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ABSTRACT

The purpose of this study was to examine the effects of two nonverbal visual variables (camera angle and image size) on variables developed in a nonmediated context (source credibility and interpersonal attraction). Camera angle and image size were manipulated in eight video taped television newscasts which were subsequently presented to eight sections of an introductory communications course at Illinois State University as taped auditions for the position of student newscaster on a campus newspaper. The students were asked to evaluate the tapes. The findings of this study suggest that televised newscasters would enhance their credibility and perceived task attraction if the preponderant shot (that shot which appears in each treatment the majority of the time) is of a higher angle than its corresponding reference shot (that shot which appears in the remainder of the sequence). It was found that low angle shots may increase credibility and attraction, but only when used sparingly. The study emphasized that the effect of the shot, whether preponderant or referent, depends on its relationship to the other shots utilized in a sequence. (LL)

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**The Effect of Camera Angle and
Image Size on Source Credibility and
Interpersonal Attraction**

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The construction of visual messages in the mass communication process is complex. Television and film sources manipulate both verbal and non-verbal variables in an attempt to focus receiver attention and illicit particular meanings. The majority of mass communication research has focused on the effect of the verbal messages; we consequently know precious little about the effects of the nonverbal media message variables on human behavior. The importance of nonverbal message properties was noted by Gerbner:

. . . There are objective built in elements (camera angle, lighting, juxtaposition, contexts, relative size, etc.) which form part of the basis along which pictures are perceived. 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 (Tannenbaum and Fosdick, 1964, p. 253).

The specific purpose of this study was to examine the effects of two nonverbal visual variables (camera angle and image size) on variables developed in a non-mediated context (source credibility and interpersonal attraction).

Camera Angle

Practitioners. Since the earliest days of film the use of vertical camera angle has been part of a director's repertoire. Its use in early Russian films was evidenced in Eisenstein's Film Form (1965). One source of conflict within a shot is ". . . conflict between matter and viewpoint (achieved by spatial distortion through camera angle)" (p. 54). Arnheim (1957) depicted its use in early Russian films as well:

The domineering forcefulness of a character is often expressed by taking the shot from the worm's eye view. An iron captain of industry or a general . . . the camera looks at him as at a mountain. Here again the fact that the actor has to be taken from some particular point of view is not handled perfunctorily but is consciously exploited: the perspective angle acquires meaning, a virtue is made of necessity. (pp. 38-39).

Huss and Silverstein (1968) suggested that camera angle can be used by a director to form audience attitudes toward film characters:

Murnau in The Last Laugh had his camera 'look up' at the old doorman's good fortune by means of low angle shots, and later makes it 'look down' at his misery with high angle ones, he is only enhancing the tragic reversal, but is imposing upon us - perhaps without our awareness or conscious consent -- attitudes of reverence, condescension, and social judgment of a sort (p. 111).

Television production textbooks have discussed the role of camera angle. Millerson (1961) wrote that ". . . lower viewpoints impart strength while elevated viewpoints suggest weakness (p. 264)" Another text by Bretz (1962) referred to this relationship as the "principle of dominance":

. . .if one is looking up at an object . . .it takes on a greater importance than the viewer. We feel we are figuratively as well as actually 'looking - up' to it. Conversely, if the camera shoots down on someone, he is less important than we are (p. 32).

Most of these observations point to the notion that lower camera angles elevate visually presented sources to the viewer.

Empirical research. Tiemens (1970) attempted to test the relationship between camera angle and credibility of newscasters. Only one significant effect was found; "activity" was higher for one of the newscasters in a low camera shooting upward condition. The dependent measure was one of Osgood's dimensions of meaning and not a dimension of newscaster credibility. Chilberg (1972) assessed the effects of vertical camera angle on source credibility and attitude change using McCroskey's (1971) dimensions of source credibility as dependent measures. His results clearly indicated that high camera angles shooting downward on subjects produced significantly higher credibility ratings.

