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ON JURORS' PERCEPTIONS OF A VIDEOTAPED DEPOSITION:
A MEDIUM SHOT IN THE DARK

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THE EFFECTS OF IMAGE SIZE ON JURORS' PERCEPTIONS OF A VIDEOTAPED DEPOSITION: A MEDIUM SHOT IN THE DARK

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ABSTRACT

THE EFFECTS OF IMAGE SIZE
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This is an exploratory study of how various camera shots may affect a juror's opinion of a witness testifying in a civil suit via videotape. Prior research has provided inconclusive evidence that certain attributes of a videotaped subject may interact with the type of shot to differentially influence ratings by viewers, and perhaps bias a verdict.

This study controlled for the attractiveness and sex of a witness by videotaping a male and female pretested as attractive, and a male and female pretested as unattractive. Each actor presented forty-five minutes of testimony in a close-up shot, medium shot, long shot, and extreme long shot, resulting in a 4 x 2 x 2 factorial design. A total of 215 Lansing area adults were each randomly assigned to view one of the sixteen videotaped experimental conditions and complete a questionnaire measuring the following variables: information retention, identification with the witness, source credibility and homophily, interpersonal attraction, and interest in the proceedings.

Data analysis was done using three-way analyses of variance with a regression approach, in conjunction with the Tukey method for post hoc comparisons of means. The results indicated that the composure dimension of credibility was significantly influenced by an interaction between camera shot and witness attractiveness. Physical attraction was affected by an interaction of shot and witness sex. Viewers' ratings of interest in the proceedings were also affected by the type of camera shot.

Based upon these results and the findings of practitioners and past researchers, the medium shot was recommended as the most useful for videotaping a single, seated witness.

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CHAPTER I

RATIONALE AND REVIEW OF LITERATURE

The advent of video technology into the courts has focused attention upon a relatively unexplored area of media research. Before videotape recording of depositions, and entire trials, can gain widespread acceptance, legal experts and social scientists must assess the potential effects upon a legal system that has been reluctant to change for hundreds of years. Rather than contending here with the controversy of advantages and disadvantages of videotape versus an all live trial (see Kaminski, 1977), we will examine an aspect of videotape usage--techniques used to record testimony.

As part of the controversy, much discussion centers on what production techniques should be specified for testimony recording. As videotaped depositions replace live testimony, the camera and microphone intervene, or mediate, in jurors' acquisition of information needed to reach a verdict. If mediation by these electromechanical devices introduces excessive bias due to recording methods, then the jurors may be basing their decisions upon information significantly different from that available in a live presentation.

Although a microphone will record non-selectively the same sounds that would be normally heard in a court, the video

camera has certain inherent limiting properties. Moreover, the recording of visual events is complicated by the wide number of decisions made by the camera operator (or the person directing him or her). Discounting any special effects, the most basic camera selections include: camera location, angle of view, focal length, aperture size, composition, and framing. Gerbner (1964) stresses the necessity of being more conscious of these production variables:

> We are not always aware of the existence or nature of these more subtle elements . . . . Manipulation of these elements can therefore lead to changes of perception (meaning) with relatively little awareness of manipulation. (p. 253)

The question confronting researchers is whether or not certain production "manipulations" present a danger to the concept of a fair trial. Bermant, McGuire, and Chappell (1975) warn us that "the techniques of film and television art will soon become applied to videotaped depositions and testimony" (p. 8). Even the novice television directing student knows of simple ways to transform a lifeless actor into a dramatic hero. Kaminski (1977) points out that current rules governing production equipment and methods are minimal. "It is conceivable that if the costs of losing the case were high enough, and the defendent or plaintiff has the money, some depositions could become M.G.M. productions" (p. 6).

Optimally, guidelines should originate from research findings. To date, enough research has not been conducted to allow court systems to generate specific suggestions for

permissible camera techniques. Due to the nature of the material being recorded, it becomes increasingly important to determine the degree of objectivity of videotaping.

Given the vast array of possible production techniques, it was necessary to limit the scope to selections made most frequently. Whenever a deposition is recorded, the camera operator has to decide how to present the witness within the limited size of the television frame. The subject's image size relative to the television screen is referred to as a "camera shot," or also the "image size" (throughout this study, the two phrases will be used interchangeably, but always with reference to the same concept). Camera shot is a function of the focal length of the camera lens, and the camera-subject distance. There are currently four camera shots useful for videotaping testimony:[1]

(1) Close-up Shot -- tight focus on the head and shoulders of one focal individual with nobody else in the frame.

(2) Medium Shot -- view of not more than two focal individuals from the waist up.

(3) Long Shot -- view of entire bodies of multiple focal individuals.

(4) Extreme Long Shot -- panoramic view of multiple focal individuals and setting, with any given person occupying only a fraction of the frame.

The decision of which type of shot (or combination of shots) to use is an important one because of the influence a particular shot may have upon the amount and type of

information that is recorded. Both social scientists and legal experts disagree on the type of shot that should be used when recording testimony. Doret (1974) typifies the ambivalence that commonly occurs when choosing a camera shot. He suggests that the panoramic view (extreme long shot) provides information that "deviates least, in terms of the visual field offered the jury, from the traditional trial and offers the jury the widest possible universe of sensory data to formulate his impressions upon." However, the panoramic view cannot "capture the nuances of the demeanor of the witness" (p. 228).

Conversely, a close-up view of the witness could supply greater detail and definition of the witness's face than could be seen by a jury sitting in a courtroom, but it would severely restrict the normal field of vision. Since only the witness is visible in a close-up, the gain in facial information might not compensate for the inability to observe the behavior of other trial participants.

Mention has been made of only some of the considerations that require careful examination before the courts can set guidelines for videotaping a deposition. The specific purpose of this thesis is to determine what effects, if any, different camera shots have upon jurors' perceptions of a videotaped deposition and the testifying witness.

Review of Literature

The remainder of this chapter will be devoted to an examination of literature relevant to the use and effects of camera shots. Also included in this review will be literature discussing other variables that mediate the effects of camera shot.

Some of the sources cited will be referring to motion picture production rather than video. This analogical approach was felt justified since any discussion of video or television production techniques will necessarily find its roots in the cinema. Although some terminology is exclusive to one medium or the other, the essential elements of theory and technique are shared. According to Roy Madsen (1973), "Electronic photography for videotape requires the same principles of composition and perception as does motion picture cinematography" (p. 125).

In reviewing the literature regarding the effects of different image sizes upon television and film audiences, one soon notices an obvious dichotomy of authors. One group consists of media practitioner-theorists who base their statements upon observation, personal experience and intuition. These writers suggest when certain shots should be used and

what effect may be expected, although they rarely offer reasons why a given effect occurs. The other group is composed of researchers who base their conclusions on the results of data collection and analysis. Both sources will be cited, making it clear to the reader into which camp a particular author falls.

Practitioners

D.W. Griffith is considered one of the earliest filmmakers to make use of camera shots other than the long shot, standard in the first years of cinema. Although he supposedly first used the closeup in an effort to save money (Montague, 1964, p.100), he soon realized its great cinematic potential. In a 1908 film, Griffith used a close-up of the heroine's face to prepare the viewers for the succeeding shot of the object of her thoughts. The close-up served to bring the audience in closer and then closer still, into her imagination and emotions (Kracauer, 1960, p.47).

Ever since Griffith's revolutionary breakthroughs filmmakers have been conscious of selecting the best image size to bring about the desired audience response. Eisenstein (1965) encourages the purposeful use of different image sizes within a "montage" (i.e. a rapid succession of informative viewpoints where the whole is greater than the sum of the parts). Other than simply making things larger, he indicates that the close-up has a distinctly different effect than the long shot. By excluding details that compete for the attention of the viewer, the filmmaker guides the audience to the

important subject and gives it increased connotative meaning.

To better understand how long shots, medium shots, and close-up shots differ, it would be helpful to discuss them from a "content transfer" point of view as suggested by Rod Whitaker (1970). Considering film as a language, he defines two classes of content: facts and attitudes. Facts may be conceptualized as "those aspects of the film message that can be given a noun label, even outside the context of the film, and without reference to the subjective reading of the film viewer." Facts may be photographically simple such as a "man, bottle, window and tree," or complex, such as "marriage, urbanization and economic depression" (p. 42).

Attitudes are the subjective aspects that cannot be photographed directly and depend upon the emotional state of the viewer. Through a cinematic arrangement of facts, the audience is led to perceive attitudes such as "good and bad, love, and emotional depression" (p. 42).

Whitaker suggests that due to the much larger field area, the longer shot is a much better carrier of fact than the close shot. This increase in facts reduces the attitude potential, allowing the audience to view the facts from a more detached point of view. Conversely, the close shot excludes distracting facts and emphasizes affect displays. Its limitation as a carrier of fact increases its potential as a carrier of attitudes. Also, distance acts as "emotional

insulation," both limiting viewer involvement in the long shot, and increasing it in the close-up.

The ability of selected shots to transfer factual or attitudinal content offers an explanation why film and television theorists discuss the close-up shot as heightening emotion, and the long shot as primarily expositional. Over the years, a "grammar," or rules of production, has evolved which incorporates these ideas. Madsen (1973, p.87) refers to the basic editing approach as: long shot--medium shot--close-up shot--long shot. The long shot supplies the full view of the actors and the setting. The medium shot is used to focus attention on a character performing some activity relevant to the plot. The close-up provides a more detailed and intimate look at the person revealing a mood or feeling. Then the camera returns to the long shot to show a new character or dramatic action. In all shots, each new view should yield some information not readily available in previous views.

Each shot seems to serve a particular function, corresponding with fact-attitude limitations. The long shot is most effective when providing an opportunity for the audience to familiarize themselves with spatial relations within a specific setting. But, as Roberts and Sharples (1971) warn, the long shot should not be needlessly maintained or used without reason since it decreases control of the audience's attention. This would imply that Doret's suggestion of a panoramic view would suffice to establish locale, but may

sacrifice interest.

On the other hand, Millerson objects to overlong use of the close-up, claiming that a close-up fragment held too long may seem to be detached from the rest of the scene, and "this can cause us to lose our orientation, sense of location, or forget the relationship of the portion to the whole" (1972, p. 224). In a later writing, Millerson (1976) advises that screen filling views are dramatic for the presentation of people, but skin imperfections and dental problems will become more noticeable (p. 32). Although it cannot be specified which shots are most appropriate for viewing testimony, certain uses of the close-up, as well as longer shots, will likely have a detrimental effect on the production as an objective record (i.e. a representation that does not introduce significantly more bias than the live version).

So far, discussion has centered on some of the more generally accepted theories that apply to both cinema and television. When we consider the differences between viewing a filmed deposition and a videotaped deposition, one major dissimilarity is apparent. Unless a court has access to a modern video projector, the screen size of the television will be considerably smaller than the average sized 16mm movie screen. Due to this smaller reproduction size, Zettl (1968, p. 420) claims that close-up and medium shots are more beneficial because they enlarge objects relative to the screen. Millerson (1976) suggests that for television use,

longer shots function best to " reveal a location, establish a mood, or follow action. . . . In practice, the type of shot that predominates varies with the kind of production" (p. 30). Although it would depend upon the nature of a particular deposition, it would seem that the closer shots would be better for the average single witness testimony.

This review of relevant statements by practitioners indicates that different image sizes may play an important role in recording a deposition. Their conjectures suggest that close-up shots and medium shots of a witness would provide increased picture clarity and more attitudinal information. However, the long shot supplies a larger field of view thus providing a truer approximation of the total scene. In the widest view, the extreme long shot, the juror would have the greatest choice for focusing attention upon different trial participants, although the amount of perceivable detail would be minimal. Depending upon the shots selected, the jury could receive an overabundance of factual information and not enough insight into the attitudinal data that would contribute to a verdict, or vice versa.

Empirical Research

The discussion now turns to a review of several studies that are the product of systematic data collection and statistical analyses. The first pair of studies focus on the effects of image size on perceptions of source

credibility and interpersonal attraction. Two other studies try to isolate specific variables that might interact with image size: (1) body type and sex, and (2) acting style. A more general discussion proposes that speaker physical attractiveness might also be of heuristic value for examining image size's effects. This section closes by considering two dependent variables, identification and interest, that might be influenced differently by different camera shots.

Image size. A series of studies conducted at Illinois State University contributes the best evidence of the influence of image size on viewers' perceptions of a mediated presentation. McCain and Repensky (1972) manipulated camera shot to determine its effects on perceived interpersonal attraction of two comedy performers. Three cameras simultaneously recorded a close-up, medium, and long shot of two professional comedians doing their routine. Interpersonal attraction was operationally defined as a three-dimensional construct consisting of physical attraction, social attraction, and task attraction.

Although there were no significant differences in social attraction between different shot conditions, physical and task attraction were both influenced by particular combinations of shot and comedian. One explanation for these interactions is that the impact of image size may be affected by certain physical characteristics of the videotaped subjects. For instance, the taller of the two comedians was judged more physically attractive in shots emphasizing the height

discrepancy (the medium and long shots). The authors also suggest that the differences observed in task attraction may be a function of the funny man-straight man relationship of the two comedians. If this is true, then variation in the physical appearance of two witnesses may produce differential perceptions by the jury, due to shot emphasis.

Some of the problems encountered in this initial attempt were eliminated in a study by Wakshlag (1973) who examined the effects of camera angle and image size on interpersonal attraction and source credibility. Since few television shows ever use a single static shot of an actor, Wakshlag decided "that each treatment should have a preponderance of the desired camera angle and image size which would be complimented by switching back and forth to a referent angle and image size" (p. 17). Image size treatments consisted of a preponderant medium shot with a close-up referent, and a preponderant close-up with a medium shot referent (referent shots were shown 25% of the time). Stimulus subjects were two male broadcasting students delivering a three minute newscast.

Wakshlag administered semantic differential credibility scales designed by McCroskey (1971). They factored into four dimensions: dynamism, composure, character, and sociability. Comparisons of image size produced significant differences only on sociability, where the medium shot received higher ratings than the close-up. Wakshlag contended that the stoic expressions of the newscasters were uncomplimentary

in the emphasis of the close-up (p. 41).

The same interpersonal attraction scale was used as in the McCain and Repensky study. Physical and social attraction showed higher ratings in the medium shot than in the preponderant close-up. Wakshlag was unable to account for what particular characteristic(s) of the newscasters produced the difference. He concludes that three factors interact with image size: "1. The image size(s) with which it is juxtaposed; 2. How long the viewer is exposed to each; (and) 3. The object(s) and/or person(s) in the sequence" (p. 44).

These two studies indicate that the image size of a mediated source affects a viewer's interpersonal judgments of the stimulus subject. It may be inferred that some physically observable attribute(s) of a witness might also be differentially perceived in various shots, but there is insufficient information to hypothesize what it (they) may be. The next study to be discussed determines if somatotype (body type) is possibly one such attribute.

