement seemed to be the more effective of the two.

The Effect of Friends and Strangers

Friends were more effective than strangers as agents of influence. Significant interactions of Friend/Stranger with Type of Influence were obtained on questions one and three. This interaction of Friend/Stranger x Type of Influence did not reach statistical significance on question two, however, the trend was the same: friends were more effective than strangers in raising agreement scores and lowering disagreement scores.

Tukey post-hoc tests performed on the data for questions one and three revealed that for the friend group, both forms of influence, "agree" and "disagree" significantly altered subjects' responses (i.e. "agree" and "disagree" differed significantly from "no comment"). For the stranger group, the "disagree" condition differed significantly from the "no comment" condition. The "agree" condition, however, did not differ significantly from the "no comment" condition, although the "agree" scores were higher than the "no comment" scores. The implication of this finding is that although friends and strangers are both effective as agents of influence, friends seemed to be more effective in that they

could significantly alter subjects' responses in both directions (agreement and disagreement), while strangers exerted their greatest influence primarily through disagreement.

On question three, t-tests that compared the effectiveness of friends and strangers for each condition of influence ("agree," "no comment," "disagree") separately, revealed significant differences between these two groups on "agree" and "disagree." This means that even though friends and strangers were both able to produce a "disagreement" effect, the strength of the disagreement effect produced by friends was significantly greater than that produced by strangers. And, in addition, for agreement, the scores of subjects in the friend condition were significantly higher than those in the stranger condition. The results of t-tests for question one were the same as those in question three with the exception of the "agree" condition: the difference between the friend and stranger groups for "agree" did not reach statistical significance, although the trend for friends to be more effective in elevating the "agree" scores did exist.

Thus, in conclusion, there are two findings of interest concerning the friend/stranger issue:

(1) friends are more effective as agents of influence in that they could significantly alter subjects' responses in two directions, through agreement and disagreement, while strangers exerted their strongest effect primarily through disagreement.

(2) although both friends and strangers were capable of producing change in subjects' scores and thereby exerting

influence, the influence of friends seemed to be stronger than that of strangers: that is, friends produced more extreme scores in subjects, higher scores when they "agreed" and lower scores when they "disagreed" than the strangers did.

3. Results for the Effect of Type of Message

The last issue we addressed is whether personal forms of influence are differentially effective across topics. For example, might the confederates' agreements be more effective on health messages and play reviews and less effective on editorials and commercials? Or, might the confederates' disagreements be particularly effective on play reviews and commercials but not as effective on editorials and health?

The analysis of variance we used to answer this question was a 4x3x2 factorial in which we collapsed across subjects and treated messages as the random variable. Thus, the first factor was the four levels of type of message (commercial, editorial, play, health); the second and third variables were repeated measures: Type of Influence (agree, disagree, no comment) and Confederate (friend/stranger).

Results for Question One: General Agreement with the Television Messages

In our analysis of variance, the issue of whether the influence was differentially effective across the four topics, corresponds to a Type (commercial, editorial, play, health) x Influence (agree, no comment, disagree)

interaction. This interaction was not significant (Table 7) which indicates that the effect of the confederates' agreements did not differ significantly across the four topics, nor did the effect of the disagreements differ across the four topics. The means for the "agree" condition were the following: Type 1 (Commercial) M = 5.017, Type 2 (Editorial) M = 5.850, Type 3 (Play) M = 5.567, Type 4 (Health) M = 5.017. For the "no comment" condition: Type 1 M = 4.283, Type 2 M = 4.800, Type 3 M = 5.000, Type 4 M = 4.683. For "disagree": Type 1 M = 3.000, Type 2 M = 3.483, Type 3 M = 3.300, Type 4 M = 3.850 (Table 8). The similarity between the means within each condition can be seen by examining the graph for Type X Influence (Figure 3). The parallel lines indicate the absence of a significant interaction.[11] Thus, this finding seems to indicate that all four types of messages seem susceptible to the influence of the confederate.[12] No other effects concerning type of message were significant.

Results for Question Two: Intent to Act/Use

The results for question two are similar to those for question one and indicate that the confederates' influence

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[11]Note however that the distance between each of the three lines reflects the strong main effect for type of influence ("agree," "disagree," "no comment"), a finding discussed previously.

[12]Additional analyses were performed on each of the twelve messages individually to examine the influence process. The results have not been included here because no special relationships emerged.

Table 7

Analysis of Variance for Examining the Effect of Type of Message Question One: General Agreement

Source	SS	df	F
Type	3.945	3	N.S.
Error	6.549	8	
Influence	47.326	2	77.839** (2,16)
Type X Influence	3.083	6	N.S.
Error	4.861	16	
Friend/Stranger	.867	1	N.S.
Type X Friend/Stranger	.647	3	N.S.
Error	2.524	8	
Influence X Friend/Stranger	3.314	2	4.902* (2,16)
Type X Influence X Friend/ Stranger	1.577	6	N.S.
Error	5.406	16	

** $p < .01$

* $p < .05$

Table 8

Mean Response of Subjects for "Agree," "Disagree," and "No Comment" Conditions on the Four Types of Messages for Question One

Type of Message	Type of Influence		
	Agree	No Comment	Disagree
Type 1 (Commercial)	5.017	4.283	3.000
Type 2 (Editorial)	5.850	4.800	3.483
Type 3 (Play)	5.567	5.000	3.300
Type 4 (Health)	5.017	4.683	3.850