A major problem in Chilberg's (1972) research as well as that of Tiemen's (1970) was that only one camera angle and image size was maintained for each experimental treatment. This condition is rarely viewed in "normal" media presentations.

Image Size

Practitioners. The selective use of the close-up, medium shot, or long shot has been a long used visual technique for directing an audience to a message. Russian film makers claimed ". . .the principle function of the close-up in our cinema is--not only and not so much to 'show' or to 'present' as to 'signify', to 'give meaning', to 'designate'"(Eisenstein, 1965, p. 238).

In television, long shots are used primarily for orientation or as cover shots. Medium shots and close-ups are recognized as the more important camera shots. According to Zettle (1961); "The size of the television screen is small. To show things clearly, you must show them relatively large within the frame of the screen." (p. 342)

Empirical research. McCain and Kepensky (1972) assessed the effects of image size on the perceived interpersonal attractiveness of two comedy performers. Significant differences were observed on the physical and task dimensions of attraction, but manipulation of shot size had opposite effects for each of the performers. In the task dimension the close-up was significantly better for one of the performers than the other, in the physical dimension the long shot increased attraction for this performer. These interactions indicate that the effect of image size may depend on characteristics of the stimulus objects. Since this study maintained only one perspective in each stimulus tape, it is subject to the same criticism as the Chilberg

and Tiemens works. Regardless of the length of the production, it is common practice to vary image size.

Williams (1968) discovered that long shots decreased subjects' interest level in a film presentation and that when shot type conflicted with interest level of sentences, interest level was decreased. His results lend support to the proposition that image size can effect a receiver's evaluations.

Wurtzel and Dominick (1972) reported that different acting techniques are suited to different image size shots, which further indicates that selective variation of image size can alter a receiver's attitude toward a stimulus object.

Source Credibility

Source credibility can be defined as a multi-dimensional attitude of a receiver towards a source (McCroskey, Larson, and Knapp, 1971). Source credibility is not determined by some innate personality characteristics of a source, but is instead determined by the characteristics a receiver perceives a source to have.

Source credibility research has shown the importance of this construct to communication. High and low initial credibility has been shown to differentially effect attitude change (Anderson and Clevenger, 1963). Credibility has been a factor in assessing the effects of message variables such as evidence (McCroskey, 1969), and fear appeals (Miller and Hewgill, 1967). Terminal credibility has been used as a dependent variable to assess the effects of using familiar and unfamiliar evidence (McCroskey, 1966), and delivery style (McCroskey, 1967). Source credibility is a well tested dependent variable for assessing communication effects.

Mediated Interpersonal Attraction

Interpersonal attraction is likewise a multi-dimensional construct. It concerns ". . . judgments about whether we 'like' another person, whether we 'feel good' in his presence, etc." (McCroskey, Larson, and Knapp, 1971, p. 38). Although little communication research has focused on mediated interpersonal attraction, it seems to be an important element in a receiver's evaluation of a source (Berscheid and Walster, 1969). The perceived attractiveness of a television personality, may determine to a great extent, his success or failure.

Summary

Mediated source credibility is a receiver's attitude towards a mediated source. Mediated interpersonal attraction is a receiver's judgment of the degree to which he likes or dislikes a mediated source. Camera angle is the degree to which a camera lens varies on a vertical plane. Image size is the apparent distance between camera and source. Mediated credibility and interpersonal attraction have been shown to be affected by variance within these nonverbal variables. This study's concern with the effects of camera angle and image size upon a receiver's attitudes and perceptions of a mediated source can be appropriately measured by source credibility and interpersonal attraction.

The above theory and research lead to the following experimental hypotheses:

Hypotheses

1. Higher camera angle treatments will produce more positive receiver attitudes towards a mediated source on the dimensions of source credibility, than will low camera angles.
2. Variance in camera angle treatments will produce differential receiver evaluation of a mediated source's interpersonal attraction on the dimensions of mediated interpersonal attraction.
3. Variance in image size will produce differential attitudes of a receiver towards a mediated source on the dimensions of source credibility.
4. Variance in image size will produce differential receiver evaluations of a mediated source's interpersonal attraction on the dimensions of mediated interpersonal attraction.