Somatotype (body type). A third study from Illinois State University tested for the effect of body type and camera shot on interpersonal attraction and credibility. To control for sex differences a male and female of each of the three body types were viewed: ectomorph (thin), mesomorph (muscular), and endomorph (fat). These six speakers presented a neutral message and were videotaped in three views: a close-up shot, a medium shot, and a long shot. This

resulted in 18 experimental conditions, or a 3 x 2 x 3 factorial design.

Although there were no main effects of shot (i.e. all speakers combined), camera shot and body type interacted to produce significant differences in scores for physical attraction, and the sociability dimension of credibility. These differences were attributed to availability of body type information due to variations in camera-subject distances. The authors suggest that the medium shot provides the most detailed view of body type, since the close-up is restricted to the face only, and the distance of the long shot makes detail harder to see. They feel that the medium shot is the most likely to receive ratings corresponding to viewers' predispositions toward particular body types.

The validity of these assertions is questionable. This study fails to control for or measure other potentially mediating variables such as speaking style and facial attractiveness. Since speakers were chosen by experimenters, rather than randomly selected, the results may not be generalizable to any other set of speakers. This same limitation applies to the prior two image size studies as well.

Speaker sex. McCain and Divers (1973) found in post hoc tests that speaker sex interacted significantly with image size to produce unhypothesized effects on the dependent variables. Sex also had influence as a main effect, in interaction with body type, and in three-way interactions

with body type and image size. The impact observed in this study caused the researchers to advise that the sex of the stimulus be controlled for in future research.

Acting style (expressiveness). Another attempt at isolating mediating characteristics was made by Wurtzel and Dominick (1972), who varied the degree of expressiveness of their speakers. The researchers compared television acting style with stage acting style to determine what effect differing camera shots would produce. In two of the experimental treatments three male actors used a normal television acting style. In the other two videotaped treatments the actors used the more exaggerated gestures and facial expressions associated with stage acting. For each acting style one videotape consisted of close-ups and medium shots, and the other tape only medium shots.

An interaction of camera shot and acting style supported the hypothesis that close-ups in conjunction with a low key acting style will be evaluated more positively than a close view of stage acting, This would suggest that a witness who expresses him/herself with too much intensity would suffer in a close-up view, whereas a more introverted speaker would be rated lower in a medium shot.

Physical attractiveness. All the studies cited thus far seem to suggest that physical appearances and behavior of a speaker interact with image size of a videotaped presentation. Surprisingly, no studies have controlled the physical attractiveness of the actors. Past research in areas of persuasion (Mills and Aronson, 1965), reactions to

evaluations (Sigall and Aronson, 1969), and person perception (Dion, Berscheid and Walster, 1972; Sigall and Landy, 1973) seem to point to a strong influence of the source's physical attractiveness on communicative interactions with others. In fact, Dion et al. maintain:

> The results suggest that a physical attractiveness stereotype exists and that its content is perfectly compatible with the "What is beautiful is good" thesis. Not only are physically attractive persons assumed to possess more socially desirable personalities than those of lesser attractiveness, but it is presumed that their lives will be happier and more successful.

Landy and Aronson (1969) tested the sentencing of defendants described as attractive, neutral, or unattractive, and found that the unattractive one received a significantly longer sentence. However, according to Friend and Vinson (1973), jurors committed to being unbiased may overcompensate, resulting in more leniency for the unattractive defendants. In all the studies reviewed, the degree of perceived attractiveness exerted an influence on interpersonal evaluations. It may be that a particular camera shot that makes a witness appear more, or less, attractive could add a bias to jurors' decisions.

Identification. One of the main goals of any film or television director is to present the protagonist so that the viewer can identify with the characterization. Madsen (1973, p. 25) maintains that one of the most crucial elements of a film or television production is its "subjectivity," or the potential for the audience to metaphorically "see" events through the eyes of the character. The

viewer is expected to be less aware of self and identify more with the lives portrayed on the screen.

The importance of this concept to mass media research is emphasized by Weiss (1968) when noting the great attractiveness of heroes. He states:

> Basically, "identification" refers to a person's involvement in the depicted events through a psychological relationship with one or another of the participants. . . . As a result, he participates vicariously in the events, feelings, and behavior that relate to the object of identification, and experiences the communication more personally and deeply. (p. 98)

This "psychological relationship" is demonstrated in research by Tannenbaum and Gaer (1965) who found that subjects who identified with the endangered protagonist exhibited more stress arousal to stressful film endings than subjects who rates themselves less similar to the protagonist.

Identification with a source is related to the source's physical attractiveness. Landy and Aronson (1969) propose that jurors may find it easier to identify with an attractive or neutral defendant than an unattractive one because it is ". . . easier to imagine themselves involved in a similar situation . . . because they had potentially more in common with the defendant" (p. 151).

Other attributes of a character have been suggested as contributing to identification potential, such as sex similarity of character and subject (Maccoby and Wilson, 1957; Wall and Simonson, 1951), rewarded behavior (Kagan, 1958; Zajonc, 1954), and viewers' aspired social class

(Maccoby and Wilson, 1957). In addition to these variables, the actual audio-visual presentation could influence perceptions such that identification may be increased or decreased.

Although there is a paucity of research linking image size and identification, many practitioners claim that the choice of shot plays an essential role in bringing the audience emotionally closer to the screen reality, Huss and Silverstein (1968) state that "close shots, which peer at objects, create intensity; long shots, by their distance, imply detachment" (p. 116). Kracauer (1960) uses similar phrasing when he comments on one of D.W. Griffith's emotion-laden close-ups as "intensifying our participation in the total situation" (p. 47). This can be partially explained by referring back to Whitaker's (1970) theory that the close-up shows attitudes better than the longer shot, thus allowing the viewer to better observe and vicariously experience portrayed feelings.

Identification theory and research suggest that, depending upon how a witness looks and behaves in various camera shots, a jury might identify to different degrees. Any identification with a witness may have two effects: (1) the juror may feel psychologically closer to the witness and react with more positive evaluations and therefore find the testimony more credible; or (2) the juror may feel as though he/she has a better understanding of the witness, and therefore feel more confident in any evaluations, either positive or negative. Both these considerations lend

importance to determining what effect image size has upon juror identification with a videotaped witness.

Interest. Judges and attorneys often complain of difficulty in maintaining juror interest throughout lengthy and frequently tedious trial proceedings. Videotape may either alleviate or aggravate this serious hindrance. Williams (1968) varied film shots to assess the effect on viewer interest level. Showing a filmed lecture to students, he found, contrary to expectations, that a close-up did not significantly raise the interest level of a film, although a long shot did decrease it. When shots were congruent with judged interest levels of sentences (i.e. close-up for high interest, medium shot for moderate interest, and long shot for low interest), only the moderate sentences increased in interest. When image size conflicted with inherent sentence interest, measured interest decreased. Although these results are far from conclusive, they suggest that the shots used in a videotaped deposition are likely to affect the interest level of the jurors.

Summary. The empirical research reviewed in this section suggests that image size does have a significant influence on such communication variables as perceived source credibility and interpersonal attraction. However, it appears that certain characteristics of the source interact with, or mediate the effect of image size. Some mediating variables specifically investigated were: speaker body type, sex, and acting style. Physical attractiveness was discussed

as possibly interacting with image size. Research indicates that image size may also have an impact on identification and interest, which may in turn influence jurors decisions.

One of the common problems of image size research is that stimulus speakers are not randomly selected from a population of speakers, but are instead chosen by the researchers. Also, most of the studies do not directly pertain to jurors viewing a deposition. However, the research cited does provide an empirical starting point and general procedures for implementing further research.

Summary

This chapter has pointed out the need to assess the effects of the current practice of videotaping depositions on the guarantee of a fair and speedy trial. Justification was given for examining necessary, but potentially biasing, production decisions such as the choice of camera shot. If jurors are differentially influenced by various camera shots, then production guidelines may be necessary.

The literature of media practitioners found intuitive and experiential speculation that a scene or character may be perceived differently depending upon the camera shot used. For instance, it was suggested that closer shots tend to increase audience involvement and may be more effective for presentation of emotions. The longer shots may carry more factual information in a more detached atmosphere. Most practitioners merely give advantages and disadvantages of each shot without providing empirical support or reasons.

Research by social scientists also indicates differences in viewers' perceptions when image size is varied. Image size was shown to affect source credibility, interpersonal attraction, and interest, but researchers concluded that certain source variables may have had a mediating effect. Investigation in this area is still exploratory and

many potentially influential characteristics of the speaker have not been controlled, and many relevant dependent variables have not been measured. More extensive research is needed before any empirical generalizations can be made.

Source credibility, interpersonal attraction and interest are three variables that may play an important role in judgments of witness veracity made by jurors. If these variables are influenced by varying camera shot, then jurors' decisions may reflect the bias. Two other variables that may be related to jurors' decisions, and may be affected by shot, are retained information (the amount of testimony remembered by a juror) and identification with the witness. The goal of this study was to determine if varying the camera shot used to videotape a deposition would have an impact on these decision related variables.

Rather than just compare camera shots of some set of testifying witnesses, control variables were employed to help specify particular reasons for any effects observed. Based upon information found in the review of literature, the physical attractiveness of the witness was believed to be a potentially mediating variable and of heuristic value. This study examined the possibility that different camera shots might influence jurors' perceptions depending upon the attractiveness of the witness.

The literature review suggested witness sex as a second control variable. Since sex has been shown as mediating effects of image size (McCain and Divers, 1973), and

physical attractiveness might vary with witness sex, it was decided to add explanatory power to the study by also controlling the sex of the witness.

Research Questions

Due to the speculative nature of statements by practitioners, and the paucity of empirical research, it would be difficult to make predictions of specific potential effects. Rather than stating particular hypotheses of image size's influence on decision making variables, this thesis took a question-centered approach, asking whether or not image size makes a significant difference. Specifically, the following questions will be examined:

1. Do subjects exposed to differences in image size demonstrate differences in retention of deposition related information?

2. Do subjects exposed to differences in image size demonstrate differences in identification with a videotaped witness?

3. Do subjects exposed to differences in image size demonstrate differences in perceived source credibility of a videotaped witness?

4. Do subjects exposed to differences in image size demonstrate differences in perceived interpersonal attraction of a videotaped witness?

5. Do subjects exposed to differences in image size demonstrate differences in the degree of interest in a videotaped deposition?

CHAPTER II

METHODS AND PROCEDURES

In the previous chapter justification was given for further research on videotape in a legal environment with specific reference to the types of camera shots used when videotaping a deposition. Writings of practitioners and social scientists have provided no general conclusions, but do suggest possible effects which led to the five research questions posed at the end of Chapter I.

The purpose of this chapter is to describe the methods and procedures used to obtain the answers to the questions, and to further clarify the variables used in the research. The chapter opens with a presentation of the experimental design followed by detailed descriptions of the creation of the stimulus videotape and the selection of the sample.

The definitions section provides conceptual and operational definitions for the following dependent variables: (1) retained information; (2) identification; (3) mediated source credibility; (4) perceived homophily; (5) mediated interpersonal attraction; and (6) interest in the proceedings. A discussion of the statistical design used concludes the chapter.

Procedures

Experimental design. The following three independent variables were manipulated in this experiment: image size (i.e., types of shots used); the physical attractiveness of the testifying witness; and the sex of the witness.

Figure 1 presents a geometric display of the resultant 4 X 2 X 2 factorial design. The four levels of image size were close-up shot, medium shot, long shot, and extreme long shot (a_1 to a_4 in Figure 1). Physical attractiveness was divided into two levels - attractive and unattractive (b_1 and b_2 in Figure 1). Two levels of witness sex, male and female, are shown in Figure 1 as c_1 and c_2. This is a cross-classified design, meaning that each level of each variable enters into combination with each level of every other variable, thus forming a total of 16 unique experimental conditions. The execution of this design will be discussed next.

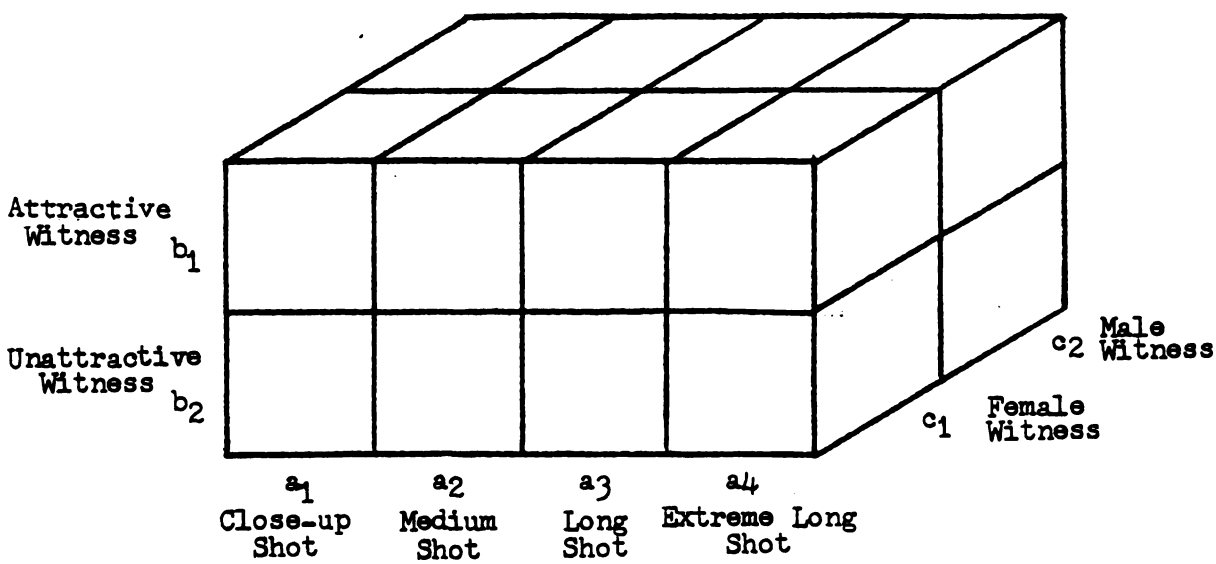


Figure 1. Geometric Display of a 4 X 2 X 2 Factorial Design.

Selecting the stimulus. To enhance the external validity of findings, it was decided to select an actual deposition transcript rather than attempting to script a plausible simulation. The following criteria were used in selecting the transcript:

1. It had to be part of a civil case.
2. The content of the testimony had to be of the nature that either a male or female witness could present it.
3. The deposition could not exceed one hour in length.
4. The deposed witness had to be a person whose credibility was not already established due to their occupation or status (e.g. a physician or police officer).

The rationale for the above criteria is as follows. The first stipulation contributes to the generalizability of the study since the majority of videotaped depositions are currently generated by civil suits.

The second criterion was necessary to manipulate the sex of the witness as an independent variable required by the research design.

The third requirement emanated from pragmatic considerations. To use available adult subjects, the experiment--including introduction, presentation of the stimulus, and questionnaire completion--had to be less than two hours. Moreover, the reels of tape used to record a deposition are one hour in length. Attempting to work with a longer deposition would thus become quite unwieldy and expensive. Although depositions vary widely in duration, several advisers agreed that one hour was a fair representation.