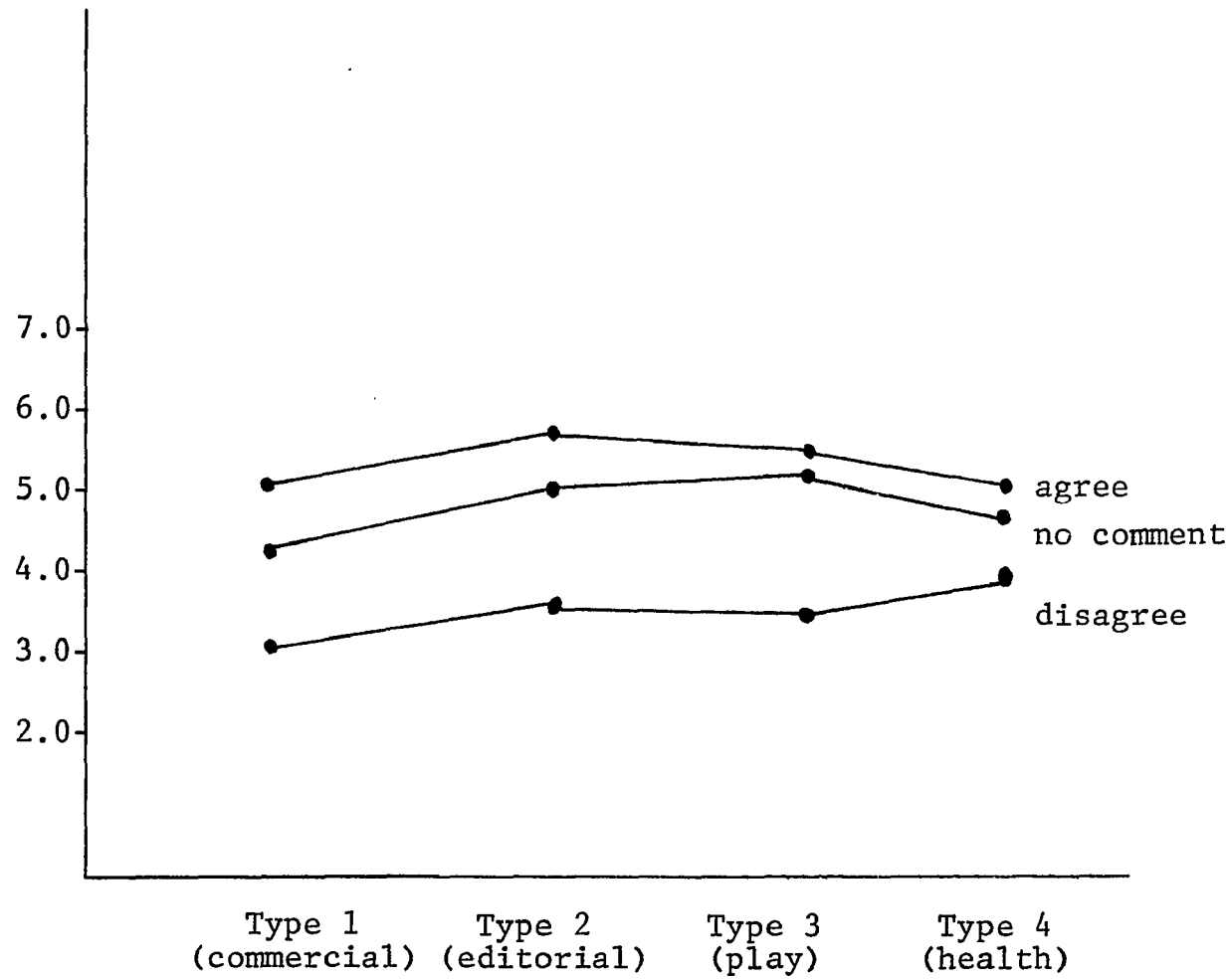

Figure 3. Graph of Type of Message at the Three Influence Conditions for Question One: General Agreement

was not differentially effective across the four topics. From Table 9 we see that the Type of Message X Influence ("agree," "no comment," "disagree") Interaction was not significant. The effect of the confederates' agreements did not differ significantly across the four topics, nor did the effect of the disagreements differ across the four topics. The means of the three conditions for each type of message can be found in Table 10. Figure 4 presents a graph that illustrates the absence of a significant Type X Influence effect. No other effects concerning type of message were significant.

Results for Question Three: Recommendation to Friend

Again, the confederates' influence was not differentially effective across the four topics. The Type X Influence Interaction was not significant (Table 11). The means of the three conditions for each type of message can be found in Table 12. The similarity between the means within each condition can be seen by examining the graph for Type X Influence (Figure 5). The parallel lines indicate the absence of a significant interaction. No other effects concerning type of message were significant.

4. Summary for the Effect of Influence Upon Type of Message

All four types of messages (commercials, editorials, play reviews and health information) were susceptible to the confederates' influence. This influence (both agreement and

Table 9

Analysis of Variance for Examining the Effect of Type of Message

Question Two: Intent to Act/Use

Source	SS	df	F
Type	2.368	3	N.S.
Error	10.970	8	
Influence	52.255	2	64.514** (2,16)
Type X Influence	1.579	6	N.S.
Error	6.473	16	
Friend/Stranger	.000	1	N.S.
Type X Friend/Stranger	.966	3	N.S.
Error	2.373	8	
Influence X Friend/Stranger	1.713	2	N.S.
Type X Influence X Friend/ Stranger	2.622	6	N.S.
Error	7.361	16	

** $p < .01$

* $p < .05$

Table 10

Mean Response of Subjects for "Agree," "Disagree," and "No Comment" Conditions on the Four Types of Messages for Question Two

	Type of Influence		
Type of Message	Agree	No Comment	Disagree
Type 1 (Commercial)	4.983	4.150	2.833
Type 2 (Editorial)	5.367	4.617	3.367
Type 3 (Play)	5.233	4.217	2.667
Type 4 (Health)	4.967	4.317	3.400

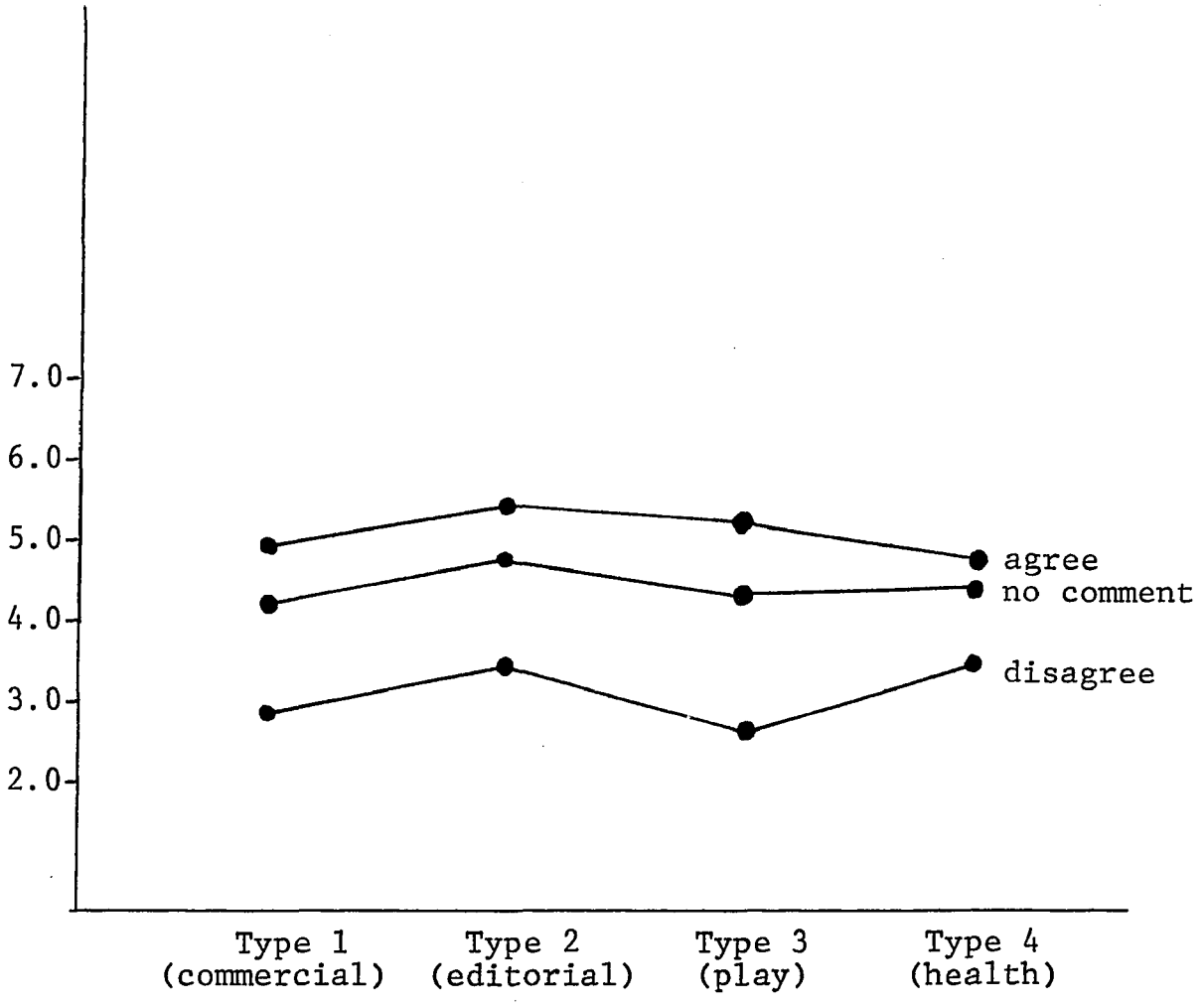

Figure 4. Graph of Type of Message at the Three Influence Conditions for Question Two: Intent to Act/Use