Methodology

The testing of the hypotheses required the production of eight video taped television newscasts. Camera angle and image size were manipulated in these conditions.

Operational Definitions

Camera angle. Three levels of camera angle were included. An eye level shot of a student newscaster was used as a criterion; it formed a 90 degree angle with the vertical plane. High and low angle cameras were placed 38 inches above and below the eye level camera respectively. The camera angle which appeared for the majority of time in the sequence was labeled the preponderant angle. The angle shot which appeared in a treatment the remainder of the time was called a referent angle.

Image size. Image size is the apparent distance between camera and television newscaster is controlled by a zoom lens. Two image sizes were utilized. A close-up refers to the properly framed image of the newscaster from the shoulders upward which filled the entire frame. The medium shot framed the newscaster from the waist to the head. The preponderant image size was the shot which appeared in each treatment the majority of the time. The image size which appeared in the remainder of the sequence was called the referent image size.

A pilot study varied the length of time the preponderant shot appeared in the message sequences. A panel of judges determined that the preponderant shot should appear in 75 percent of each experimental tape.

Since the preponderant shots in all of the treatments under test were eye level shots, the relative highness or lowness was determined by the referent shot utilized. The low angle referent shots made the eye level treatment appear relatively higher, whereas the higher angle shots made the eye level treatments appear relatively lower.

Mediated source credibility. Mediated source credibility was defined as subject's attitudes towards a television newscaster on five dimensions of credibility: sociability, competence, dynamism, character and composure as measured by McCroskey, Scott and Young's (1971) semantic differential scales for peer and media credibility. Both sets of scales were employed because the stimuli consisted of student-newscaster auditions.

Mediated interpersonal attraction. Attraction was defined as the degree to which subject's liked the television newscaster source on three dimensions of attraction: physical attraction, task attraction, and social attraction, as measured by the attraction items developed by McCroskey and McCain (1972), and McCain and Repensky (1972).

Message Procedures

The video taping was done in the Communication Research Center at Illinois State University using two half-inch video tape recorders; two special effects switchers; and four television cameras. Two of the cameras were placed at either the high or the low angle positions. The other two cameras were placed at the eye level position. One of the cameras at each position was adjusted for a close-up, the other for a medium shot. The image sizes were matched so as to be identical for all treatments (i.e., eye level close-up shot and high angle medium shot, etc.).

Two hand-operated teleprompters were placed under the two angle treatments to be incorporated in a single reading--this assured constant eye contact with the take cameras. Each newscaster was video recorded standing behind a news desk. The newscaster stood 12 feet from the eye level camera.

Two male undergraduate broadcast news students presented the same newscast which was composed of news items from the U.P.I. World Roundup of October 26, 1972. The newscast lasted approximately three minutes. Each newscaster was recorded twice, reading the same group of stories. On one reading the two high angle referent shot conditions were recorded; the second reading was required to record the low angle referent shot conditions. This procedure resulted in eight conditions--two referent angles by two image sizes across two newscasters.

After the treatment tapes were constructed they were submitted to a panel of judges to discover inconsistencies between the deliveries of individual newscasters. The judges concluded that the delivery associated with the low-angle referent condition of one of the newscasters had slightly less verbal emphasis than did his other reading. The differences were not deemed serious enough to warrant retaping.

Data Collection Procedures

Subjects were students enrolled in sections of the introductory communication course at Illinois State University during the fall semester of 1972. Each section had approximately 18 students. Eight sections were utilized, each viewing one of the treatment tapes.

The video treatments were introduced as taped auditions for the position of student newscaster on a campus newsprogram. The students were asked to aid in the evaluation procedure. The stimulus tapes were then shown. The subjects completed the measurement booklet immediately following the presentation.