The fourth criterion was necessary to insure an unbiased evaluation of credibility by the subjects based only on behavior observed during the deposition. It is possible that a witness introduced as a medical expert would be viewed by subjects as having a certain level of credibility that would not fluctuate appreciably due to experimental treatments.

After a substantial search, with the assistance of legal advisers, a deposition was selected, that met all these criteria. Like many other civil case depositions, testimony was taken from an individual who had witnessed a serious motor vehicle collision. The witness was called upon to present evidence involving precise judgments of time and speed of the vehicles, which could not be corroborated with any other evidence. Jurors had to evaluate the veracity of the testimony based upon perceptions of the witness during the deposition. The questioning by the defense and plaintiff's attorneys lasted forty-five minutes. There were no opening or closing statements.

Selecting the actors. Eight actors and eight actesses from the Lansing, Michigan, vicinity responded to audition announcements distributed to local acting groups. To pretest for physical attractiveness, each were videotaped for sixty seconds using a medium shot. This tape was then shown to a sample of volunteer undergraduate student subjects. The videotape was stopped after each person appeared and the subjects were instructed to rate the physical attractiveness of

the individual just viewed on the screen. Perceived physical attractiveness was operationalized as scores on the following eleven-point semantic-differential scale:

attractive ___:___:___:___:___:___:___:___:___:___:___: unattractive. Based upon these ratings, the most attractive male and female, and the most unattractive male and female were chosen to play the part of the witness in the enactment of the deposition transcripts. All looked to be in their early twenties, corresponding with age of the actual witness.

Rather than using actors to play the parts of the attorneys, these parts were typecast by employing law students, with previous trial experience, who could add to the realism of the simulation. They were both in their early thirties and had had extensive courtroom exposure.

Taping the stimulus: After all the actors had memorized and rehearsed their parts, the deposition was reenacted and videotaped. The production took place in Michigan State University's Telecommunication Department's television studio, using Panasonic color cameras and 1/2 inch Sony color videotape recorders. A light blue cyclorama (curtain) provided the backdrop, and the only props used were a six foot wood grain table and three chairs placed on a large shag carpet. The two attorneys were seated at one end of the table with the witness positioned at the other end so the attorneys would not be in the same shot as the witness. (See studio diagram in Appendix C)

Only four cameras and videotape recorders were available to produce the stimulus tape. After an opening establishing

shot showing all three participants, two cameras were used to record two different shots of the witness, a third camera to record both attorneys, and the fourth served as a back-up. Each of the four witnesses presented the testimony twice, resulting in the following four shots taken at witness eye level:

1) Close-up Shot -- showing head and shoulders of seated witness

2) Medium Shot -- showing seated witness from top of head down to hands on table

3) Long Shot -- showing seated witness framed from head to feet

4) Extreme Long Shot -- panoramic view in which seated witness occupies only a small part of the total view.

For each of the deposition reenactments, a separate recording was made of the questioning attorney. In order to relieve the monotony of a single fixed view of only the witness, shots of the attorneys were insert-edited at appropriate times during the questioning using the following criteria: (1) at a new line of questioning, (2) during an objection, or (3) during the handling of exhibits. The shots were inserted at the same location in each treatment tape thereby keeping the attorney interaction constant across conditions.[2]

Subjects. Due to the unavailability of a courtroom setting and actual jurors, potential jurors were used in this experiment to role-play the part. This procedure has been criticized (Freeman, 1969) because it may lack the realism of the actual situation. Jurors probably have a greater sense

of responsibility since their decisions will have more serious consequences than subjects in an experiment. An assumption of this study is that the judgment process and responses of adult subjects will not be significantly different from that of jurors viewing a deposition in a trial context.

In an effort to approximate the demographic composition of a typical jury, adults eligible for jury duty were recruited from the Lansing, Michigan area. Members from a variety of service organizations, veterans groups, parent-teacher associations, and adult social groups volunteered. A total of 215 adults were randomly assigned to the sixteen experimental conditions.

When each group of subjects met, they were informed that this experiment was part of a research grant sponsored by the National Science Foundation, and that the researchers were interested in finding out their impressions toward videotaped depositions. It was explained that they were about to view a forty-five minute deposition of an actual witness who was unable to appear in court. The subjects were asked to role-play the part of jurors and pay careful attention to the videotape because they would be questioned about it when it was over.

In each condition, the stimulus videotape was viewed on two 19-inch Sony Trinitron color television monitors by not more than fifteen subjects at a time, to permit a comfortable viewing distance without crowding. Room lights were

left on to avoid eye fatigue since the experiment was conducted on weekday evenings. After viewing the entire deposition without interruption, subjects completed the questionnaire (Appendix A), were fully debriefed, and cautioned not to disclose the exact nature of the study to friends until experimentation was completed. All subjects were asked if they had recognized any of the actors or had guessed the manipulations, with none responding affirmatively. For each participating subject, the organization with which s/he was associated received a $5.00 donation.

Definitions

This section will provide the conceptual and operational definitions for each of the dependent variables generated by the research questions. When appropriate, factor analysis of some multidimensional variables is presented. The factor structure will be discussed as part of the operational definition. Reliability coefficients will be provided for each dependent variable scale.

Retained information. This variable was defined in this study as the amount of the witness's testimony which is remembered by a subject at the conclusion of the deposition.

The construct was operationalized as responses to twenty-seven multiple choice items (one correct choice with three foils), and twelve completion items requiring one or two word answers. The questions pertained to relevant

material evenly distributed throughout the stimulus testimony. One question, regarding the birthdate of the witness was misprinted on the questionnaire and was eliminated from the analyses. Reliability computations for the thirty-eight item retained information scale produced a Cronbach's alpha coefficient of .82. (Unless otherwise indicated, all calculations are done by computer using the Statistical Package for the Social Sciences, version 6.0).

Identification. This was defined as the degree to which a subject is vicariously involved in the proceedings through a psychological relationship with the witness. The identifying subject would experience an emotional state similar to that which s/he believes the witness is experiencing.

To operationalize this construct, a seven item, comparative judgment, ratio scale was developed. According to Torgerson's (1958) "Law of Comparative Judgment," if two stimuli are presented, an observer can "judge which is higher on the psychological continuum (e.g. which is louder, heavier, or more beautiful)" (p. 160). The observer can also make judgments as to the amount that one stimulus is higher than the other, beginning at some arbitrary zero point and using some numerical rating to express the degree of difference.

In this study, the viewer-subjects were asked to consider the amount of identification they felt they would experience when viewing a live deposition. This amount of identification was arbitrarily valued at a constant rating

of 50. For each of the seven identification items, the subjects compared the identification they felt during the videotaped deposition to their impressions of a live presentation, and responded with an appropriate rating of either more or less than, or equal to the standard of 50. For example:

> How much did you feel the same emotions the witness felt? ____

If the viewer believed s/he felt the same emotions to a greater degree during the deposition than they would during a live testimony, s/he chose some number larger than 50 (e.g. 100 to represent twice as much identification). If the viewer felt s/he would experience less emotional involvement watching the videotape than if the witness were viewed in person, the subject responded with some number smaller than 50 to represent the difference in intensities. If the response was "50", it meant that the subject believed s/he would identify with the witness to the same degree, live or videotaped. (See Appendix A for questionnaire)

After data collection, examination of the ratings for each identification item demonstrated that subjects had developed a response set. Positive correlations among all items indicated that the subjects responded to every question as measuring positive identification with the witness. However, item #3 (see Table 1) was intended to measure detachment from the witness (i.e. negative identification), and should have been negatively correlated with the other responses. Further support of this conclusion was supplied

when the scale items for identification were submitted to principal components factor analysis with varimax (orthogonal) rotation. This resulted in a single factor with all items loading +.60 or better, explaining 57.8% of the variance in the set of measures (see Table 1). Item #3 should have had a negative loading reflecting its negative association with the factor. Due to the suspected invalidity of the item it was dropped from the scale and not used in subsequent analyses. Reliability computations for the six item identification scale produced an alpha coefficient of .86.

Table 1

Rotated Factor Loadings for Identification Items

Item	Loading
1. How much did you identify with the witness?	.78
2. How much did you feel the same emotions that the witness felt?	.78
3. How detached from the witness did you feel?[a]	.72
4. How well did you feel you knew the witness?	.85
5. How close did you feel toward the witness?	.81
6. How restless did you feel while viewing the witness?	.64
7. How much did you feel you were a part of the action of the case being tried?	.65
Cumulative Variance (after rotation)	.58

[a]Item dropped from subsequent analyses.

By measuring identification with a videotaped witness, relative to feelings toward live testimony, we can gain some insight into juror's preferences. With the same scale we can also compare varying degrees of identification across treatment conditions to assess the effects of the independent variables.

Mediated source credibility. This variable was conceptualized as a viewer-subject's evaluation of a videotaped witness as a communicator of case related information. Credibility is not determined by any inherent qualities of a source, but rather by characteristics receivers perceive in a source based upon five hypothesized dimensions: (1) sociability, (2) extroversion, (3) competence, (4) composure, and (5) character.

The items used for the operational definition similar to Wakshlag's (1973) study of image size, are a combination of scales used by McCroskey, Hamilton, and Wiener (1974) and by McCroskey, Jensen, and Todd (1972). The resultant mediated source credibility scale consisted of 17 nine-point semantic differential items. Each hypothesized dimension was measured by three items, except for competence and character (most relevant for evaluating a witness) which were measured by four items each. An example of the scales follows:

Good ___:___:___:___:___:___:___:___:___ Bad

The bipolar adjectives composing the sociability dimension were: good natured-irritable; cheerful-gloomy;

sociable-unsociable. The bipolar adjectives used for the extroversion dimension were: aggressive-meek; verbal-quiet; and interesting-boring. The bipolar adjectives making up the competence dimension were: competent-incompetent; expert-inexpert; intelligent-unintelligent; and qualified-unqualified. The bipolar adjectives used for the composure dimension were: poised-nervous; relaxed-tense; and calm-anxious. Bipolar adjectives composing the character dimension were: honest-dishonest; believable-unbelievable; reliable-unreliable; and good-bad. To avoid response set, eight of the bipolar adjectives were reversed on the questionnaire (see Appendix A).

Perceived homophily. McCroskey, et al. (1974, page 43) contend that homophily is a construct closely related to credibility and is of heuristic value for predicting communication interaction. Rogers and Shoemaker (1971) define homophily as "the degree to which pairs of individuals who interact are similar in certain attributes, such as beliefs, values, education, social status, and the like" (p. 14). They maintain that individuals who are homophilous will communicate more effectively with each other than those who are not. This principle, combined with research on characteristics of "opinion leaders" (Katz and Lazarsfield, 1955) suggests the concept of "optimal heterophily." "The most influential source is highly homophilous with the receiver in all other aspects, but is perceived as somewhat more competent on the topic in question" (McCroskey, et al., 1974,

p. 43). In their study of interaction behavior, McCroskey, et al. (1974) measured homophily in conjunction with source credibility, using three semantic-differential items to guage attitudinal similarity. Since a deposed witness deals mainly with observations of events, a juror would tend to judge homophily based on how the witness looks and behaves. For this study, perceived homophily was defined as the degree to which a subject perceives the observed behavior of a trial participant as being similar to his or her own behavior.

This variable was operationalized as ratings on three nine-point semantic-differential scales similar to the credibility scales above. The bipolar descriptors used were: speaks like me-doesn't speak like me; like me-unlike me; and acts like me-doesn't act like me. Based upon measurement of homophily in past research, these items were inserted among the 17 credibility items on the questionnaire. This resulted in a 20 item Credibility-Homophily Scale resembling the one used by McCroskey, et al. (1974).

To verify the existence of the six dimensions hypothesized for mediated source credibility-perceived homophily, the scales were submitted to principal components factor analysis with varimax rotation. The criteria employed for interpretation of the factors were as follows:

1. Each orthogonal factor will be interpreted as a unique dimension.

2. For an item to be judged as measuring a particular dimension it must have a primary loading on that

factor of .55 or higher with no secondary loading of .35 or higher.

3. In order to use a dimension in later analyses it must contain at least two items that meet criterion #2.

The results of the factor analysis are reported in Table 2.

Seven items did not meet the criteria for interpretation. All other items loaded as predicted on factors designated by sociability, competence, composure, character, and homophily. The three items associated with the extroversion dimension did not load well. It was decided to drop the dimension from subsequent analyses. Four other items did not load properly and were not used in later computations. They were: expert-inexpert and qualified-unqualified (competence dimension); sociable-unsociable (sociability); good-bad (character dimension). The five factors used in analyses accounted for 59.4% of the variance.

Reliabilities were computed independently for the five sets of items. The alpha coefficients were adequately high to conclude that the items making up each dimension were internally consistent (see Table 2). Each orthogonal dimension was treated as an independent dimension in later calculations.

Although the behavior of the two questioning attorneys was held constant for each condition, a check was made for any confounding effect due to their presence during the deposition. Subjects were asked to rate both attorneys

Table 2

Rotated Factor Loadings and Reliability
for Mediated Source Credibility-Homophily Items
(Principal Components Factor Analysis; Varimax Rotation)

Scales	Compo-sure	Char-acter	Socia-bility	Homo-phily	Compe-tence	Extro-version
Poised-Nervous	.87*	.06	.03	.02	.18	-.01
Tense-Relaxed	-.75*	-.03	-.03	.01	-.09	-.28
Calm-Anxious	.70*	.13	.10	.08	.10	.05
Unbelievable-Believable	-.02	-.77*	.00	.08	-.13	.02
Dishonest-honest	-.06	-.69*	.02	-.03	-.17	-.00
Reliable-Unreliable	-.00	.59*	.31	-.02	.13	-.06
Good-Bad	.15	.44	.38	.08	.28	-.17
Good natured-Irritable	.07	.15	.82*	-.03	.09	-.07
Cheerful-Gloomy	.18	.06	.77*	-.01	.10	.10
Unsociable-Sociable	-.06	-.42	-.36	-.00	-.10	-.39
Speaks like me-Doesn't speak like me	.10	-.11	-.03	.68*	.12	.04
Acts like me-Doesn't act like me	.04	-.02	.03	.61*	-.06	-.07
Unlike me-Like me	.02	-.11	.00	-.55*	-.20	-.21
Incompetent-competent	-.18	-.25	-.16	-.01	-.74*	-.16
Unintelligent-Intelligent	-.13	-.15	-.02	-.12	-.70*	-.13
Qualified-Unqualified	.19	.24	.17	.15	.46	-.32
Expert-Inexpert	.24	.23	.19	.10	.35	-.24
Boring-Interesting	-.12	-.09	-.15	-.20	-.36	-.55
Meek-Aggressive	-.22	.13	.08	-.04	.04	-.51
Verbal-Quiet	.28	-.05	.17	.06	.07	.02
Internal Reliability of Sets of Adequate Loading Items	.84	.71	.72	.64	.71	

*Factor loadings and corresponding scales which met criteria.

using the mediated source credibility-perceived homophily scales used in rating the witness. Items in each set of measures were combined to form one 18 item scale to assess the credibility-homophily of both attorneys. This scale was factor analyzed using principal components with varimax rotation resulting in four usable factors (see Table 3).