Table 11

Mean Response of Subjects for "Agree," "Disagree," and "No Comment" Conditions on the Four Types of Messages for Question Three

	Type of Influence		
Type of Message	Agree	No Comment	Disagree
Type 1 (Commercial)	4.517	3.633	2.600
Type 2 (Editorial)	4.950	4.683	3.333
Type 3 (Play)	4.983	4.133	2.700
Type 4 (Health)	4.783	4.133	3.117

Table 12

Analysis of Variance for Examining the

Effect of Type of Message

Question Three: Recommendation to Friend

Source	SS	df	F
Type	4.969	3	N.S.
Error	17.120	8	
Influence	43.192	2	69.890** (2,16)
Type X Influence	1.315	6	N.S.
Error	4.940	16	
Friend/Stranger	.027	1	N.S.
Type X Friend/Stranger	1.537	3	N.S.
Error	3.306	8	
Influence X Friend/Stranger	3.259	2	4.490* (2,16)
Type X Influence X Friend/ Stranger	1.040	6	N.S.
Error	5.801	16	

** $p < .01$

* $p < .05$

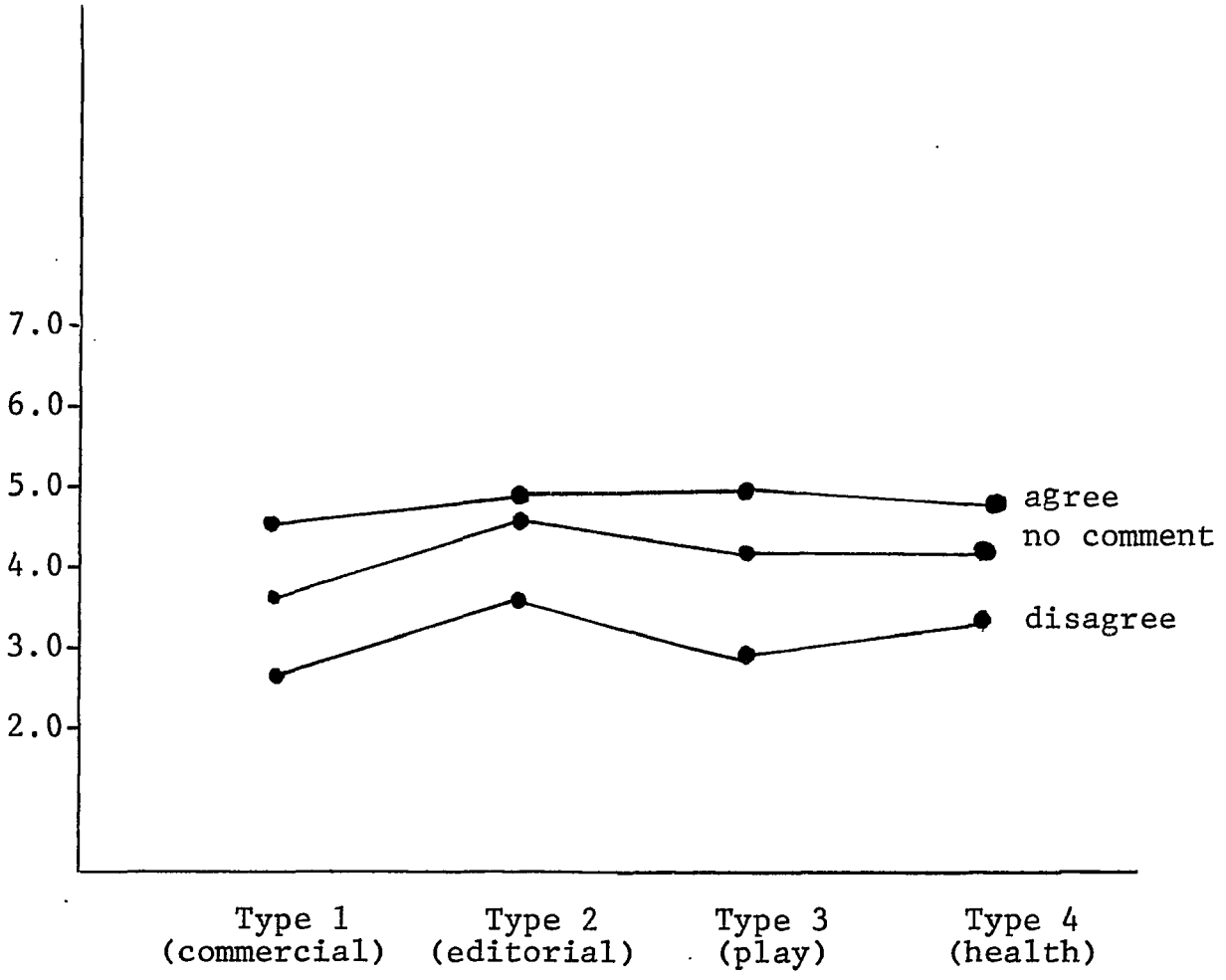

Figure 5. Graph of Type of Message at the Three Influence Conditions for Question Three: Recommendation to Friend

disagreement) was not significantly more effective on one topic than another. These results were replicated on all three dependent measure questions: Question one, general agreement, question two, intent to act/use, and question three, recommendation to friend.

5. The Behavioral Measure

In addition to obtaining paper and pencil measures of subjects' responses, we obtained a small behavioral measure. After subjects filled out their questionnaire in response to the television messages, they were told they had the chance to win two tickets to a Broadway play. They were asked to specify which of two plays they preferred to see: Talley's Folly, or Strider. We compared the responses of those twenty subjects who had been in the "agree" condition for Talley's Folly with the responses of the twenty subjects who were in the "disagree" condition. A Chi-Squared (test of association) was used to analyze the data. For the expected values within the Chi-Squared test, we used the responses of subjects in the "no comment" condition: 12 subjects chose Talley's Folly, 8 chose Strider. The results of the analysis were as follows: In the agree condition, 18 chose Talley's Folly and only 2 chose Strider. In the "disagree" condition, 8 chose Talley, but 12 chose Strider (these figures are a reversal of those in the "no comment"

condition).[13] The Chi-Squared test was significant, x^2 (1) = 8.854, $p < .01$, one tailed. In other words, subjects in the "agree" condition chose Talley's Folly more frequently than one would expect (based on the choices of the subjects in the "no comment" condition) and, subjects in the "disagree" condition chose Strider, the alternate play, more frequently than one would expect based on the "no comment" scores. These results indicate that the confederates' influence statements were taken into account by subjects when they made their decisions concerning the play they would like to see. For the disagree group, the statements made by the confederates seemed to override the information provided by the television reviewer. The confederate was able to convince (some) subjects that Talley's Folly was not worth seeing. In the agree group, confederates were able to enhance subjects' agreement with the television message. These subjects were even more likely to want to see Talley's

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[13] It is interesting to note that on this behavioral measure, "agreement" seemed to be the more effective mode of influence. That is, subjects in the "agree" condition chose Talley's Folly with greater frequency than did subjects in the "disagree" conditions choose "Strider." This may seem contradictory to the results concerning the greater effectiveness of "disagreement" as a mode of influence. These results for the "behavioral" measure, however, may be understood when we consider the possibility that some subjects might rather see something they were familiar with (e.g. Talley) (even if they had heard negative comments) than see something which they heard nothing about. Another possible reason for the "seemingly" greater effectiveness of "agreement" in this case may be that Talley's Folly seems to have a reputation of being a popular and enjoyable play.