Statistical Procedures

The scales for credibility and mediated attraction were independently factor analyzed. The scales meeting criteria for the dimensions of mediated source credibility and mediated interpersonal attraction were summed independently and tested in a three-way analysis of variance design for unequal and disproportional cell sizes to determine the corrected error term for use in subsequent analysis (Ferguson, 1971, p. 269). The corrected error term consisted of adding any interaction effect caused by newscaster differences to the error term and dividing by the corresponding degrees of freedom (Winer, 1971, p. 320). To correct for disproportionality, estimated means, weighted by the least squares method, were utilized. The .05 level of significance was required for all tests. Only the main effects of camera angle and image size were hypothesized and subjected to t tests. Different newscasters were employed simply to produce variance in source type.

Results

Factor analysis of the mediated source credibility scales resulted in a four factor solution which accounted for 61 percent of the total variance.

--Table 1 about here--

The dimensions of credibility were labeled Dynamism, Composure, Character and Sociability. None of the items originally included as competence items obtained satisfactory loadings.

The factor analysis of the mediated interpersonal attraction scales resulted in a three factor solution reported in Table 2.

--Table 2 about here--

The three factors accounted for 52 per cent of the total variance. The dimensions were labeled Physical Attraction, Task Attraction, and Social Attraction.

The mean scores for the high appearing and low appearing treatments of the credibility dimensions are reported in Table 3.

--Table 3 about here--

In the character dimension the mean score for the high appearing treatment ($\bar{X} = 15.24$) was significantly higher than the mean score for the low appearing condition ($\bar{X} = 14.08$; $t = 3.03$). However, a significant interaction effect (see Appendix A for analysis of variance results) indicated that this only occurred in the medium shot condition ($\bar{X}_{hi} = 16.00$, $\bar{X}_{lo} = 13.80$, $t = 4.22$).

In the sociability dimension the mean score for the high appearing treatment ($\bar{X} = 18.95$) was significantly higher than the mean score for the low appearing treatment ($\bar{X} = 17.90$; $t = 1.76$).

The mean scores for the high and low appearing treatments on mediated interpersonal attraction ratings are reported in Table 4.

--Table 4 about here--

In the task attraction dimension the mean score for the high appearing treatment ($\bar{X} = 27.21$) was significantly higher than the mean score for the low appearing treatment ($\bar{X} = 25.04$; $t = 2.86$). See Appendix B for analysis of variance results.

No significant differences were found in the main effects analysis of image size on mediated source credibility or mediated attraction in the eye level treatments.

Post Hoc Analysis

The more conservative Sheffe test was used to determine significance for non-hypothesized differences. A significant F ratio ($p < .05$) was the criteria utilized for the employment of Sheffe.

In the social dimension of mediated interpersonal attraction, a significant interaction between image size and newscaster was observed ($F = 5.40$). The medium shots were found to be better than close-ups for the newscasters with lower ratings only (observed dif. = 2.79, critical dif. = 2.35).

Discussion

Factor Analysis

The factor analysis of the source credibility scales produced dimensions which were not entirely consistent with previous research (Chilberg, 1972; McCroskey, Scott and Young, 1971). The major inconsistency was the absence of a competence dimension. The scales utilized in this study were originally designed as measures of initial credibility for known sources who were not seen immediately prior to filling out the scales. This study used the scales to measure the terminal or derived credibility of an unknown source who was seen immediately prior to filling out the scales. Such use might be expected to result in factor structures which deviate from results reported in initial credibility research. It is of particular interest that the competence dimension failed to materialize in this television setting. Competence has traditionally been found to be a principle component of most credibility research.

The expertness of a television newscaster may well be a function of that performer's character, sociability, composure and dynamism when the source is not known to the receivers. Audio and visual cues in a television message provide information which facilitate making judgments about a newscaster's composure, dynamism, sociability and character. Evaluations of a newsman's competence may require more and different types of information.

The factor analysis of the scales for mediated interpersonal attraction produced factor loadings which were consistent with previous research (McCroskey and McCain, 1972; McCain and Repensky, 1972). The interpersonal attraction scales factored out for a mediated source as they have for an interpersonal source.