Two of the previously hypothesized dimensions, sociability and homophily, each formed a distinct factor. However, items composing extroversion, competence, and character were divided among two orthogonal factors. Comparison of the two factors with the questionnaire (Appendix A) revealed a pattern existing in the responses. Those items loading high on Factor I had been expressed on the questionnaire as adjectives with a negative connotation on the right hand side, or "9" end of the nine-point bipolar scale. Those items comprising Factor II were expressed as positive adjectives on the right side of the scale. This suggests the possible occurrence of a "left hand effect." Respondents seem more prone to rate a stimulus closer to the right, or upper end of the scale rather than the left, or lower end when either is positive. It is not known why this phenomenon did not occur in measures of the witness.

Reliabilities for Factor I and Factor II items were .91 and .86 respectively. These two orthogonal factors were treated as two separate indices in later computations.

Composure items did not meet the criteria for acceptable factor loadings and were dropped from subsequent analyses (see Table 3).

TABLE 3

Rotated Factor Loadings and Reliabilities
for Combined Attorney Credibility-Homophily Items

Scales	Factor #1	Factor #2	Homo-phily	Socia-bility	Factor #5
Qualified-Unqualified	.89*	.19	.01	.06	.13
Expert-Inexpert	.79*	.23	.01	.08	.16
Reliable-Unreliable	.79*	.27	-.03	.27	-.03
Poised-Nervous	.73*	.19	-.06	.20	.40
Verbal-Quiet	.69*	.18	-.11	.04	-.05
Good-Bad	.67*	.32	-.01	.30	.06
Unintelligent-Intelligent	-.29	-.76*	-.02	.06	-.26
Unbelievable-Believable	-.27	-.75*	.02	-.21	-.04
Dishonest-Honest	-.34	-.71*	-.03	-.28	.03
Incompetent-Competent	-.30	-.70*	.06	.07	-.18
Boring-Interesting	-.01	-.58*	-.14	-.19	-.14
Meek-Aggressive	-.25	-.46	.01	.12	.07
Speaks like me-Doesn't speak like me	-.01	.03	.90*	.11	-.06
Acts like me-Doesn't act like me	-.12	.02	.87*	.05	-.03
Unlike me-Like me	-.01	-.04	-.71*	-.04	-.04
Cheerful-Gloomy	.28	.06	.10	.80*	.14
Good natured-Irritable	.33	.01	.10	.71*	.19
Unsociable-Sociable	.08	-.46	-.09	-.52	-.16
Tense-Relaxed	-.02	-.39	-.05	.23	-.72
Calm-Anxious	.39	.03	.01	-.25	.56
Internal Reliability of Sets of Adequate Loading Items	.92	.86	.91	.84	

*Factor loadings and corresponding scales which met criteria.

Mediated interpersonal attraction. This variable was defined as the degree to which the viewer-subject feels an affinity toward a videotaped source such that further interaction would be desirable. This is also a multidimensional construct which, according to McCroskey et al. (1974), is composed of the following three dimensions: (1) physical attraction, (2) social attraction, and (3) task attraction. Like the preceding dependent variables, interpersonal attraction serves to increase a communication source's influence on a receiver (Berscheid and Walster, 1969).

For comparative purposes, this study operationalized mediated interpersonal attraction by employing scales used by previous image size studies (14 items used by McCain and Repensky, 1972, and Wakshlag, 1973; and 2 items used only by Wakshlag, 1973). The construct's three dimensions were measured by 16 five-point Likert-type scales (five items each for social and task attraction, and six items for physical attraction). Each item contains a positive or negative attitudinal statement regarding the subject's attraction to the witness. The respondents marked the blank that best reflected their agreement with the statement. For example:

1. I think the witness could be a friend of mine.

strongly agree	:	agree	:	neutral	:	disagree	:	strongly disagree

Subsequent post data collection principal components factor analysis with varimax rotation resulted in four distinct factors instead of the expected three (see Table 4). Factor I had only three items with satisfactory loadings and was labeled social attraction. Factor II had four items with acceptable loadings and was labeled task attraction. Factor III had three items load well, all of them phrased as negative evaluations of the witness' physical attraction. Factor IV had three items with acceptable loadings--all of them phrased as positive evaluations of the witness' physical attraction. Unlike the previously discussed attorney credibility-homophily scales, these items were not bipolar adjectives, but were either positive or negative statements. It may be the case that people react differently when asked to say that someone is beautiful than when they must admit that someone is ugly. Social norms seem to prohibit disparaging remarks regarding a person's physical limitations, although flattery is quite acceptable.

The reliability of the set of measures for each dimension was as follows: social attraction - alpha = .76; task attraction - alpha = .78; and Factor III, named physical unattraction, alpha = .82; and Factor IV, named physical attraction, alpha = .76. The latter two factors were treated as unique, but related dimensions.

TABLE 4

Rotated Factor Loadings and Reliability for Mediated Interpersonal Attraction Items

Item No.	Social	Task	Physical Unattraction	Attraction
1.	-.85*	-.23	-.08	.10
2.	.62*	.18	.06	.23
3.	-.62*	-.05	-.09	-.11
4.	.47	.18	.10	.17
5.	-.39	-.21	-.22	.03
6.	.22	.76*	-.10	.29
7.	-.23	-.66*	-.25	.04
8.	.16	.63*	-.15	.30
9.	-.16	-.57*	-.23	-.01
10.	-.09	-.49	-.15	-.02
11.	-.19	-.09	-.78*	-.16
12.	-.15	-.10	-.71*	-.27
13.	-.10	-.14	-.67*	-.23
14.	.19	.05	.16	.79*
15.	.16	.06	.19	.64*
16.	-.05	.14	.29	.57*
Cumulative variance (after rotation)	.30	.43	.53	.62
Internal Reliability of sets of adequately loaded items	.76	.78	.82	combined .81 .76

Items

1. We could never establish a personal friendship with each other.
2. I think the witness could be a friend of mine.
3. The witness just would not fit into my circle of friends.
4. I would like to have a friendly chat with the witness.
5. It would be difficult to meet and talk with the witness.
6. If I wanted to get things done, I could probably depend on the witness.
7. I could not get anything accomplished with the witness.
8. I have confidence in the witness's ability to get the job done.
9. The witness would be a poor problem solver.
10. The witness is a typical goof-off when assigned to do a job.

*Factor loadings and corresponding scales which met criteria.

TABLE 4 Continued

11. I do not like the way the witness looks.
12. The witness is somewhat ugly.
13. I do not think the witness is very good looking.

14. I find the witness very attractive physically.
15. The witness is very sexy looking.
16. The witness's clothes are quite becoming.

Interest in the proceedings. This variable was conceptualized as the degree to which the videotape held the attention of the subjects such that they would be motivated to continue viewing.

Operationalization was accomplished via six nine-point semantic-differential scales resembling the mediated source credibility-perceived homophily scales discussed previously. The bipolar adjectives used were: fast-slow; interesting-boring; easy to pay attention-difficult to pay attention; refreshing-fatiguing; clear-confusing; and stimulating-tedious. The alpha coefficient computed for this scale was .88.

The final ten questions of the questionnaire were devoted to demographic information about the respondents. To assess effects of commercial television viewing, subjects were asked how many hours per week they watch television and whether in black and white, or in color. They completed questions regarding their sex, age, education, marital status, occupation, and income level. To check for any possible difficulties in viewing the videotape, subjects were asked to describe any sight or hearing defects. To assess prior knowledge and expectations, they were also asked if they had ever served on an actual jury before and whether their experience pertained to a civil or criminal suit.

Statistical Design

The t-tests. The scales measuring the dependent variables were reflected for consistent direction and recoded for subsequent analysis. One-tailed t-tests were computed to ascertain that the attractive stimuli witnesses were indeed perceived as more attractive than the unattractive witnesses. Comparisons were made between ratings of physical attraction of the witnesses by subjects in the close-up and medium shot conditions since they were at the optimal proximity to judge accurately.

Analysis of variance. Since the subjects' perceptions of the two questioning attorneys should have been constant across conditions, a check was made for any confounding differences among conditions. The scales comprising the four dimensions of attorney credibility were created independently and tested in a three-way analysis of variance designed for unequal and disproportional cell frequencies. For this test, the computer employs a regression approach which examines "a given effect only after the effects of all the others (including interactions) are adjusted for" (Kim and Kohout, 1976, p. 407). As in multiple regression, this method assesses all effects simultaneously with each effect being the additional contribution to the explained variation after adjusting for all other effects.

The five research questions from Chapter I were analyzed using the same analysis of variance design described above. The scales measuring the twelve witness

variables were analyzed independently.

Post hoc comparisons. Since this thesis takes a question centered approach there were no hypotheses of specific effects due to camera shot, or the interaction of camera shot and witness attractiveness or witness sex. Any significant main effects or interactions involving image size were further analyzed using the Tukey method for multiple comparison between pairs of means.[3] An effect was considered significant if the analysis of variance F ratio were significant at the .05 level. The Tukey method holds the experiment wise alpha at a preset level of .05 for comparisons between interpretable means.

It should be noted again that camera shot was the independent variable of primary interest, and witness sex and witness attractiveness served to control sources of important but unwanted variability. Throughout the analyses the main focus was upon interpreting effects due to shot.

Whenever shot interacted significantly with one of the other independent variables, the interaction was interpreted prior to consideration of the main effect for shot. This is necessary since the interaction indicates that shot will have a different influence on the dependent variable at different levels of the control variable. These differences might otherwise be obscured by the main effect which collapses across the control variable. If no interactions

are significant, the significant main effect for shot can be interpreted disregarding fluctuations in other variables.

Regarding interpretation of interactions, Lindquist (1953, p. 124) has pointed out that there are three possible causes of a significant interaction: (1) "true" interaction which really exists; (2) error, or chance significance; and (3) an extraneous, uncontrolled effect happening at one level and not at another. When large numbers of F tests are conducted (seven for each three-way analysis of variance), the probability of a significant F ratio occurring by chance greatly increases (Hays and Winkler, 1970, p. 171). This is especially true in non-orthogonal designs where the F tests are not independent, even with large samples. The Tukey test makes a more conservative estimate of differences by adjusting the per comparison significance level to keep the experimentwise level constant ($alpha_{EW}$=.05). It is possible for a chance significant effect to have means that are not significantly different from each other.

In this experiment, a significant three-way interaction will be attributed to Lindquist's third cause above. Since only four stimuli witnesses were used to represent the four unique combinations of witness sex and attractiveness, any three-way interaction could be a function of uncontrolled individual differences.

CHAPTER III

RESULTS

This chapter will present the findings of the statistical analyses of the five research questions posed at the end of Chapter I. After discussion of the manipulation checks, each question will be considered individually. Unless otherwise specified, all statistical tests of significance were set at a .05 confidence level, and were calculated using the Statistical Package for the Social Sciences. (Nie, et al., 1975).

Manipulation Checks

Witness attractiveness. Results of the one-tailed t-tests comparing mean physical attraction scores of attractive and unattractive witnesses are reported in Table 5. As intended, the witness designated in the pretest as the attractive female was perceived as significantly more attractive than the unattractive witness on both dimensions of physical attraction ($t=5.33$, $df=46$, $p < .001$ for attraction; and $t=4.21$, $df=46$, $p < .001$ for unattraction).

The difference between the means for the males was significant for the physical attraction dimension ($t=2.56$,

TABLE 5

Means and Standard Deviations of the Two Dimensions of Physical Attraction for Attractive and Unattractive Female and Male Witnesses

Female Witnesses

	Attractive			Unattractive			t	p
Dimension	Mean	S.D.	N	Mean	S.D.	N	t	p
Physical Attraction	9.58	1.61	24	7.00	1.75	24	5.33	<.001
Physical Unattraction	11.17	1.76	24	8.75	2.19	24	4.21	<.001

Male Witnesses

	Attractive			Unattractive			t	p
Dimension	Mean	S.D.	N	Mean	S.D.	N	t	p
Physical Attraction	8.93	1.62	27	7.88	1.50	24	2.33	.01
Physical Unattraction	11.07	1.77	27	10.17	2.41	24	1.54	.06

df=49, $p < .02$), but only approached significance for the physical unattraction dimension ($t=1.54$, df=49, $p < .06$).

Attorney credibility. The four summed scales comprising the four factors of attorney credibility generated from the factor analysis were tested in a three way analysis of variance. Factor 1, Factor 2, and Factor 3 (sociability) produced no significant differences and were not considered further. The analysis of variance of the homophily factor did show a significant main effect for shot ($F=3.51$, df=3, 190, $p=.016$, see Table 6). To test the strength of association between this component of variance and the dependent variable, an omega squared was computed equal to .02 (i.e. shot accounted for 2% of the total variance in perceived attorney homophily).

The means for the four treatments were compared using Scheffe's test for multiple comparisons ($alpha_{EW}=.05$). This test showed no significant difference between means (see Table 7).

Research Questions

Results for each question will be presented within the text, but only significant tests will be presented in tabular form. Analysis of variance tables for non-significant effects can be found in Appendix B.

Question 1: Do subjects exposed to differences in image size demonstrate differences in retention of deposition-related information?

TABLE 6

Summary Table for Analysis of Variance
for Homophily Dimension of Attorney Credibility

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig. of F
Main Effects	105.303	5	21.061	2.303	.046
Shot[a]	96.178	3	32.059	3.505	.016
Watt[b]	.503	1	.503	.155	.815
Wsex[c]	11.359	1	11.359	1.242	.266
2-way Interactions	112.418	7	16.060	1.756	.098
Shot Watt	63.745	3	21.248	2.323	.076
Shot Wsex	5.355	3	15.118	1.653	.179
Watt Wsex	3.548	1	3.548	.388	.534
3-way Interactions	5.743	3	1.914	.209	.890
Shot Watt Wsex	5.743	3	1.914	.209	.890
Explained	213.904	15	14.260	1.559	.089
Residual	1737.699	190	9.146		
Total	1951.604	205	9.520		

[a]Camera shot; [b]Witness attractiveness; [c]Witness sex

TABLE 7

Means of the Homophily Dimension
of Attorney Credibility for Image Size

	Close-up Shot	Medium Shot	Long Shot	Extreme Long Shot
Mean	7.90	8.31	9.56	9.06
Sample Size	51	47	48	61

[1]Scheffe's critical difference test shows no significant differences among pairs of means.

The three way analysis of variance of information retention resulted in a significant interaction between camera shot and witness sex. Omega squared was .03 (F=2.99, df=3, 199, p=.032; Table 8).

The subsequent post hoc analysis found that none of the means comprising the interaction differed more than the critical range set by the Tukey method with $alpha_{EW}$=.05. These means and the results of the analysis are reported in Table 9.

Question 2: Do subjects exposed to differences in image size demonstrate differences in identification with a videotaped witness?