Folly than those subjects who heard only the television reviewer's recommendation.

IV. DISCUSSION

Our findings support the idea that personal influence can mediate the impact of television messages. The casual comments made by confederates systematically altered subjects' responses to the television messages. When the media source was pitted against the personal source as a persuasive agent (as in the case of confederate "disagreement"), the confederates were able to successfully counteract the impact of the media messages. When personal influence was in the form of agreement with the media message, an additional enhancement effect was obtained.

Although our study does not provide information concerning the specific reasons for the effectiveness of personal influence we suspect that several of the explanations pointed out by Katz and Lazarsfeld (1955) (and reviewed earlier in this paper) are applicable here. For example, Katz and Lazarsfeld had suggested that the benefits of social conformity and maintaining a satisfactory relationship may act as incentives to acceptance of a personal communication. At the very least, subjects might be reluctant to disrupt the social situation by voicing disagreement with the confederate and precipitating an argument. The verbal responses of our subjects to the confederates' influence statements do in fact seem to reflect this tendency, a tendency toward steering away from arguments. Rarely did a subject openly disagree or challenge the confederate on an

issue. When disagreement was expressed, it was done so politely and gingerly, and in a rather indirect manner. For example, when our confederate agreed with the television commercial and asserted that "Bounce" was an excellent fabric softener, one subject replied quietly: "I like the generic kind because it's cheaper"; another replied "I think I prefer the liquid softeners" ("Bounce" goes in the dryer). An occasional subject did openly disagree. Perhaps the most blunt comment was in response to a confederate who claimed that Paul Masson's Emerald Dry Wine was awful and tasted like vinegar. The subject exclaimed: "No, that's not true, that wine is good!" Interestingly enough, however, when we examined the subjects' scores for the wine question, they were very low: 3.0 for general agreement, 1.0 and 1.0 for use of the product and recommendation to friend (1.0 represents the extreme of disagreement).[14] Thus, her scores seemed to reflect the confederate's influence.

However, for the most part, our subjects tended to respond to the confederate's influence statements with statements which were in agreement with the confederate, or, they remained silent. The "agreement" statements the

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[14]Note that it would be interesting to examine the relationship between the subjects' verbal responses to the confederate and their written candid responses on the questions. The example we mentioned was a case in which the subject expressed verbal disagreement with the confederate but showed agreement with the confederate in her written response. It might be the case that some subjects expressed verbal agreement with the confederates while disagreeing in their written response. Unfortunately, we do not have enough of this kind of information to perform any kind of systematic analysis of this issue.

subjects made were of two varieties. The first type consisted of expressions of agreement either by restating what the confederate said or by elaboration upon the confederate's statements. For example, on a health message the confederate claimed that the teddy-bear gadget to calm the crying baby was ridiculous and that it was more a gadget for a lazy mother than it was for the baby. The subject responded: "Yeah, it's pretty silly, all it is, is like using an alarm clock for a puppy dog" (elaboration). For the South Street Seaport editorial, our confederate's statement was: "I think it's a terrible idea to restore it like that, it's too commercial, they should preserve its historic value." The subject replied: "Yeah, they'd destroy it by rebuilding it like that, it is very commercial" (restatement).

The second type of statement made by subjects to express their agreement with the confederate did not consist of elaboration or restatement, but called attention to the fact that both the subject and the confederate were "in agreement." The following are examples of this type of response: "Yeah, I'll go along with that," "I think so too," "I don't think so either," "Well, we agree!" "I really think that's a good idea also." These subjects seemed to call attention to the fact that the confederate and themselves had reached consensus. This might be an indication that it was important for subjects to maintain rapport and harmony with the other person (the confederate) in this social situation.

Thus, in accordance with Katz and Lazarsfeld (1955), subjects appeared to be motivated to maintain a somewhat satisfactory relationship with the confederate. Certainly, the rewards in terms of immediate social approval for subjects (even if somewhat minimal) were greater for agreement with the confederate than agreement with more remote media source.

We do not, however, mean to imply that this kind of social conformity may be the sole reason for the influence effect. And, we do not mean to imply that subjects merely went along with the confederates on the verbal dimension. That is, in the verbal expression of agreement only. When given every opportunity to express their opinions candidly, by their anonymous response to the questionnaire, our subjects still persisted in expressing views that were similar to those of the confederate rather than those of the media.

Several other factors might also be responsible for the influence effect we obtained. For example, it is possible that subjects took the word of the confederate over the media source because they perceived the influence attempts of the confederate as more casual and less purposive (Katz & Lazarsfeld, 1955). Perhaps they were more open to information presented in this manner than information that could have been regarded as a direct attempt to persuade. For example, when our confederate disagreed with the camera commercial and told a subject: "That's a terrible camera,

it isn't easy to use at all," a subject replied: "Yeah, they'll say anything to sell a product."

Subjects might place their trust and confidence in another person who appears to have their best interest in mind, and appears to have no ulterior motives, than to place their trust in the more remote media source. When our confederate "agreed" with the camera commercial and informed a subject that the camera "was a great camera and it really was easy to use," the subject responded, "Really? that's good to know." Thus, it seems that while subjects are skeptical in accepting many of the media communications, they perceive many of the person's communications as an offering of personal advice.

The two reasons given thus far for explaining the "influence effect" have focused on uncovering those factors which might encourage subjects to agree with one source versus the other source (person vs. media). This approach seems to consist of locating variables in the social situation (e.g. need for social harmony) or source variables (e.g. which source is perceived as more trustworthy) that would lead to, or explain, the subjects' incorporation of one or the other source's viewpoints. There is, however, another way of examining the situation. We might view the situation as one in which the confederate acts as a catalyst in triggering subjects' further thoughts about the television messages. It may be that the confederate, in making comments, forces the subject to reevaluate the information she has

received. The ideas presented to the subject by the confederate may have served as a ready "cognitive set" for the subject to use when reevaluating the information received from the television messages. Subjects might then reorganize their thinking along the lines of the confederate. In examining some of the responses subjects made to the confederates' comments, we came across some statements which we feel might reflect this kind of reevaluation. For instance, the "Train to the Plane" editorial argued that the "Train to the Plane" was a convenience that should be publicized more. Our confederate commented: "It doesn't matter how much they advertise it, it's still not going to make it convenient." A subject responded, "Well, I though it seemed like a good idea, but now that you mention it, I can just imagine lugging my fifteen bags onto the train and then getting mugged!" Thus, perhaps the confederate's point that the "Train to the Plane" was not convenient triggered subjects' search for other information or reasons that would reinforce this point of view.

Another example is one of the health messages that argued that milk contained the ingredient "tryptophan" which was useful for inducing sleep. Our confederate commented: "Warm milk doesn't really help you get to sleep at night, I've tried it a number of times and it's never worked." The subject replied: "I've heard of people taking milk to help them sleep, but if it never works for you, then how effective could it really be?" Here, the subject began to

question the viewpoint presented in the health message as a result of the confederate's comment.