Effects of camera angle on source credibility. Hypothesis one, that higher camera angle conditions will produce more positive receiver judgments towards a source on the dimensions of source credibility than will low camera angles, received partial support. The mean of the high appearing angle condition was significantly higher than the low appearing angle condition on two dimensions--sociability and character. An interaction between angle and image size was observed on the character dimension. On the character dimension the effect of the higher angle treatment was supported in the medium shot condition only. The fact that foreground and background cues for the angles were visible for a greater length of time in the medium shot condition provides a plausible explanation for this occurrence.

These results, that higher angle perspectives enhance a mediated source's credibility more than do lower angle perspectives are consistent with those of Chilberg (1972).

Film theorists such as Eisenstein believe that the effects of visual communication are not a result of the shots themselves, but rather a gestalt of the juxtaposition of shots. Discussing the basics of cinema, Eisenstein (1965) wrote:

I want here to discuss two of its features . . . Primo: photo-fragments are recorded; secundo: these fragments are combined in various ways. Thus, the shot (or frame), and thus montage (p. 3).

The shot is by no means an element of montage.

The shot is a montage cell.

Just as cells, in their division form a phenomenon of another order, the organism or embryo, so, on the other side of the dialectical leap from the shot, there is montage (p. 53).

Eisenstein's emphases on the importance of shots in combination with one another is important. Individual shots combine to form a montage or message.

This combination of shots has meaning which is different than the meaning people assign to any individual shot. How long an angle shot is held in relation to other shots in the sequence may be the crucial issue. This notion appears to be supported by the present study. The high angle shot does appear to raise credibility. However, this does not mean that merely including a few high angle shots will increase a mediated source's credibility. In fact, the present study shows that the inclusion of a high angle shot as a referent negatively effects credibility. But, when the higher angle shot appears during a considerable portion of the sequence and is juxtaposed with a relatively lower referent shot, credibility is enhanced. It logically follows that the inclusion of a shot that is lower than others in a sequence will enhance credibility only if used as a referent. But when a low angle shot is used during a considerable portion of a sequence and is juxtaposed with a relatively higher angle shot, credibility will be reduced.

Therefore, the high and low angle shots have different effects depending on how they are employed in the context of a sequence of shots. The important point to be made is that a shot itself can be interpreted only in relation to the shots around it. The effect of a single angle shot depends on the angle shot with which it is juxtaposed and how long the viewer is exposed to each.

Effects of camera angle on mediated interpersonal attraction. Hypotheses two, that variance in camera angle will produce differential receiver evaluations of a source's mediated interpersonal attraction ratings, received partial support. In the Task dimension, the higher appearing treatment mean was significantly higher than the low appearing treatment mean score. The juxtaposition of the shots once again differentially effected receiver responses in a pattern similar to the responses to the newscasters credibility.

Effects of image size on source credibility. Hypothesis three, that variance in image size will produce differential receiver evaluations of a source's credibility received no support in this analysis.

Effects of image size on interpersonal attraction. Hypothesis four, that variance in image size will produce differential receiver evaluations of a source's mediated interpersonal attraction, received support in the post hoc analysis only. One newscaster's medium shot treatments were rated significantly higher than his close-up treatments on the social dimension. It appears that something about the person appearing in the frame determines the effect of image size. It may be his physical appearance, or the attitude of the viewer's toward his attractiveness on the social dimension. McCain et. al (1973) found that body type affected receiver's judgments towards speakers dependent on the camera shot which emphasized the positive characteristics of a particular body type.

The use of close-ups focusing attention on faces lowered the physical attraction scores of one of the newscasters as well, though not significantly. It appears that one newscaster's face was perceived as less attractive and the preponderant use of close-ups emphasized this by focusing the viewers attention on that face.