For the three-way analysis of variance for the identification measure, a significant two-way interaction was observed between camera shot and witness attractiveness (F=3.92, df=3,145, p=.01) reported in Table 10. Omega squared was .05.

The cell means for the interaction and the results of the post hoc comparisons are presented in Table 11. None of the differences between means exceeded the critical range required by the Tukey test.

Question 3: Do subjects exposed to differences in image size demonstrate differences in their perceptions of the credibility of a videotaped witness?

Analysis of this question was conducted by examining the effect of image size on five variables measuring dimensions of credibility (see Table 2). A separate three-way

TABLE 8

Summary Table for Analysis of Variance
for Information Retention

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig. of F
Main Effects	2143.827	5	428.765	1.100	.362
Shot[a]	475.097	3	158.366	.406	.749
Watt[b]	857.666	1	857.666	2.200	.140
Wsex[c]	814.642	1	814.642	2.090	.150
2-way Interactions	5815.257	7	830.751	2.131	.042
Shot Watt	354.140	3	118.047	.303	.823
Shot Wsex	3500.951	3	1166.984	2.994	.032
Watt Wsex	2084.934	1	2084.934	5.349	.022
3-Way Interactions	3369.034	3	1123.011	2.881	.037
Shot Watt Wsex	3369.034	3	1123.011	2.881	.037
Explained	12173.721	15	811.581	2.082	.012
Residual	77563.237	199	389.765		
Total	89736.958	214	419.332		

[a]Camera shot; [b]Witness attractiveness; [c]Witness sex

TABLE 9

Means of Retained Information
for Image Size and Witness Sex

	Close-up Shot	Medium Shot	Long Shot	Extreme Long Shot
Female Witnesses	120.87 (24)	113.82 (24)	120.78 (23)	120.93 (24)
Male Witnesses	110.97 (30)	123.12 (24)	112.21 (28)	115.75 (38)

NOTE: 1. Figures in parentheses are the numbers of respondents.
2. Tukey multiple comparison (a_{EW}=.05) show no significant differences between means.

TABLE 10

Summary Table for Analysis of Variance
for Identification With the Witness

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig. of F
Main Effects	31061.855	5	6212.371	1.229	.298
Shot[a]	24283.809	3	8094.603	1.602	.192
Watt[b]	2093.699	1	2093.699	.414	.521
Wsex[c]	4521.419	1	4521.419	.895	.346
2-Way Interactions	110588.773	7	15798.396	3.127	.004
Shot Watt	59444.644	3	19814.881	3.921	.010
Shot Wsex	36011.189	3	12003.730	2.376	.073
Watt Wsex	12179.023	1	12179.023	2.410	.123
3-Way Interactions	19041.952	3	6347.317	1.256	.292
Shot Watt Wsex	19041.952	3	6347.317	1.256	.292
Explained	162671.998	15	10844.800	2.146	.011
Residual	731680.846	145	5052.971		
Total	895352.845	160	5595.955		

[a]Camera shot; [b]Witness attractiveness; [c]Witness sex

TABLE 11

Means of Identification With the Witness
for Image Size and Witness Attractiveness

	Close-up Shot	Medium Shot	Long Shot	Extreme Long Shot
Attractive Witness	260.79 (19)	230.83 (18)	200.18 (22)	212.52 (33)
Unattractive Witness	202.96 (24)	269.73 (15)	249.73 (17)	207.08 (13)

NOTE: Figures in parentheses are the numbers of respondents.

analysis of variance was computed for each of the following variables: sociability, competence, composure, character, and homophily.

No significant main effects for image size were observed in any of the analyses. Only in the measure of composure did shot enter into a significant interaction with one control variable. Witness attractiveness and camera shot interacted to produce an F of 4.91, (df=3,190, p=.003) reported in Table 12.

Cell means for the interaction and the results of the post hoc comparisons are reported in Table 13. The only significant differences for composure means were found in the close-up condition. The unattractive witnesses were perceived as being more composed in the close-up shot than the attractive witnesses. The omega squared was computed equal to .05 indicating that by determining what the attractiveness of a witness is in a particular shot, we can account for 5% of the variance in composure perceptions.

Question 4: Do subjects exposed to differences in image size demonstrate differences in perceptions of the interpersonal attraction of a videotaped witness?

Factor analysis suggested the subdivision of interpersonal attraction into the following four dimensions: social attraction, physical attraction, physical unattraction, and task attraction. Scales measuring the four variables were submitted to separate three-way analyses of variance.

TABLE 12

Summary Table for Analysis of Variance
of Composure Dimension of Witness Credibility

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Main Effects	245.993	5	49.199	1.766	.122
Shot[a]	70.597	3	23.532	.845	.471
Watt[b]	192.072	1	192.072	6.894	.009
Wsex[c]	.830	1	.830	.030	.863
2-Way Interactions	558.979	7	79.854	2.866	.007
Shot Watt	410.693	3	136.898	4.913	.003
Shot Wsex	131.276	3	43.759	1.571	.198
Watt Wsex	11.897	1	11.897	.427	.514
3-Way Interactions	325.692	3	108.564	3.897	.010
Shot Watt Wsex	325.692	3	108.564	3.897	.010
Explained	1139.080	15	75.939	2.726	.001
Residual	5293.736	190	27.862		
Total	6432.816	205	31.380		

[a]Camera shot; [b]Witness attractiveness; [c]Witness sex

TABLE 13

Means of Composure (Dimension of Witness Credibility)
for Image Size and Witness Attractiveness

	Close-up Shot	Medium Shot	Long Shot	Extreme Long Shot
Attractive Witness	11.04 (24)[a]	15.08 (26)	13.12 (25)	15.33 (36)
Unattractive Witness	16.78 (27)[a]	15.00 (21)	16.45 (22)	15.00 (25)

NOTE: 1. Figures in parentheses are the numbers of the respondents.
3. Means with the same subscript are significantly different, $p < .05$ using Tukey method.

Analyses of social and task attraction resulted in no significant main effects or interactions involving image size, and were not considered further.

The analysis of variance of physical attraction produced a significant F of 7.24 (df=3,192, p=.001) for the main effect of shot. Shot also interacted significantly with witness sex (F=2.63, df=3,192, p=.05). These results are reported in Table 14.

To assure more precise interpretation of shot's effect, the post hoc comparisons were conducted first for the interaction. The means for the interaction, along with main effect means, are presented in Table 15. The Tukey test indicated that three comparisons exceeded the critical range for differences between means.

The attraction ratings for the female witness were significantly higher in the medium shot than in either the long or extreme long shots. No significant differences occurred in comparing camera shots of the male witness. The third significant comparison showed that the male witness was perceived as more attractive than the female witness in the long shot.

As Table 15 demonstrates, the means comprising the main effect for camera shot exhibit the identical pattern as the means for the female witness. It will be shown in a later discussion section that examination of only the main effect would be misleading without consideration of the

TABLE 14

Summary Table for Analysis of Variance
of Physical Attraction Dimension
of Interpersonal Attraction

Source of Variation	Sum of Squares	DF	Mean Square	F	Sig. of F
Main Effects	166.162	6	33.232	11.229	.001
Shot[a]	64.311	3	21.437	7.243	.001
Watt[b]	87.434	1	87.434	29.543	.001
Wsex[c]	22.890	1	22.890	7.734	.006
2-Way Interactions	101.055	7	14.436	.878	.001
Shot Watt	10.761	3	3.587	1.212	.307
Shot Wsex	23.364	3	7.788	2.632	.051
Watt Wsex	64.937	1	64.937	21.942	.001
3-Way Interactions	8.636	3	2.879	.973	.407
Shot Watt Wsex	6.636	3	2.879	.973	.407
Explained	262.211	15	17.481	5.907	.001
Residual	568.232	192	2.960		
Total	830.442	267	4.012		

[a]Camera shot; [b]Witness attractiveness; [c]Witness sex

TABLE 15

Means of Physical Attraction
(Dimension of Interpersonal Attraction)
for Image Size and Witness Sex

	Close-up Shot	Medium Shot	Long Shot	Extreme Long Shot
Female Witnesses	7.79 (24)	8.79 (24)[ab]	6.50 (22)[ac]	7.13 (24)[b]
Male Witnesses	8.26 (27)	8.61 (23)	8.15 (26)[c]	7.50 (38)
All Witnesses	8.04 (51)	8.70 (47)[de]	7.40 (48)[d]	7.36 (62)[e]

NOTE: Figures in parentheses are the number of respondents. Means with the same subscript differ significantly, at α_{EW}=.05 using Tukey method.

camera shot by witness sex interaction. The omega squared for the interaction was .02, and was .08 for the main effect of shot.

Physical unattraction was also tested with a three-way analysis of variance, and also produced a significant main effect for shot ($F=2.64$, $df=3,192$, $p=.05$), and shot-sex interaction ($F=2.78$, $df=3,192$, $p=.04$). The analysis of variance summary table is reported in Table 16.

Although the pattern of means was similar to physical attraction, the post hoc analysis revealed only one significant difference between means. Corresponding to physical attraction, the males in the long shot were perceived as more attractive than the females in the long shot. There were no significant differences between means for the main effect (see Table 17).

Question 5: Do subjects exposed to differences in image size demonstrate differences in the degree of interest in the videotaped deposition?

The analysis of variance of the interest measure resulted in a significant main effect for shot ($F=4.17$, $df=3,187$, $p=.007$) reported in Table 18. Since there were no significant two-way interactions, interpretation of the main effect would explain the most variance ($\omega^2=.05$). The means for the main effect are presented in Table 19, along with the results of the post hoc comparisons. Examination of significant differences between means indicates that, considering all witnesses, the subjects judged the proceedings

TABLE 16

Summary Table for Analysis of Variance
for Physical Unattraction Dimension
of Interpersonal Attraction

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Main Effects	164.910	5	32.982	9.356	.001
Shot[a]	27.905	3	9.302	2.639	.051
Watt[b]	88.634	1	88.694	25.160	.001
Wsex[c]	53.628	1	53.628	15.213	.001
2-Way Interactions	93.678	7	13.383	3.796	.001
Shot Watt	14.723	3	4.908	1.392	.246
Shot Wsex	29.367	3	9.789	2.777	.043
Watt Wsex	53.019	1	53.019	15.040	.001
3-Way Interactions	5.478	3	1.626	.518	.670
Shot Watt Wsex	5.478	3	1.826	.518	.670
Explained	245.928	15	16.395	4.651	.001
Residual	676.836	192	3.525		
Total	922.764	207	4.458		

[a]Camera shot; [b]Witness attractiveness; [c]Witness sex

TABLE 17

Means of Physical Unattraction
(Dimension of Interpersonal Attraction)
for Image Size and Witness Sex

	Close-up Shot	Medium Shot	Long Shot	Extreme Long Shot
Female Witnesses	10.08 (24)	9.83 (24)	8.77[a] (22)	9.50 (24)
Male Witnesses	10.11 (27)	11.35 (23)	10.61[a] (26)	9.95 (38)
All Witnesses	10.10 (51)	10.57 (47)	9.77 (48)	9.77 (62)

NOTE: Figures in parentheses are the numbers of respondents.
Means with same subscript differ significantly.

TABLE 18

Summary Table for Analysis of Variance
for Interest in Proceedings

Source of Variation	Sum of Squares	DF	Mean Square	F	Signif. of F
Main Effects	1701.243	5	340.249	3.524	.005
Shot[a]	1207.764	3	402.588	4.170	.007
Watt[b]	352.387	1	352.387	3.650	.058
Wsex[c]	80.765	1	80.765	.837	.362
2-Way Interactions	713.911	7	101.987	1.056	.394
Shot Watt	502.932	3	167.644	1.736	.161
Shot Wsex	102.295	3	34.098	.353	.787
Watt Wsex	76.747	1	76.747	.795	.374
3-Way Interactions	978.811	3	326.270	3.379	.019
Shot Watt Wsex	978.811	3	326.270	3.379	.019
Explained	3293.534	15	219.569	2.274	.006
Residual	13055.018	187	96.551		
Total	21348.542	202	105.686		

[a]Camera shot; [b]Witness attractiveness; [c]Witness sex

TABLE 19

Means of Interest in Proceedings
for Image Size

	Close-up Shot	Medium Shot	Long Shot	Extreme Long Shot
$\bar{X}$	32.88_a	32.21_b	30.20	$26.77_{a,b}$
n	(51)	(47)	(45)	(60)

NOTE: Means with the same subscript are significantly different, $p < .05$ using Tukey's method of multiple comparisons.

to be more interesting when presented in a close-up or medium shot than when viewed in an extreme long shot. The long shot was not judged as significantly different from the other three shots, falling between the two extremes.

Summary

This chapter presented the significant results of the data analyses. The manipulation checks indicated that the attractive and unattractive witness were perceived as such, and interspersed shots of the attorney had no effect.

The five research questions were tested via separate three-way analyses of variance of the twelve dependent variables. The results showed: (1) A significant interaction for retained information, but nonsignificance in the post hoc tests; (2) a significant interaction for identification, but nonsignificance in the post hoc tests; (3) a significant interaction for the composure dimension of witness credibility; (4) significant interactions for physical attraction and physical unattraction dimensions of interpersonal attraction; and (5) a significant main effect for interest in the proceedings.

The significant findings will be discussed at length in the next chapter, and explanations of effects will be presented. Following a list of the study's limitations, the implications of the findings will be presented along with specific recommendations for their application.

CHAPTER IV

DISCUSSION

This chapter will present a discussion of the results of the statistical analyses examined in the preceeding chapter. Following inspection of the effectiveness of the experimental manipulations, each of the five research questions will be considered separately. Suggestions will be offered as to why certain dependent variables were significantly influenced by variations in camera shot, or the interaction of camera shot with either witness attractiveness or witness sex. Implications of such explanations will be discussed, drawing relevance to actual uses in a legal environment and for future research. The limitations of the study will be outlined, along with suggested remedial strategies. The chapter will close with specific recommendations for the selection of camera shot.

Experimental Manipulations

Witness Attractiveness. Results of the manipulation check for witness attractiveness indicated that persons used in the attractive witness condition and the unattractive witness condition were perceived as intended.

The attractiveness manipulation was more effective for the female than for the male witnesses, suggesting that physical differences between the females were more readily perceived than differences between the males.

One explanation of the larger attractiveness difference between the males in the pretest is that the pretest scales were not completely comparable to the method of measurement in the experiment. In the pretest, subjects rated each stimulus person relative to their impression of the other stimulus people. In comparison with the other males, the most attractive male was much more attractive than the most unattractive male. In the actual experiment, subjects viewed only one witness in each condition, and in effect were rating attractiveness in comparison with their own standard for beauty. It is possible that the subjects' mental poles of attractiveness corresponded more closely to the two females than the males. Without being compared to his opposite, each male received a rating closer to an average between attractive and unattractive. This resulted in a smaller difference when the two were compared in the manipulation check.