This more cognitive explanation of the greater effectiveness of personal influence is not incompatible with the other two explanations we offered. Probably all three explanations are tenable and might jointly account for the influence effect. The first explanation emphasizes the demands of the social situation. The second explanation stresses the characteristics of the source(s) as perceived by the subject and the third explanation places heavier emphasis on cognitive aspects and presents the subject as a more active information processor.

Now that we have tried to account for some of the reasons for the effectiveness of personal influence, it is necessary to consider the relative effectiveness of the two directions of influence in this study: agreement and disagreement. Our findings indicate that while agreement and disagreement are both effective in altering subjects' responses to the television messages, disagreement remained the more effective of the two.

Several factors might account for this. In terms of methodological considerations, one might ask whether the "disagreement" influence statements made by the confederate were stronger than the "agreement" statements. We do not believe this to be the case, because, for the most part, the wording of the agree and disagree statements was quite similar and employed equally strong adjectives, etc.

Another methodological issue one might raise concerns the baseline scores for the messages, that is, the scores of the "no comment" control condition. If these scores were high, then a ceiling effect could have been obtained. The scores for the "no comment" control condition for the three dependent measure questions were: 4.692, 4.325, and 4.146. Although the first question's baseline score (4.692) is higher than 4.0 (the exact midpoint), we do not believe this one score would provide sufficient cause to ascribe our results to a ceiling effect.

Of course, in agreeing, the confederate is essentially offering to the subject a somewhat similar kind of information to that which is presented in the television message. For example, both types of information presented to subjects are positive evaluation. In contrast, when the confederate disagreed, the subject received two different and opposing types of information, that is, a positive evaluation from television, and a negative evaluation from the confederate (person). Thus, in the agreement condition, the similarity of the two kinds of information (from the confederate and the television) might be responsible for weakening the potential influence effect (of the confederate).

Another consideration is that people may (in general) be more easily influenced by critical and negative statements than by positive statements. One way of finding out whether the "disagreement" statements carried more weight primarily because of their "critical" and "negative" nature

would be to construct disagreement statements that were positive in nature and see if these comments were still more effective than the "agreement" comments (now negative in nature). For this situation to occur, the television messages would have to consist of negative evaluations, so that the confederates, in disagreeing, would have to offer positive evaluations. (For example, the television play reviewer would give the play a bad review and the confederate's "disagreement" would consist of giving the play a "glowing" review.) Correspondingly, the confederates' "agreements" would then consist of negative evaluations. If, under these conditions, disagreements (now positive comments) were still the more effective form of influence, then this would indicate that the effect we obtained was not primarily a result of the "negative" component of the disagreement statements. Furthermore, if this were the case, we would probably favor the first explanation we offered to account for these results, namely, that the similarity (vs. the opposition) of the information presented by the television and the confederate is the important factor.

The implications of these results, as they stand now, however, is that it seems easier to make a person critical of television messages than it is to get them to agree with the messages. This may reflect a tendency of people to view media communications with some degree of skepticism.

The fact that disagreement seemed to be the more effective mode of influence can also be seen when we examine the issue of the effectiveness of friends and strangers as agents of influence. Friends were more effective as agents of influence in that they were successful in altering subjects' responses in two directions, through agreement and disagreement.[15] In contrast, strangers exerted their influence primarily through disagreement. In addition, the strength of the influence effect was greater for friends than for strangers: the agreement and disagreement scores for subjects in the friend group were respectively higher and lower than for subjects in the stranger group.

Although friends were more effective than strangers, the fact that strangers were able to exert influence should not be minimized.

The influence of strangers might be due to a tendency for people to overgeneralize based on a limited sample. That is, people might (mis)take information that has been received from a limited group (one other person) to represent a "consensus." Thus, our subjects may have reasoned: "If even the very person sitting next to me, a total stranger (a random sampling of all those others out there) feels this way, then most other people must feel this way. If most other people feel this way, then there must be some objective

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[15]Note that even for friends, the change in scores due to "disagreement" was greater than the changes produced by agreement.

basis for their feelings." Thus, if the confederates' influence statements were perceived as consensual indicators, then they might have had the aura of a more objective kind of information. If the information presented to the subjects by the confederate did seem "more objective" then it might have greater impact. The question that remains, then, is why the strangers were primarily effective in their "disagreements" and not as effective in their "agreements."[16] It could be that while the disagreements may have been viewed as objective criticisms, the agreements, because they were positive in nature were perceived as "personal preferences." As such, they could have been dismissed more readily as personal likings of the confederate.

Another possible reason for the effectiveness of the stranger's influence may be that it is not the norm for people to converse with strangers. Because of this, it may be that when the confederates spoke, they were perceived as speaking about issues which they had some knowledge of, or

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[16]Note that we might be tempted to attribute the finding that strangers were not particularly effective on agreements to a high baseline reading of the "no comment" condition: For Question 1, the "agree" M = 5.19, the "no comment" M = 4.84. However, for Question 3, where the "no comment" mean was almost exactly at midpoint (M = 4.117), the difference between the "agree" and "no comment" conditions still did not reach statistical significance. Therefore, although the baseline was slightly elevated in Question 1, it does not seem that we can attribute the results to a ceiling effect. Note also that Question 2 was not considered here because no significant interaction was obtained, therefore, further post hoc analyses (e.g. of the stranger group individually) were not indicated.

felt strongly about.[17] The implication being, that otherwise they would not have communicated their ideas to a total stranger. In this manner, the confederate strangers could have gained credibility. However, this explanation does not account for the reasons confederates were not particularly effective in their "agreements."

Thus far, we have tried to account for the factors which might explain why strangers were effective and why they were more effective in their "disagreements" than in their "agreements." It is also necessary to consider why strangers were less effective than friends. Probably this is due to the unique factors which characterize the interactions between two friends: enhanced trust, mutual empathy, interest in both the preferences as well as dislikes of the other, similarity and communality of interest, rapport, etc.

Sources that are perceived as similar to oneself are often particularly effective as agents of persuasion (Goethals & Nelson, 1973).[18] However, the issue of source

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[17]Many subjects in the stranger group did tell us later that they felt the "other subject" (the confederate) had very strong opinions on some of the issues and that "she had different ideas about some of the things we saw." Others commented that the confederate seemed to know alot about certain things, e.g. they knew of the camera, had heard about the plays before, etc.

[18]In the present study, confederate-subject pairs in the friend condition were quite homogenous, that is the two individuals appeared to be similar in age, interests, etc. In contrast, the subject and the confederate in the stranger group were not always as close in age, etc. It might be of interest to replicate this experiment with the addition of a new group: the "similar-stranger" confederate group. If this new "similar-stranger" group reached a level of influence that

similarity extends to the media also. We have treated "the media" as the source, and have not considered the particular source on the media; that is, the actual person presenting the media message, e.g. Joel Siegel, Goeffrey Lyons, etc. When examining the effect of source similarity, it may also be of interest to manipulate this aspect of the media presentations.

The last issue we addressed is whether personal influence was differentially effective across topics. The confederates' influence statements were effective for all four types of messages: play and movie reviews, commercials, editorials, and health information. Thus, our findings indicate that the important variables in the influence process seem to be type of influence (agreement, disagreement) and source of influence (friend and stranger) rather than type of message.