Implications

The experimentors would suggest from the findings of this study that televised newscasters would enhance their credibility and perceived task attraction if the preponderant shot is higher than it's corresponding reference shot. It is also suggested that low angle shots may increase credibility and attraction, but only when they are used sparingly. However, it should be stressed that the effect of a shot appears to depend on its relationship to the other shots utilized in a sequence. Therefore, it appears that how a shot is utilized, for example as a preponderant or referent shot, rather than the shot itself, will determine the effect of the shot on viewer behavior.

Since only one case of support for the effect of image size was found, further research in this area is needed. Results of this study seem to indicate that when doing so, future researchers should account for the context of the treatment, the object or person being shot, the image sizes being juxtaposed, and how long the viewer is exposed to each.

These researchers stress the fact that the ultimate goal of research of this nature is not separate theories for the effects of individual media variables or individual contexts. Nor is the goal a theory which attempts to explain media variables alone. Rather, the search is to develop a theory of media variables which can be subsumed under a theory which explains and predicts all communication behavior. Only then will we be able to isolate the differences of degree between mass communication and other communication contexts.

TABLE 1

ROTATED FACTOR LOADINGS FOR
MEDIATED SOURCE CREDIBILITY
SEMANTIC DIFFERENTIAL SCALES

Scales	Dynamism	Composure	Character	Sociability
Silent-Talkative	-.78*	-.03	0.22	-.16
Verbal-Quiet	.76*	.08	.12	.03'
Aggressive-Meek	.72*	.09	.03	.23
Timid-Bold	-.61*	.35	.02	-.23
Nervous-Poised	-.17	-.83*	-.09	-.22
Calm-Anxious	.10	.81*	.11	.08
Tense-Relaxed	-.07	-.74*	.08	-.36
Qualified-Unqualified	.38	.59	.36	.26
Composed-Excitable	-.05	.58	.39	-.13
Trained-Untained	.35	.57	.28	.11
Virtuous-Sinful	.01	.06	.68*	.10
Undependable-Responsible	-.36	-.21	-.64*	-.11
Selfish-Unselfish	-.02	-.06	-.62*	-.27
Intelligent-Unintelligent	.36	.31	.59	.06
Unfriendly-Friendly	-.18	-.16	-.19	-.79*
Cheerful-Gloomy	.37	.13	.04	.77*
Irritable-Good Natured	-.28	-.19	-.31	-.67*
Sympathetic-Unsympathetic	.08	.10	.11	.65*
Withdrawn-Outgoing	-.57	-.22	-.04	-.51
Valuable-Worthless	.49	.32	.32	.35
Good-Bad	.42	.34	.42	.41
Expert-Inexpert	.42	.49	.28	.17
Nice-Awful	.18	.22	.55	.48
Cruel-Kind	-.04	-.03	-.49	-.58
Cumulative Variance (After rotation)	.16	.32	.45	.61

*Factor loadings and corresponding scales which met criteria.

ROTATED FACTOR LOADINGS FOR MEDIATED
INTERPERSONAL ATTRACTION ITEMS

Item No.	Physical	Task	Social
1.	.72*	.03	.37
2.	.70*	-.10	.37
3.	-.67*	.10	-.35
4.	.67*	-.20	.28
5.	-.66*	.26	.04
6.	.66*	.03	.27
7.	-.65*	-.07	-.35
8.	-.51	.33	.02
9.	-.02	.76*	-.01
10.	-.06	.75*	-.16
11.	-.15	.70*	-.17
12.	.05	-.68*	.05
13.	-.13	.60*	-.17
14.	-.10	.13	-.74*
15.	.22	.02	.71*
16.	.33	-.16	.67*
17.	.37	-.20	.63*
18.	.24	-.14	.61*
19.	-.03	.21	-.60*
20.	.29	-.13	.60*
21.	-.31	-.02	-.46
22.	.11	-.54	.49
CUMULATIVE VARIANCE (After rotation)	.19	.33	.52

*Factor loadings and corresponding scales which met criteria.