Attorney credibility. The analyses of attorney credibility indicated that the inclusion of shots of the questioning attorneys did not differentially influence subjects' perceptions. Had credibility been significantly higher, or lower, in any of the sixteen experimental conditions, it would have raised questions as to how subjects'

perceptions of the witness might be affected. Since there is no evidence of differences due to the presence of the attorneys, the main research questions can now be discussed with increased confidence.

Research Questions

The present study examined the effects of differing camera shots on information retention, identification with the witness, witness credibility-homophily, interpersonal attraction, and interest in the proceedings. In the following discussion of the five research questions, those analyses leading to significant findings will be examined first, with suggested explanations of observed effects. A more general discussion of nonsignificant results will then follow.

Mediated source credibility-homophily. In this study, mediated source credibility-homophily was treated as having five independent, but related, dimensions. Results did not justify concluding that variations in the type of camera shot used would significantly influence subjects' perceptions of the witnesses': (1) sociability, (2) competence, (3) character, or (4) homophily. However, perceptions of the composure dimension of credibility did fluctuate significantly depending upon the combination of camera shot and witness attractiveness. Post hoc analyses indicated that the unattractive witnesses were perceived

as more composed than the attractive witnesses in the close-up shot. This effect did not occur in any other camera shot.

Of major concern to this study are factors unique to the close-up which might result in the observed difference. The close-up provides more facial detail than any other shot, and shows no other expressive part of the body. In other shots, composure ratings may be influenced by such cues as hand movement, leg kicking, or feet tapping. Review of the stimulus tape suggests that the unattractive witnesses were generally more reserved in their expression of emotion than the attractive witnesses. The close-up view amplified any anxiety expressed by the attractive witnesses and made them look much less composed than the more reserved unattractive witnesses. This effect was not as pronounced in other shots where the face was of less prominence.

Since physical attractiveness and facial expressiveness do not always covary, this finding appears to have no intrinsic relationship with witness attractiveness. Given a situation where an attractive witness is more calm and reserved than a demonstrative unattractive witness, opposite results might be expected.

Interpersonal Attraction. A significant relationship was observed between camera shot and the physical attraction dimension of interpersonal attraction, which resulted in a significant main effect, and an interaction

of shot and witness sex. Examination of the main effect for shot leads to the following conclusion: discounting witness sex or attractiveness differences, a witness will be perceived as significantly more attractive in the medium shot than in either the long or extreme long shot.

Interpretation of the witness sex by camera shot interaction shows this to be misleading, and adds a further condition to the conclusion. The effect of camera shot depends upon the sex of the witness. Post hoc comparisons of means showed that only the female was perceived as significantly more attractive in the medium shot than in either the long or extreme long shot. Perceptions of the male witness did not vary significantly. A similar pattern existed in the measure for unattraction, but did not reach a level of statistical significance.

Also contributing to the interaction was a significantly higher mean for the male than for the female in the long shot. This pattern was observed to a significant extent in the unattraction dimension, and will be explained along with attraction.

Since the interaction of sex and camera shot supplies more detailed information, it will be interpreted in lieu of the main effect for shot. Although it cannot be determined from the data collected what specific physical attributes were used to form decisions, it is likely that subjects gathered most information from the witnesses' faces. If this is true, then the longer shots,

displaying less facial detail (i.e. less information to form judgments), might cause scores to approach an average rating between attractive and unattractive.

The combined female means seem to do exactly that, but examination of separate means for each female creates an interpretive problem. If the above reasoning is correct, the means for the attractive female would be higher in the face-emphasizing close-up and medium shots, and lower in the less flattering long and extreme long shots. This pattern corresponds to the ratings observed in this study.

Conversely, the closer shots should be the most uncomplimentary for the pretested (in a medium shot) unattractive female, and she should benefit from the decrease in facial detail occurring in the longer shots. This, however, was not the case; rather, her scores varied in the same direction and at the same rate as the attractive female. In the closer shots the scores are near an average rating of attractiveness, and drop lower in the longer shots.

This contradiction of the original explanation may be partially attributed to a confounding effect of the somatotype (i.e. body type) of the unattractive female. The woman selected in the pretest as the most unattractive also happened to be endomorphic (i.e. obese). McCain et al. (1973) found that speaker somatotype, sex, and camera shot interacted to influence physical attraction, although the

endomorphic female did not vary significantly between shots. It was also shown that the endomorph was considered less attractive than both the thin ectomorph and the athletic mesomorph.

In this study, subjects may have concentrated mainly on the face in the close-up and medium shots and responded with relatively low ratings. When the face and body were both visible in the long and extreme long shots, the combination of the two may have produced the much lower scores observed. This confounding may also account for the females' long shot mean being significantly lower than the males'. The unattractive male was a mesomorph and was rated as more attractive in the long shot. The combined decrease of both females' means in the longer shots could have produced the two effects indicated by the sex by camera shot interaction (i.e. the shot effect for the female witnesses, and the sex effect for the long shot).

Interest in the proceedings. A significant main effect for camera shot indicated that, disregarding witness sex and attractiveness differences, viewers were significantly less interested while watching an extreme long shot than while viewing either a close-up or medium shot.

An explanation of this effect can be found in psychological theories of perception and attention. One of the key factors for getting and maintaining attention

is change, or contrast (i.e. movement in any direction). "For example, successive changes, or variation in the stimulus situation will probably help maintain attention (Ruch and Zimbardo, 1971, p. 229)." Also, television practitioners emphasize the concept of change, or visual variety, as a means of maintaining audience interest. Lewis (1970) warns that when a visual situation is static, a viewer will lose interest as soon as the pertinent information has been taken in.

Visual variety in a videotaped deposition can come in the form of gestures or other restricted body movements by the witness or attorneys, or variations in facial expressions. This type of situation is addressed by Lewis (1970) when he advises, "When animation is restricted to only a portion of the subject, shoot close enough to make that animation discernable" (p. 163).

In this experiment, the extreme long shot presented the witness within a fraction of the television frame, making it difficult to perceive small body movements, and nearly impossible to discern facial changes. Whereas the extreme long shot seems to diminish movement, the close-up and medium shots heighten visual variety by emphasizing facial expressions. This variety makes the visual situation of the deposition appear more active and thereby commands increased viewer attention.

Identification with the witness. The analysis of variance for identification showed a significant interaction between camera shot and witness attractiveness, although the post hoc comparisons revealed no significant differences between means (see Tables 10 and 11). However, the difference between the close-up and the medium shot of the unattractive witness approaches significance, and some theoretic utility may be derived from speculating as to why.

Subjects were able to identify with the unattractive witness more closely in the medium shot than in the close-up shot. The opposite was true for the attractive witness, although the difference was not as great. Since the post hoc tests were nonsignificant, observed differences may have been due to chance, but past research suggests an alternate possibility.

Landy and Aronson (1969) found that subjects more readily identified with attractive and neutral defendents than with unattractive ones. If this is generally true, then emphasis of unattractive features in a close-up shot might have dissuaded subjects from identifying with the unattractive witness. The medium shot probably gave less accentuation to uncomplimentary characteristics, making the witnesses appear more neutral. This neutrality, in conjunction with the visual proximity, allowed the viewers to feel closer to the witness. This speculation suggests

that identification is influenced by the attractiveness of the witness with respect to the apparent physical closeness of the shot.

Other nonsignificant findings. So far discussion has centered around the significant effects of camera shot on: (1) a single credibility dimension, (2) two dimensions of interpersonal attraction, and (3) interest. Also some speculation was provided to account for a nearly significant difference between identification means. These variables represent five of the twelve dependent variables measured in this study. Camera shot, by itself or in interaction, had no significant impact upon: retained information; witness sociability, character, competence, or homophily; and social or task attraction. These results suggest that overall, variations in image size did not greatly influence subjects' perceptions of the videotaped deposition.

Several reasons may be suggested for the lack of significant effects. Perhaps changes in camera shot did not provide enough variation in visual information to alter subjects' perceptions, or the measurement instrument was not sensitive to the fluctuations. Of course, certain variables, other than those measured, could have been affected, but were not considered as pertinent to judging witness veracity as the dependent variables used in this experiment.

It is more likely that the effects of shot can be better observed in interaction with some aspect of the

witness's physical appearance. The manipulations of witness sex and attractiveness might not have provided the initial conditions sufficient for a significant interaction with camera shot. Witnesses who differ in certain other physical attributes may be perceived differently when camera shot is varied (this will be discussed further in the "Implications" section).

An alternate explanation is offered for consideration, but it depends upon the viability of several assumptions. This experiment probably constitutes a special situation not applicable to any circumstances other than a legal environment. Subjects were instructed to act and think like jurors, paying careful attention to the facts presented in the testimony. This may have caused many of them to concentrate mainly on the verbal information; i.e., giving more credence to what was said than the general appearance of the witness. Certain visual cues could have been more relevant to a judgement of witness veracity (e.g. nervousness as a sign of deception or uncertainty), and could have left a stronger impression on the viewers.

If some perceptions of the witness were not dependent upon visual information (e.g. competence might be determined solely by statements in the testimony), then changes in camera shot would not be expected to have much effect. This conclusion rests on the following assumptions:

(1) subjects were acting in a fashion corresponding to jurors; (2) jurors are more attuned to verbal information, and only relevant nonverbal cues; and (3) the nonsignificant effects pertained to variables that were not determined by visual cues. Further research would be required to test the validity of these assumptions.

Limitations

Underlying the discussion of the results is an inherent assumption that the limitations of the study are not serious enough to invalidate the conclusions. Since this is essentially an exploratory study, extra effort has been given to listing any potential weaknesses that may be circumvented in subsequent experiments.

Stimulus. In the interest of experimental control, certain compromises had to be made:

1. The actors and actresses playing the parts may have behaved differently than an actual witness giving a deposition.
2. Actors and actresses differed in speaker characteristics other than intentional manipulations of attractiveness and sex (e.g. facial expressiveness and body type).
3. The attractiveness manipulation was not as effective for the male witnesses as the females.
4. Because of the unavailability of the required number of videotape recorders and cameras, not all shots were taped simultaneously.

The effect of the first limitation depends upon the proficiency and realism with which the role is portrayed.

The second limitation may be partially overcome by having one male and one female use make-up to appear both attractive and unattractive. Another method involves controlling for differences with a covariance design. Control groups would listen to audio tapes and respond to the same questionnaire as the videotape viewers. An analysis of covariance would be conducted using listeners' responses as the covariate.

The third limitation might be prevented by providing a single standard of attractiveness for use in the pretest and experiment (i.e., have subjects compare witnesses to a brief shot of some other male, or female).

Sample. Inability to acquire real jurors and to conduct an actual trial led to the following limitations:

1. The random assignment of adult volunteers is not equivalent to the more random process of juror selection.

2. Asking adults to role play jurors, is not the same as jurors involved in the context of a full trial. Actual jurors realize that decisions they make have consequences that affect the lives and property of others.

An alternative would be to draw a sample from a list of potential jurors and to present the deposition within the context of a mock trial.

Measuring instrument.

1. The ratio scales used to measure identification were unfamiliar to most of the respondents and, despite an acceptable reliability coefficient (.86), it is possible that a number of subjects misinterpreted the instructions. There was more missing data (54 cases) than for any other measure.

2. The dimensions observed in the measure of witness physical attraction differed from the factor structure predicted by past research. These factor structures may not be generalizable to any combination of context and sources other than those used in this experiment.

3. The factor structure for the measures of attorney credibility was affected by an inclination of subjects to rate certain scales closer to the upper end than the lower end.

Theory. All the results and implications of this experiment should be weighed against the fact that it is an exploratory study in an area relatively devoid of empirical generalizations. Due to the paucity of prior research, this study took a question-centered approach, choosing to ask general questions, rather than form specific hypotheses about the effects of camera shot. Without hypotheses to guide the analyses of the data, the use of statistics must be more conservative than in theory-based studies. This safeguards against incorrectly rejecting the null hypothesis because of chance significance, but also makes actual significance harder to find.

In this sense, the results are restricted by more stringent criteria for judging the effects of camera shot. Researchers using these findings for speculative purposes should realize that nonsignificant results in an exploratory study may still be of theoretic utility. This study, with all its limitations, could be viewed as a crawling stage prior to an attempt at walking in a potentially important and fertile field of media research.

Implications

This study found evidence that image size has a significant effect on the following three variables that contribute to jurors' perceptions of a videotaped deposition: (1) mediated source credibility; (2) interpersonal attraction; and (3) interest in the proceedings. These findings provide some very salient implications for the legal community.

Probably, every attorney wishes to have a supportive witness present testimony under conditions which lead the jury to the most favorable impression. This study supplies information useful in determining which shot provides the best view of a particular witness. The findings reported imply that the selection of the proper shot is complex, and may depend upon such physical characteristics as the sex and attractiveness of the prospective witness.

A significant difference observed in the composure of attractive and unattractive witnesses in the close-up view implies that the perceived credibility of a witness may be affected by the choice of camera shot. The greater composure of the unattractive witnesses was attributed to their more reserved speaking style, but might also be due to some other factor more directly associated with attractiveness. Further research is needed to establish the cause of the interaction, but the mere existence of

such an effect implies that the close-up shot will benefit some witnesses more than others on ratings of composure.

Similarly, in measures of physical attraction, shot again interacted with a witness appearance variable, but this time it was the sex of the witness. From these results, an attorney might choose to have a female witness videotaped in a medium shot since it was shown to be the most flattering. The selection of shot would not be as crucial for the male witness, since attraction scores did not vary greatly. Implications for further research lie in determining what aspects of physical attractiveness may be unique to each sex.

Also, results indicated that the choice of camera shot had an impact on juror interest in the videotaped deposition, regardless of witness differences. If avoiding use of the extreme long shot can help to prevent loss of attention, this should be considered when videotaping the testimony. Another implication may be that there are other production techniques that can increase juror interest without sacrificing impartiality of decisions. An explanation was given that correlated visual activity, or change, with viewer interest. If this speculation is valid, attorneys would be advised to avoid situations where the television picture is static for any great length of time.

An important implication emerging from this study's lack of significant effects is that image size may have

only a subtle influence on jurors' perceptions. Only four of twelve dependent variables showed a significant relationship with image size. If variations in camera shot have only slight biasing effects, then there may be no need for specific procedural guidelines. However, it may be that this study did not provide certain initial conditions that would ordinarily precipitate a stronger impact. Further research is required before legal administrators would be in a position to decide what guidelines should be suggested.

In this experiment, witness sex and attractiveness were varied in an effort to determine the effects of their interactions with camera shot. These are only two of many speaker variables that may be perceived differently in various shots. The presence of such interactions in this study suggests that future research should carefully control for or measure such differences in order to isolate those of greatest explanatory power. Some that may specifically warrant examination within a legal context are: somatotype (i.e. body type), deception behavior, and facial expressiveness.