One reason that may explain why subjects responded to all four types of messages in a similar manner may be that the messages themselves were similar. The types of messages may have been more homogenous than we assumed. The fact that the content of the messages differed is undeniable. However, all four types of messages tended to present the content in an informational manner: For example, the camera commercial might have informed us of the desirable characteristics of

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approached that level reached by the "friend" group, then "similarity" might be as important a factor as friendship is, for the influence process.

the camera and explained the new "auto winder" device in much the same way as the health message told us about the sleep-inducing qualities of "tryptophan." The wine commercial informed us of the unique aging process of the wine (that was responsible for its good taste), while the play reviewer summarized the plot of Talley's Folly. In addition to this "informational component," the messages were similar in that they all made recommendations and have a strong persuasive/evaluative component. One subject even referred to the "Train to the Plane" editorial as the commercial about the "Train to the Plane."

Perhaps we might have obtained a significant "type effect" had we used specific health information and editorials which seemed more technical and "factual," or commercials and play reviews that seemed "less informative." However, to have sought out "special" types of play reviews, commercials, etc., would have seemed to defeat our purpose: the inclusion of different types of messages which were part of current, every day, media fare.

Another consideration may be that the very medium of television produces a homogenization of content and level of import. The act of television viewing often presents us with a situation in which we can encounter and respond to myriad situations, all within the range of a few minutes. Within a brief period, we can experience operas, world news, violence, drama, comedy, and in fact, cover a huge spectrum of human activity and emotion. Thus, one possible concomitant

of this miniaturization of experience may be the neutralization and homogenization of the different kinds of messages.

We have emphasized the fact that the messages consisted of an "informational" component and an "evaluative" component. In this investigation, we have primarily focused on the evaluative component. That is, we tried to ascertain whether subjects would agree with the evaluations made by the confederate, or the media. We did not however ask subjects whether they believed some of the informational aspects of the message. For example, we did not directly ask whether subjects believed the milk contained "tryptophan." Instead, we asked whether the tryptophan contained in milk would help them fall asleep at night. Similarly, we did not ask whether the subjects believed the play reviewer's account of the plot of Talley's Folly, but asked whether they accepted the reviewer's evaluation of it. Had we asked questions that were directed toward the more "factual" or "veridical" aspects of the messages, we might have obtained different results. In addition, had we used television messages that were primarily veridical in nature, our results might be different. For example, we did not present a televised weather report to the subject and then have the confederate deny this report. Nor did we include a news bulletin which informed subjects that 900 people died in Guyana. The impact of confederate disagreement on this type of information (e.g. "no they didn't die" or "no, only 200 people died") would probably be somewhat limited.

The messages presented to subjects did not consist of strictly "factual" accounts or information, but consisted primarily of explicit evaluations. One direction that future research might take is to examine the effect of personal influence on the implicit evaluations made in television messages. For example, in our investigation the fabric softener commercial argued that "Bounce" was a good brand of fabric softener. The implicit message, however, was that "one ought to use fabric softeners when washing clothes." Television messages often consist of normative information. They offer specific guidelines for dealing with various situations. Perhaps future investigations of personal influence might deal with this normative kind of information. For example, the confederate might then make comments that are in opposition with or are defensive of the normative information and implicit evaluations made by the media.

V. CONCLUSION

Our research has provided a new paradigm for the study of personal influence and media influence. Hovland (1959) had pointed out that in the past, media effects have been primarily tested in the field where personal sources of influence typically emerge as the more persuasive source. The assumption was made that in the field, individuals had greater exposure to personal sources of influence than to media sources. It was not clear that when media and personal sources were brought together in the same situation, where both sources could be heard equally, the personal source would still prove to be the more effective persuasive agent. Our investigation resolves this issue by demonstrating the effectiveness of personal influence in the controlled environment of the laboratory.

Our findings are in accordance with previous literature that has indicated that personal forms of influence can modify the direct impact of media messages. Our research however, has been able to specify that people are able to make two types of modifications: they can inhibit the impact of media messages as well as enhance or facilitate the impact of these messages. Furthermore, we have been able to specify the enhanced effectiveness of friends in the influence process, while demonstrating that total strangers are also able to exert influence.

The finding that personal forms of influence did not vary in effectiveness according to the type of message used might suggest a tendency of the medium of television to homogenize both the content and import of televised messages.

Although our research did not specify the particular reasons for the effectiveness of personal influence, several explanations were offered. The first explanation we offered emphasized the demands within the social situation which might encourage subjects to hold opinions which conform to those of the confederates' (for example, the benefits of social conformity and the fact that the confederates could sanction the responses of the subjects by giving or withholding approval). The second explanation we offered stressed the characteristics of the sources as perceived by the subjects. For example, subjects may have perceived the influence attempts of the confederates as more casual and less purposive rather than as a direct attempt to persuade; they might also more readily place their trust and confidence in another person who appears to have their best interest in mind than to place their trust in the more remote media source. The third explanation placed emphasis on cognitive aspects and presented the subject as an active information processor who was forced to reevaluate the information presented in the television message because of the confederate's comments.

At this point, it is also necessary to consider some more general principles that might facilitate an understanding

of the personal influence effect. This entails an examination of the structure of the social situation which we have constructed. We have clearly demonstrated the power of personal forms of influence in a particular social setting. The social setting with which we have dealt entailed a small interactive system containing two people and a television set. Within this system, opinions were offered and exchanged. However, while the flow of information was unidirectional between the television and the person, the flow of information was bidirectional (or at least appeared to be)[19] between the two people. This factor of the potential exchange of information and opinions may be important in contributing to the strength of the personal influence effect.[20] The fact that subjects had the chance to respond to the confederates with their own comments may have personalized the communication and thus facilitated the influence process. Furthermore, it is necessary to

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[19]What we are referring to here is the limits of the interactional system we have set up. In our experimental design, person A (the confederate) could speak to person B (the subject) and person B could then respond to person A. But, person A (confederate) could then respond back to person B only by repeating the original influence statement. That is, they could not add new information or tailor new arguments in response to person B's comments. Thus our system was not a true interactional or "bidirectional" system in the strict sense.

[20]One wonders what would have happened in the case of "interactive televison" where the subject could talk back to the television message; it is also interesting to consider the case in which the confederates would deliver their influence statements and then leave the room.

emphasize that this exchange was a social exchange of information involving two people. The idea that people are social beings and as such can be influenced by other people is not new. It is a consideration that has guided most social psychological research. An interesting consideration, however, is whether another source of influence (other than a person) could be just as effective in mediating the impact of television. For example, one wonders what would have happened if the confederates' role in this experiment had been replaced by a machine that conveyed the same influence statements, or even a second television set. We would suspect that the influence of the more remote and mechanical source would be less effective than that of the person.

In addition, it is important to point out that while the media may gain its strength in forming, shaping and maintaining opinions through repetition and consistency, people gain effectiveness through the immediacy of their presence.[21] The immediate presence of the person affords him/her the ability to monitor the response of the other; to sanction the opinions of the other; to give approval or withhold approval; to give instantaneous feedback concerning the message and the other person's response to the message. In contrast, the media source of communication is impersonal. The television announcer cannot respond to the subject, cannot frown upon

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[21]An interesting question that arises here is would the strength of the confederates' influence be as powerful had they delivered their influence statements from another room or via the telephone?

the subject, and has no direct means of control over the subject. Thus the person represents the more direct social agent; while television reflects more indirect and farther removed societal forces.

The influence of the person can be specific and put forth in personal terms. In contrast, media communications tend not to be tailored toward the individual since they are directed toward many. However, it is this very characteristic of the media that may account for its particular strength. In reaching the masses, the media have the potential to call to the attention of diverse groups, the same information. In this manner, public opinion can be created. Thus, the media and personal sources jointly contribute to the formation of public attitudes. People, however, seem to be powerful social agents or regulators of the information obtained through media channels. When opinions are expressed by people who share our social situation, it seems that we cannot ignore these opinions, even if these opinions contradict the viewpoints presented by the media.

Another conceptualization of the experimental situation that might help in understanding our results may be in terms of balance theory (Heider, 1958). A general conception of balance theory is that people who like one another (or who in some way are associated together as a unit) will expect to agree or share similar opinions. If they do not subscribe to the same opinions, they will experience a state of discomfort. They are then motivated to reduce this discomfort

by changing their opinions to eradicate any inconsistencies. According to balance theory, subjects in our experimental situation could reduce discomfort due to a discrepancy in opinions in two ways: (1) they could bring their opinions in line with those of the confederate or (2) they could maintain opinions that differed from those of the confederate only if they in some sense severed the bond between themselves and the confederate. Balance theory would predict that if subjects did not initially hold opinions (concerning the television messages) that were similar to those of the confederate, they would probably change their opinions to conform to those of the confederates in order to maintain cognitive harmony. This first alternative would be easier (and thus preferable) to the alternative of rejecting the confederate (and maintaining opinions which conformed to those of the television message), especially in the case where the confederates were "friends" of the subjects. (When the confederates were friends of the subjects, the subjects would be even more motivated to maintain cognitively consistent views.)

Thus, the balance theory explanation does seem to be able to account for both the influence effect and the greater effectiveness of friends and strangers as agents of influence; and, it does seem useful for understanding our results in terms of more general socio-psychological principles.[22]

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[22]Note that although balance theory falls within the domain of socio-psychological theories, it is probably more a "psychological" theory than it is a "socio-psychological" theory in that it emphasizes individual cognitive processes.

Future research is indicated in order to specify more clearly the particular reasons for the effectiveness of personal influence in a variety of settings. In addition, the longevity of the strength of personal forms of influence might be examined.

Katz and Lazarsfeld (1955) and others, have charted the flow and demonstrated the importance of personal influence in natural environments over more prolonged periods of time. We have demonstrated the strength of personal influence when people and television are joined together in the same setting.

The wider implication of our finding is that the media cannot easily bypass social channels; people may still depend upon social channels of information rather than media sources when making decisions and forming judgments. Information received from the media can be counteracted by social comments. This should not be understated in an era where mass communications are more pervasive than ever.

Furthermore, this study reinforces the strength of individuals as social regulators and reinstates the importance of social influence processes as a determinant of individual experience.

In closing, we wish to note that although several suggestions for future research have already been made, the present paradigm readily lends itself to the investigation of several other issues. More behavioral measures could be developed. And, instead of measuring the effect of the

confederates' comments on subjects' agreement with the messages, one might examine the effect of the mere presence of the confederate and the confederates' comments on subjects' enjoyment of television messages.

The type of argument the confederate uses could be varied to ascertain the strategies which might maximize the person's effectiveness as an agent of influence. For example, how subtle should the confederates' comments be? Must the influence be verbal or might nonverbal communications be enough to sway subjects' opinions?

We tried to ascertain whether the subjects in this investigation were aware of the confederates' comments; we also asked the subjects if they were influenced by these comments. Although most subjects were aware of the comments, only one-third claimed that they were influenced by them.[23] This suggests that the influence process may be subtle. However, it may also be the case that the denial was due to social desirability.

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[23]If the subject told us she was not influenced, we asked "why?" Two kinds of responses were common. First, many subjects said "I have my own opinions" or "I'm not influenced by what other people say." These answers might suggest social desirability. The second type of response was "I usually agreed with what she was saying in the first place." This might suggest a tendency for subjects to perceive themselves (or wanting to perceive themselves) as holding ideas which are similar to the ideas of others. A less common, but interesting answer was: "I thought I influenced her [the confederate]." This of course applied to some subjects who had answered the confederates' remarks with remarks of their own.

The source of the message may also be studied. For example, the expertise of the source or the similarity of the source (both media source and personal source) to the subject could be varied. Another interesting possibility would be to vary the number of confederates. Would maximum influence be obtained with the use of three confederates? Or, is the influence from one confederate just as effective? The unanimity of the majority could also be varied.

One other direction that future research might take would be to replicate this experiment using other media, for example, radio, or print. Is a person's influence differentially effective for different media?

We hope this paradigm will be useful to both social psychologists and those doing research in the field of communication, and that it will serve as a heuristic tool for future research in these two areas.

APPENDIX I

The Influence Statements for the Twelve Messages

The Influence Statements for the Twelve Messages

Wine Commercial

Agree: Actually, his white wines are very good, that one in particular tastes great.

Disagree: Actually, his white wines are awful, that one tastes a little like vinegar.

Bounce Fabric Softener Commercial

Agree: I use that and my clothes do come out soft and they really smell good.

Disagree: I used it and my clothes came out limp and felt sticky.

Camera Commercial

Agree: That's a great camera, it's very easy to use.

Disagree: That's a terrible camera, it wasn't easy to use at all.

Health Message-Baby's Teddy Bear Gadget

Agree: I bet that would be soothing for the baby and help the mother out too.

Disagree: That's ridiculous, I don't think that would work, it's more a gadget for the lazy mother than it is for the baby.

Health Message-Saccharin

Agree: Those studies are true, saccharin really is very safe.

Health Message-Saccharin (contd.)

Disagree: That's not true, alot of studies show that saccharin really is dangerous.

Health Message-Tryptophan in Milk

Agree: Warm milk really does help, I've tried it a number of times and it always helps me get to sleep.

Disagree: Warm milk doesn't really help you get to sleep, I've tried it a number of times and it never works.

Play Review-Talley's Folly

Agree: Yeah, I heard that play was terrific and that the acting is superb.

Disagree: I heard that play was overrated and full of cliches.

Play Review-The Lady From Dubuque

Agree: That's supposed to be fantastic, really interesting, Edward Albee is great.

Disagree: That's supposed to be a real stiff, very boring, I think they're going to close it.

Movie Review-Gizmo

Agree: I'd like to see that, I saw a longer clip and it really was hysterical.

Disagree: I wouldn't want to see that, I saw a longer clip and it got very repetitious and seemed stupid.

Editorial-The Train to the Plane

Agree: They really should advertise it more, that train is really convenient.

Editorial-The Train to the Plane (contd.)

Disagree: It doesn't matter how much they advertise it, it's still not going to make it convenient.

Editorial-South Street Seaport

Agree: I think it's a great idea to restore it like that, it's pretty run down the way it is.

Disagree: I think it's a terrible idea to restore it like that, it's too commercial, they should preserve its historic value.

Editorial-Studio 54

Agree: He's right, they shouldn't have gone to the party.

Disagree: He's being much too harsh, it was only a party.

APPENDIX II

The Dependent Measures

The Dependent Measures

Wine Commercial

Q1 Paul Masson Emerald Dry wine is an excellent wine.

Q2 If I were buying a wine within this price range, I would buy this one.

Q3 If a friend were having a party, I'd recommend that she purchase this wine.

Bounce Commercial

Q1 Bounce is an excellent fabric softener.