Implications presented thus far have referred to procedures in a legal context. The nature of the stimulus and the viewing situation may preclude direct generalization to circumstances other than jurors viewing a deposition. Nonetheless, this study could have theoretic and methodological value for media research outside the legal

environment. Film and television practitioners currently base much of their productions strategy upon experience and intuition, both of which differ from person to person. If empirical research could find regularities in the effects of certain techniques, a more reliable grammar of production could evolve. Based upon a set of known effects, practitioners could feel more confident of attaining a desired audience response, given a variety of circumstances. To date, this area of media research remains relatively unexplored. This lack of exploration is strange since the area offers ambitious investigators many opportunities for employing communication theory to obtain highly applicable results.

Recommendations

Examination of this study's findings, along with the advice of practitioners and past researchers, leads to the following recommendations. In selecting a camera shot that would present a single deposed witness in the most positive view, the medium shot should be the first choice. Regardless of the sex and attractiveness of the stimulus witness, the medium shot exhibited several advantages over the other shots. These advantages were: (1) on measures of dependent variables significantly affected by camera shot, the medium shot either received the highest (most positive) means, or was not significantly different from the highest; (2) the medium shot did not produce significant differences

between levels of witness attractiveness or sex; (3) this shot provided a view that was near enough to heighten visual variety by showing facial expressions and hand gestures, thus probably adding to the interest in the presentation; (4) the view was not so close as to emphasize unattractive facial features or seriously restrict the viewer's field of vision; and (5) the medium shot was not so distant as to include needless, and potentially distracting, space.

Overall, the medium shot seems to have all the advantages of the other shots, but not their disadvantages. However, a general rule of television production is to choose the shot that gives the greatest amount of attention to the most pertinent areas of a subject. In this study, the medium shot directed attention to the upper body of a single, seated witness. In situations that greatly differ from this one, another shot may be more desirable. For instance, a longer shot may be required to show the attorney and the witness in the same view, or a still longer shot to show the witness referring to a chart or diagram. Although this study did not examine such situations, a recommendation would be to frame the relevant areas as tightly as possible. This study's lack of significant effects suggests that little damage would be done by using a longer than medium shot, as long as no unneeded space is included.

There seems to be little reason to use a close-up shot of a witness, but if its use does serve some purpose then it is recommended not to use it if the witness's facial expressions are highly animated. This use of the close-up might reduce composure ratings.

It is recommended not to use the extreme long shot, except to establish a surrounding environment (e.g. office or studio), or to follow some large scale movement such as the witness walking up to a chart.

If only one camera is available to record a deposition, it is recommended that it be equipped with a zoom lens to allow for adjustments of focal length (image size) when necessary. If two cameras and a electronic switcher are available then it may be advisable to intersperse shots of the questioning attorneys, thereby breaking the monotony of the single viewpoint and also showing other relevant action.

A final recommendation urges further research in the area of image size's effects on communication variables. Limitations of this, and previous, shot studies may be overcome in succeeding experiments. Empirical generalizations may evolve out of a set of comparable studies, which in turn will lead to a more theory-based approach.

Summary

This chapter presented a discussion of the effects of image size on viewers' perceptions of a videotaped

deposition. It was determined that the manipulation of witness attractiveness was successful, although more effective for female witnesses than males. Visual variety, added by interspersed shots of the attorneys, did not differentially influence viewers' credibility judgements.

Significant findings related to three of the five research questions. The composure dimension of credibility may have been affected by the facial expressiveness of the attractive witness in the close-up shot. The interaction of shot and sex on physical attraction was attributed to body-type differences between the unattractive witnesses. The decrease in interest during the extreme long shot may have been due to the difficulty in perceiving visual variety. Speculation regarding the nonsignificant influence of shot on identification related it to the tendency of the close-up to emphasize unattractiveness. Several suggestions were provided to explain the nonsignificance of other measured dependent variables.

The limitations of the experiment were discussed, with specific reference to the stimulus, the sample, the measurement instrument, and the lack of theory. Remedial strategies were also supplied.

Several important implications were provided for use of these findings within a legal environment. The major implication was that the selection of the most beneficial shot depended upon certain characteristics of the witness. Further research would be required to determine

the exact nature of these attributes. This study also implies that production technique research can and should be done within the larger scope of mass media research.

A basic recommendation emerges from combining the results of this experiment with the findings of practitioners and past researchers. The medium shot is probably the most beneficial and interesting shot for videotaping the testimony of a single, seated witness. This recommendation does not apply to all situations, and, because of the limitations of this study, it may not be completely externally valid.

In conclusion, this study has provided legal and social science communities with additional information that is believed to be of heuristic value. Hopefully, the results reported here will not only be utilized for establishing guidelines for legal videotaping, but also for construction of theories of media effects.

FOOTNOTES

[1] From a personal conversation with Larry Stone, a past video consultant for the Ohio court system.

[2] Colby Lewis, an experienced television director and instructor, assisted in determining the placement of these shots of the attorneys.

[3] Due to the unequal number of respondents in the treatment cells, the harmonic mean of the group counts was used rather than the actual group counts. The harmonic mean for k groups, each with n_i cases, is computed:

$$\bar{n}_h = k/\Sigma 1/n_i$$

This will tend to make the post hoc test less conservative as the differences in cell sizes increase (Nie, et al., 1975).

APPENDICES

APPENDIX A

VIEWER QUESTIONNAIRE

APPENDIX A

MICHIGAN STATE UNIVERSITY
DEPARTMENT OF COMMUNICATION

Through the following set of questions, we would like to determine how clearly the witness presented the testimony. Do your best to answer each of the questions. In the multiple choice questions, please place a check mark (✓) in the space next to the best answer.

Where no choices are provided, simply fill in the blank with the requested information. Work quickly, answering each question to the best of your memory. If you are uncertain of a particular answer, make a reasonable guess.

Please work independently. Are there any questions? If not, please begin.

1. The witness was

   ____ A. a college graduate

   ____ B. attending officer's training school

   ____ C. a high school graduate

   ____ D. did not finish high school

2. The witness was employed by

   ____ A. General Motors Corporation

   ____ B. the Army

   ____ C. the Navy

   ____ D. Mr. Stuart

3. What was the date of the collision?

   ____ A. September 21, 1974

   ____ B. September 14, 1971

   ____ C. January 12, 1972

   ____ D. January 17, 1970

4. According to the witness, how fast was the truck going prior to impact?

   ____ A. about 30 miles per hour

   ____ B. about 40 miles per hour

   ____ C. about 50 miles per hour

   ____ D. the truck was stopped

5. Where was the point of impact on the car? _____

6. Relating to the brake being applied, what was the witness's testimony?

____ A. the truck applied the brakes just before the car hit him

____ B. the car applied the brakes and skidded into the truck

____ C. the car tried to slow down and swerved

____ D. the truck speeded up

7. How fast was the car going, and in what direction?

____ A. 20 MPH South

____ B. 40 MPH North

____ C. 10 MPH South

____ D. 30 MPH North

8. What was the witness's testimony concerning the weather conditions?

____ A. there was a slight rain with some fog

____ B. it had just snowed, but was clear at the time

____ C. it was a fairly warm night out and was clear

____ D. there was an early morning fog

9. What did the witness say concerning the traffic signals?

____ A. a yellow blinking light was facing the truck

____ B. a red blinking light was facing the truck

____ C. the truck had no light

____ D. the car had a red light

10. In describing the physical condition of the driver of the car in the accident, the witness testified that he

____ A. was very upset and kept walking around saying, "Oh, my God. . ."

____ B. was starting to come to, but could not move well because he was pinned down

____ C. was unconscious and bleeding a lot

____ D. was partially stunned, but was able to walk to the ambulance

11. What kind(s) of experience, if any, did the witness have in estimating speed? _____

12. Why couldn't the accident victim see the truck before impact? _____

_____

13. What type of car was hit by the truck?

____ A. Thunderbird

____ B. Torino

____ C. Toronado

____ D. Cutlass

14. What was the witness's estimate of the length of the trailer alone?

____ A. 60 feet

____ B. 45 feet

____ C. 55 feet

____ D. 50 feet

15. In what seat of the car was the witness sitting? _____

16. Mr. Kibley was the name of

____ A. the attorney who took the statement from the witness in Great Lakes, Illinois

____ B. the person who was the accident victim

____ C. the man who was in the car with the witness

____ D. the friend of the witness who was waiting to be picked up

17. To how many people did the witness give a statement? _____

18. When was the first time the witness saw the pictures viewed during the deposition?

____ A. a few minutes before the videotaping

____ B. last week in an attorney's office

____ C. a week after the accident

____ D. in Great Lakes, Illinois

19. What was the visibility on the night of the accident? _____

20. What did the witness see after running down to the scene of the impact?

____ A. skid marks

____ B. the unconscious truck driver

____ C. glass and metal lying in the intersection

____ D. a flashing green light

21. In which lane of Hamilton did the accident occur? _____

22. What was the color of the flashing light facing northbound and southbound traffic? _____

23. The truck was traveling in a(n) 1_____ direction, and the accident car in a(n) 2_____ direction.

____ A. 1. northerly; 2. westbound

____ B. 1. easterly; 2. northbound

____ C. 1. easterly; 2. southbound

____ D. 1. southerly; 2. westbound

24. Who did the witness say was driving the accident car?

____ A. a man

____ B. a woman

____ C. Mr. Andrews

____ D. the witness was not sure

25. What was the estimated distance from the front of the truck to the point of impact on the truck?

____ A. 10-15 feet

____ B. 20-25 feet

____ C. 25-30 feet

____ D. 30-35 feet

26. What time did the accident take place? _____

27. Why was the witness out on the road at the time the accident took place?

____ A. the witness was returning home from a job

____ B. the witness was going to give a friend a ride home

____ C. the witness was visiting Kim at his home

____ D. the witness was just riding around

28. How did the witness determine which vehicle applied the brakes?

____ A. the truck's wheels were locked

____ B. the witness heard a loud screech and the truck slowed down

____ C. the car skidded and swerved

____ D. the truck appeared to speed up as the witness heard the brakes squeal

29. The witness's car was how far from the intersection at the time of the collision?

____ A. about 150 feet

____ B. about 80 feet

____ C. about 250 feet

____ D. about 100 feet

30. In what direction was the witness's car traveling? _____

31. What took place in the five seconds between the time of the impact and when the witness's car came to a stop? The witness's car:

____ A. pulled off the road before reaching the intersection

____ B. travelled straight in the left hand lane and turned left at the intersection

____ C. swerved around the back of the truck and into the other side's curb-lane on the other side of the intersection

____ D. sped up to avoid the collision and then stopped before the collision

32. Which of the following statements did the witness make regarding observations just before the accident? The witness saw:

____ A. the car before seeing the truck

____ B. only a short distance beyond the car

____ C. the truck before seeing the car

____ D. the headlights of the car before starting under the bridge

33. What was the witness's birthdate?

____ A. January 7, 1954

____ B. January 4, 1957

____ C. September 14, 1954

____ D. September 1, 1957

34. What was the witness's estimate of the length of the accident car's hood from windshield to radiator?

____ A. about 4 feet

____ B. about 6 feet

____ C. about 10 feet

____ D. about 12 feet

35. What type of work does the witness do?

____ A. design fire control programs

____ B. drive a tractor trailer

____ C. program computers

____ D. use computers to shoot aircraft targets

36. Does the witness's job require estimates of types of measurement? _____

37. According to the witness, the accident car _____ prior to the impact.

____ A. slowed down

____ B. sped up

____ C. kept a constant speed

____ D. swerved to avoid the truck

38. In what way, if at all, did the witness test the ability to estimate speeds?

_____

39. Which of the following statements regarding the witness's time estimates are part of the testimony? The witness

____ A. looked at a watch before the accident

____ B. did not have a watch on

____ C. had a stop-watch at the time

____ D. could not remember looking at a watch

The following questions ask you to compare the deposition you have just seen with one you might see in a live courtroom setting. IMAGINE, for a moment, what it would be like sitting in a jury box and watching a witness being questioned by the attorney.

If the live situation had a value of 50, what would be the value of the videotape experience in terms of the questions we will ask.

For example:

How interesting did you find the videotaped deposition? _____

If your interest in the videotape was less than that of a live presentation, you would put some number less than 50 in the blank provided. If you had the same interest in the videotape as the live, you would rate the videotape at 50. If you were more interested in the videotape presentation, you would put some number larger than 50. You may mark numbers as high or low as you wish.

Any questions? If not, proceed.

REMEMBER THAT 50 IS ALWAYS THE VALUE ASSIGNED TO A LIVE TRIAL.

While viewing the videotaped deposition:

1. How much did you identify with the witness? _____
2. How much did you feel the same emotions that the witness felt? _____
3. How detached from the witness did you feel? _____
4. How well did you feel you knew the witness? _____
5. How close did you feel toward the witness? _____
6. How restless did you feel while viewing the witness? _____
7. How much did you feel you were part of the action of the case being tried?

_____

In this part of the questionnaire, you will be asked to indicate some of your impressions of the witness and two attorneys you have just seen. Please read the directions carefully and answer each question honestly. Please check to be sure that each question has been answered on the corresponding row. Your answers are completely anonymous and there are no right or wrong responses. Your answers are very important to us and we greatly appreciate your help.

To find out your evaluations of the trial participants, we have supplied various adjectives that would describe these people. Please indicate your judgments on the scales on the following pages. Use the scales on the basis of what these words mean to you. They are designed so that you can express the degree to which the person you are rating seems to fit into one end of the scale or the other.

Please place a check mark (✓) <u>on top</u> of the space that would best describe your feelings about that person.

EXAMPLE:

JOHNNY CARSON

Unintelligent	1	2	3	4	5	6	7	8	9	Intelligent
									✓	

If you think that Johnny Carson is extremely intelligent, you would place a check in the far right (#9) space as done above.

Unintelligent	1	2	3	4	5	6	7	8	9	Intelligent
						✓				

If he's just slightly more intelligent than unintelligent, you would check #6, as done above.

Unintelligent	1	2	3	4	5	6	7	8	9	Intelligent
					✓					

If you feel he is neither, i.e. you feel neutral, you would check #5, as done above. Please work quickly and put <u>ONE and ONLY ONE check mark for each scale</u>.