Q2 If I were to use fabric softener, I would buy Bounce.

Q3 I would not hesitate to recommend Bounce to a friend who wanted a fabric softener.

Camera Commercial

Q1 The Konica FS-1 would be a wonderful camera to own.

Q2 If I were to purchase a camera within this price range, I would buy this one.

Q3 If some friends were interested in buying a camera, I would tell them to buy this one.

Health-Baby Gadget

Q1 This teddy-bear device would be effective in comforting a restless newborn baby.

Q2 I would not hesitate to use this type of device if I were raising a young infant.

Q3 I would not hesitate to recommend this device to a friend who was raising a young infant.

Health-Saccharin

Q1 Saccharin is a relatively safe sugar substitute.

Q2 I would not be afraid to use food products containing saccharin.

Q3 I would not hesitate to recommend the use of saccharin to friends who were trying to reduce caloric intake.

Health-Tryptophan

Q1 Drinking milk and eating foods that contain tryptophan (nuts, chicken, tuna, turkey and cottage cheese) can help a person fall asleep at night.

Q2 I would use milk or other products that contain tryptophan if I needed help in falling asleep at night.

Q3 If a friend had trouble falling asleep at night, I would recommend that he use foods that contain tryptophan.

Play Review-Talley's Folly

Q1 This play is likely to be an entertaining play.

Q2 If I were going to the theatre, I would see this play.

Q3 If my friends asked, I would tell them to see this play.

Play Review-The Lady From Dubuque

Q1 This play is likely to be an entertaining play.

Q2 If I were going to the theatre, I would see this play.

Q3 If my friends asked, I would tell them to see this play.

Movie Review-Gizmo

Q1 This movie is likely to be an entertaining movie.

Q2 If I were going to the movies, I would see this movie.

Q3 If my friends asked, I would tell them to see this movie.

Editorial-The Train to the Plane

Q1 More money should be spent to publicize the "train to the plane."

Q2 If I were going to JFK airport, I would use the "train to the plane."

Q3 If some of my friends were going to JFK, I would recommend that they take the "train to the plane."

Editorial-South Street Seaport

Q1 The South Street Seaport should be restored in the manner suggested by the editorial.

Q2 If I were on the city planning commission, I would recommend this type of restoration.

Q3 If I were on the city planning commission, I would try to convince my co-workers to support this type of restoration.

Editorial-Studio 54

Q1 I endorse the viewpoint presented in the editorial and believe the celebrities should not have attended the Studio 54 party.

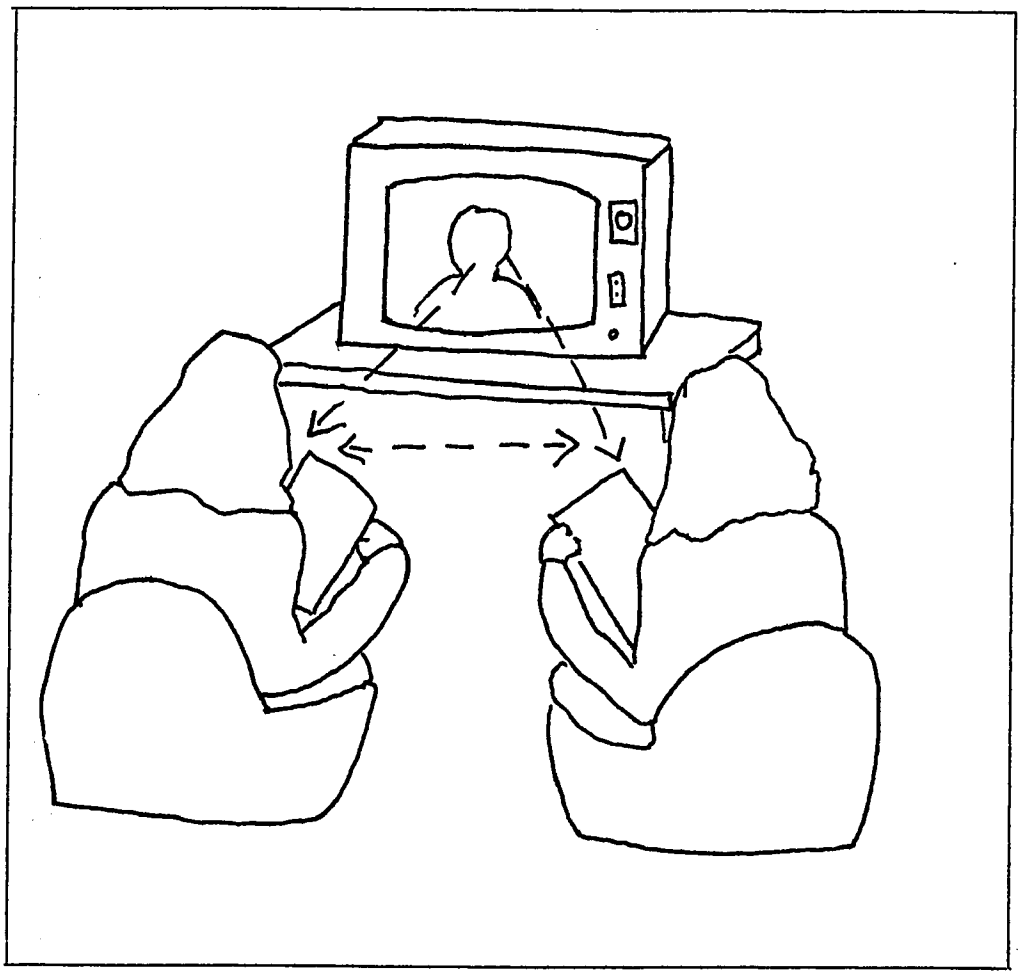
Q2 If I had been invited to the party, I would not go.

Q3 If a friend was invited to the party and asked me about it, I'd try to convince her not to go.

APPENDIX III

A Schematic Representation of the Experimental Setting

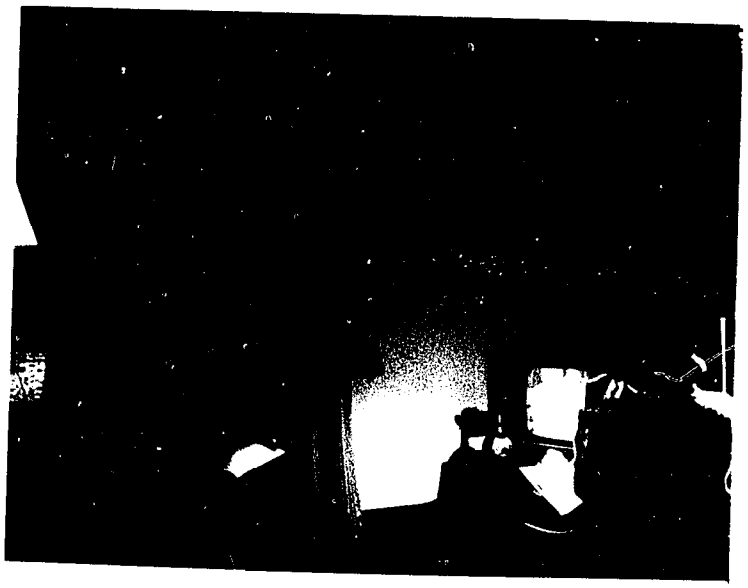
A Schematic Representation of the Experimental Setting



APPENDIX IV

A Photograph of the Laboratory

A Photograph of the Laboratory



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