THE WITNESS

Good natured	1	2	3	4	5	6	7	8	9	Irritable
Cheerful	1	2	3	4	5	6	7	8	9	Gloomy
Unsociable	1	2	3	4	5	6	7	8	9	Sociable
Meek	1	2	3	4	5	6	7	8	9	Aggressive
Verbal	1	2	3	4	5	6	7	8	9	Quiet
Boring	1	2	3	4	5	6	7	8	9	Interesting
Speaks like me	1	2	3	4	5	6	7	8	9	Doesn't speak like me
Unlike me	1	2	3	4	5	6	7	8	9	Like me
Acts like me	1	2	3	4	5	6	7	8	9	Doesn't act like me
Incompetent	1	2	3	4	5	6	7	8	9	Competent
Expert	1	2	3	4	5	6	7	8	9	Inexpert
Unintelligent	1	2	3	4	5	6	7	8	9	Intelligent
Qualified	1	2	3	4	5	6	7	8	9	Unqualified
Poised	1	2	3	4	5	6	7	8	9	Nervous
Tense	1	2	3	4	5	6	7	8	9	Relaxed
Calm	1	2	3	4	5	6	7	8	9	Anxious
Dishonest	1	2	3	4	5	6	7	8	9	Honest

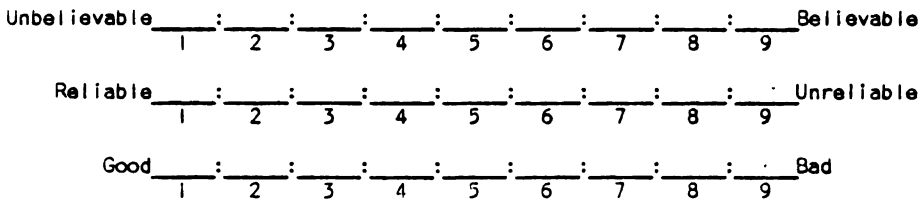
Unbelievable____:____:____:____:____:____:____:____:____Believable
1 2 3 4 5 6 7 8 9

Reliable____:____:____:____:____:____:____:____:____Unreliable
1 2 3 4 5 6 7 8 9

Good____:____:____:____:____:____:____:____:____Bad
1 2 3 4 5 6 7 8 9

MR. STUART (the first attorney)

Good natured	1	2	3	4	5	6	7	8	9	Irritable
Cheerful	1	2	3	4	5	6	7	8	9	Gloomy
Unsociable	1	2	3	4	5	6	7	8	9	Sociable
Meek	1	2	3	4	5	6	7	8	9	Aggressive
Verbal	1	2	3	4	5	6	7	8	9	Quiet
Boring	1	2	3	4	5	6	7	8	9	Interesting
Speaks like me	1	2	3	4	5	6	7	8	9	Doesn't speak like me
Unlike me	1	2	3	4	5	6	7	8	9	Like me
Acts like me	1	2	3	4	5	6	7	8	9	Doesn't act like me
Incompetent	1	2	3	4	5	6	7	8	9	Competent
Expert	1	2	3	4	5	6	7	8	9	Inexpert
Unintelligent	1	2	3	4	5	6	7	8	9	Intelligent
Qualified	1	2	3	4	5	6	7	8	9	Unqualified
Poised	1	2	3	4	5	6	7	8	9	Nervous
Tense	1	2	3	4	5	6	7	8	9	Relaxed
Calm	1	2	3	4	5	6	7	8	9	Anxious
Dishonest	1	2	3	4	5	6	7	8	9	Honest


Unbelievable
Believable
1 2 3 4 5 6 7 8 9
Reliable
Unreliable
1 2 3 4 5 6 7 8 9
Good
Bad
1 2 3 4 5 6 7 8 9

MR. ANDREWS (the last attorney)

Good natured	1	2	3	4	5	6	7	8	9	Irritable
Cheerful	1	2	3	4	5	6	7	8	9	Gloomy
Unsociable	1	2	3	4	5	6	7	8	9	Sociable
Meek	1	2	3	4	5	6	7	8	9	Aggressive
Verbal	1	2	3	4	5	6	7	8	9	Quiet
Boring	1	2	3	4	5	6	7	8	9	Interesting
Speaks like me	1	2	3	4	5	6	7	8	9	Doesn't speak like me
Unlike me	1	2	3	4	5	6	7	8	9	Like me
Acts like me	1	2	3	4	5	6	7	8	9	Doesn't act like me
Incompetent	1	2	3	4	5	6	7	8	9	Competent
Expert	1	2	3	4	5	6	7	8	9	Inexpert
Unintelligent	1	2	3	4	5	6	7	8	9	Intelligent
Qualified	1	2	3	4	5	6	7	8	9	Unqualified
Poised	1	2	3	4	5	6	7	8	9	Nervous
Tense	1	2	3	4	5	6	7	8	9	Relaxed
Calm	1	2	3	4	5	6	7	8	9	Anxious
Dishonest	1	2	3	4	5	6	7	8	9	Honest

Unbelievable____:____:____:____:____:____:____:____:____Believable
1 2 3 4 5 6 7 8 9

Reliable____:____:____:____:____:____:____:____:____Unreliable
1 2 3 4 5 6 7 8 9

Good____:____:____:____:____:____:____:____:____Bad
1 2 3 4 5 6 7 8 9

As a further measure of your feelings toward the witness, we would like you to respond to the following statements. Since your answers will be based upon your general impressions, do not worry about the lack of information you have concerning the person. Simply respond to each statement as honestly as you can.

Each statement has a space where you can mark (✓) if you strongly agree, agree, feel neutral, disagree, or strongly disagree. Remember the middle space may be used if you are undecided or neutral.

1. I think the witness could be a friend of mine.

strongly agree	agree	neutral	disagree	strongly disagree

2. It would be difficult to meet and talk with the witness.

strongly agree	agree	neutral	disagree	strongly disagree

3. The witness just would not fit into my circle of friends.

strongly agree	agree	neutral	disagree	strongly disagree

4. We could never establish a personal friendship with each other.

strongly agree	agree	neutral	disagree	strongly disagree

5. I would like to have a friendly chat with the witness.

strongly agree	agree	neutral	disagree	strongly disagree

6. I do not think the witness is very good looking.

strongly agree	agree	neutral	disagree	strongly disagree

7. The witness's clothes are quite becoming.

strongly agree	agree	neutral	disagree	strongly disagree

8. The witness is very sexy looking.

strongly agree	agree	neutral	disagree	strongly disagree

9. I find the witness very attractive physically.

strongly agree	agree	neutral	disagree	strongly disagree

10. I do not like the way the witness looks.

strongly agree	agree	neutral	disagree	strongly disagree

11 The witness is somewhat ugly.

strongly agree	agree	neutral	disagree	strongly disagree

12. The witness is a typical goof-off when assigned to do a job.

strongly agree	agree	neutral	disagree	strongly disagree

13. I have confidence in the witness's ability to get the job done.

strongly agree	agree	neutral	disagree	strongly disagree

14. If I wanted to get things done, I could probably depend on the witness.

strongly agree	agree	neutral	disagree	strongly disagree

15. I could not get anything accomplished with the witness.

strongly agree	agree	neutral	disagree	strongly disagree

16. The witness would be a poor problem solver.

strongly agree	agree	neutral	disagree	strongly disagree

We would like to know your general reactions to the deposition. We would like you to rate the proceedings you just viewed in terms of the scales below.

fast____:____:____:____:____:____:____:____:____slow
1 2 3 4 5 6 7 8 9

interesting____:____:____:____:____:____:____:____:____boring
1 2 3 4 5 6 7 8 9

easy to pay attention____:____:____:____:____:____:____:____:____difficult to pay attention
1 2 3 4 5 6 7 8 9

fatiguing____:____:____:____:____:____:____:____:____refreshing
1 2 3 4 5 6 7 8 9

confusing____:____:____:____:____:____:____:____:____clear
1 2 3 4 5 6 7 8 9

stimulating____:____:____:____:____:____:____:____:____tedious
1 2 3 4 5 6 7 8 9

Approximately how many hours of TV do you watch a week? _____

color _____ black and white _____

Sex: Female _____ Male _____

Age _____ Years of education completed _____

Marital status: single _____ married _____ divorced _____

separated _____ widow or widower _____

Have you any sight or hearing defect? _____ If yes, please explain _____

What is your current occupation? _____

Income Level: _____ $0-$5,000 _____ $15,000-$20,000

_____ $5,000-$10,000 _____ over $20,000

_____ $10,000-$15,000

Have you ever served on a jury before? _____ Have you ever been a party in a civil or criminal suit? _____ If yes, please explain how you were involved.

-- THANK YOU FOR YOUR PATIENCE AND COOPERATION --

APPENDIX B

THREE-WAY ANALYSIS OF VARIANCE TABLES FOR NON-SIGNIFICANT DEPENDENT VARIABLES

TABLE B1. Summary Table for Analysis of Variance of Sociability Dimension of Witness Credibility.

Source of Variance	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	31.881	5	6.376	.501	.775
Shot[1]	13.037	3	4.346	.341	.796
Watt[2]	1.069	1	1.069	.084	.772
Wsex[3]	16.167	1	16.167	1.270	.261
2-Way Interactions	95.936	7	13.705	1.076	.380
Shot Watt	5.494	3	1.828	.144	.934
Shot Wsex	52.032	3	17.344	1.362	.256
Watt Wsex	40.493	1	40.493	3.180	.076
3-Way Interaction	38.915	3	29.638	2.328	.076
Shot Watt Wsex	38.915	3	29.638	2.328	.076
Explained	209.625	15	13.975	1.097	.361
Residual	2419.429	190	12.734		
Total	2629.053	205	12.825		

Note: 1. Camera Shot; 2. Witness attractiveness; 3. Witness sex

TABLE B2. Summary Table for Analysis of Variance of Competence Dimension of Witness Credibility.

Source of Variance	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	108.332	5	21.666	2.869	.016
Shot[1]	52.506	3	17.502	2.317	.077
Watt[2]	.533	1	.533	.071	.791
Wsex[3]	61.540	1	61.540	8.148	.005
2-Way Interactions	48.363	7	6.909	.915	.496
Shot Watt	10.562	3	3.521	.466	.706
Shot Wsex	36.958	3	12.319	1.631	.184
Watt Wsex	.277	1	.277	.037	.848
3-Way Interaction	58.549	3	19.516	2.584	.055
Shot Watt Wsex	58.549	3	19.516	2.584	.055
Explained	225.916	15	15.061	1.994	.018
Residual	1435.079	190	7.553		
Total	1660.995	205	8.102		

Note: 1. Camera Shot; 2. Witness Attractiveness; 3. Witness Sex

TABLE B3. Summary Table for Analysis of Variance of Character Dimension of Witness Credibility.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	63.768	5	12.754	.676	.642
Shot[1]	60.624	3	20.208	1.072	.362
Watt[2]	2.467	1	2.467	.131	.718
Wsex[3]	.476	1	.476	.025	.874
2-Way Interactions	90.902	7	12.986	.689	.682
Shot Watt	45.989	3	15.330	.813	.488
Shot Wsex	15.249	3	5.083	.270	.847
Watt Wsex	35.095	1	35.095	1.861	.174
3-Way Interaction	9.346	3	3.115	.165	.920
Shot Watt Wsex	9.346	3	3.115	.165	.920
Explained	155.732	15	10.382	.551	.909
Residual	3582.816	190	18.857		
Total	3738.549	205	18.237		

Note: 1. Camera Shot; 2. Witness attractiveness; 3. Witness Sex

TABLE B4. Summary Table for Analysis of Variance of Perceived Homophily.

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	146.396	5	29.279	1.082	.372
Shot[1]	137.898	3	45.966	1.698	.169
Watt[2]	2.401	1	2.401	.089	.766
Wsex[3]	.885	1	.885	.033	.857
2-Way Interactions	196.294	7	28.042	1.036	.407
Shot Watt	117.216	3	39.072	1.443	.232
Shot Wsex	41.554	3	13.851	.512	.675
Watt Wsex	30.793	1	30.793	1.138	.288
3-Way Interaction	218.040	3	72.680	2.685	.048
Shot Watt Wsex	218.040	3	72.680	2.685	.048
Explained	579.435	15	38.629	1.427	.138
Residual	5143.405	190	27.071		
Total	5722.840	205	27.916		

Note: 1. Camera Shot; 2. Witness Attractiveness; 3. Witness Sex

TABLE B5. Summary Table for Analysis of Variance of Social Attraction Dimension of Interpersonal Attraction

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	54.162	5	10.833	2.135	.063
Shot[1]	7.166	3	2.389	.471	.703
Watt[2]	45.439	1	45.439	8.952	.003
Wsex[3]	3.045	1	3.045	.600	.440
2-Way Interactions	14.350	7	2.050	.404	.899
Shot Watt	6.133	3	2.044	.403	.751
Shot Wsex	8.068	3	2.696	.531	.661
Watt Wsex	.043	1	.043	.008	.927
3-Way Interaction	19.132	3	6.377	1.256	.291
Shot Watt Wsex	19.132	3	6.377	1.256	.291
Explained	86.777	15	5.785	1.140	.323
Residual	974.603	192	5.076		
Total	1061.380	207	5.127		

Note: 1. Camera Shot; 2. Witness Attractiveness 3. Witness Sex

TABLE B6. Summary Table for Analysis of Variance of Task Attraction Dimension of Interpersonal Attraction

Source of Variation	Sum of Squares	df	Mean Square	F	Signif. of F
Main Effects	13.744	5	2.749	.555	.735
Shot[1]	9.814	3	3.271	.660	.578
Watt[2]	3.827	1	3.827	.772	.381
Wsex[3]	1.015	1	1.015	.205	.651
2-Way Interactions	29.845	7	2.978	.601	.755
Shot Watt	9.618	3	3.206	.647	.586
Shot Wsex	3.122	3	1.041	.210	.889
Watt Wsex	6.436	1	6.436	1.298	.256
3-Way Interaction	7.861	3	2.620	.529	.663
Shot Watt Wsex	7.861	3	2.620	.529	.663
Explained	46.642	15	3.109	.627	.851
Residual	951.435	192	4.955		
Total	998.077	207	4.822		

Note: 1. Camera Shot; 2. Witness Attractiveness; 3. Witness Sex

APPENDIX C

DIAGRAM OF STUDIO SET-UP FOR VIDEOTAPING THE DEPOSITION

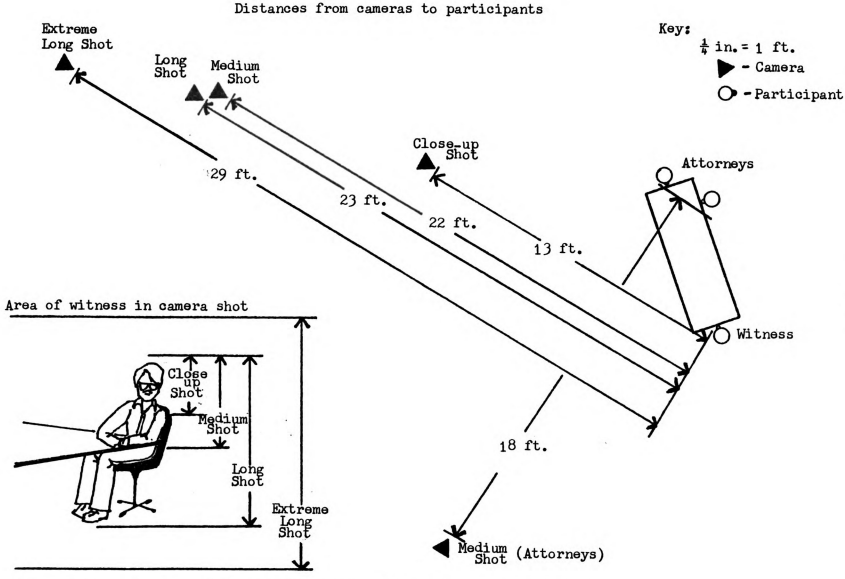


Figure C1. Diagram of Studio Set-up for Videotaping the Deposition

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