Items

1. I think he is quite handsome.
2. He is not very good looking.
3. I don't like the way he looks.
4. He is somewhat ugly.
5. The clothes he wears are not becoming.
6. I find him attractive physically.
7. He is very sexy looking.
8. He wears neat clothes.
9. You could count on him getting a job done.
10. I have confidence in his ability to get the job done.
11. He would be a poor problem solver.
12. He is a typical goof-off when assigned a job to do.
13. If I wanted to get things done I could probably depend on him.
14. We could never establish a personal friendship with each other.
15. He just wouldn't fit into my circle of friends.
16. I think he could be a friend of mine.
17. He would be pleasant to be with.
18. He would be fun to work with.
19. It would be difficult to meet and talk with him.
20. I would like to have a friendly chat with him.
21. I feel I know him personally.
22. I couldn't get anything accomplished with him.

TABLE 3

MEAN SCORES FOR DIMENSIONS OF
MEDIATED SOURCE CREDIBILITY
ACROSS EYE LEVEL TREATMENTS*

Dimension	Low Appearing Treatment	High Appearing Treatment
Dynamism	19.29	19.97
Composure	14.25	14.89
Character	14.08 ^a	15.24 ^a
Sociability	17.90 ^b	18.95 ^b

*Means with same subscript on a dimension are significantly different from each other at the .05 level.

TABLE 4

MEAN SCORES FOR DIMENSIONS OF MEDIATED
INTERPERSONAL ATTRACTION ACROSS
EYE LEVEL TREATMENTS*

Dimension	Low Appearing Treatment	High Appearing Treatment
Physical	26.10	25.33
Task	25.04 ^a	27.21 ^a
Social	27.78	28.12

*Means with same subscript on a dimension are significantly different at the .05 level.

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APPENDIX A

SUMMARY OF THREE WAY ANALYSIS OF VARIANCE OF
EYE LEVEL ANGLE TREATMENTS FOR UNEQUAL AND
DISPROPORTIONAL CELL SIZES ON DIMENSIONS OF
MEDIATED SOURCE CREDIBILITY

Source of Variance	<u>SS</u>	<u>df</u>	<u>MS</u> ^c	<u>F</u> ^a
Dynamism				
Angle (A)	17.68	1	17.68	1.11
Image Size (B)	13.30	1	13.30	.84
Newscaster (C)	368.11	1	368.11	23.18 ^b
AXB	5.91	1	5.91	.37
AXC	44.25	1	44.25	
BXC	15.97	1	15.97	
AXBXC	10.41	1	10.41	
Error	2311.63	147	15.73 (15.88)	
Composure				
Angle (A)	15.08	1	15.08	.80
Image Size (B)	.00	1	.00	.00
Newscaster (C)	27.85	1	27.85	1.47
AXB	.05	1	.05	.00
AXC	13.25	1	13.25	
BXC	1.82	1	1.82	
AXBXC	.83	1	.83	
Error	2822.11	147	19.19 (18.92)	
Character				
Angle (A)	50.70	1	50.70	9.22 ^b
Image Size (B)	9.33	1	9.33	1.70
Newscaster (C)	2.08	1	2.08	.38
AXB	41.87	1	41.87	7.61 ^b
AXC	.04	1	.04	
BXC	1.11	1	1.11	
AXBXC	7.70	1	7.70	
Error	816.08	147	5.55 (5.50)	
Sociability				
Angle (A)	41.83	1	41.83	3.10
Image Size (B)	10.72	1	10.72	.80
Newscaster (C)	348.12	1	348.12	25.84 ^b
AXB	18.24	1	18.24	1.35
AXC	2.92	1	2.92	
BXC	17.70	1	17.70	
AXBXC	2.20	1	2.20	
Error	1998.15	147	13.59 (13.47)	

^aF ratios for main effects and AXB interactions are corrected for experimental error.

^bSignificant at the .05 level.

^cValues in parentheses are corrected error terms (see procedures section).

APPENDIX B

SUMMARY OF THREE WAY ANALYSIS OF VARIANCE OF
EYE LEVEL ANGLE TREATMENTS FOR UNEQUAL AND
DISPROPORTIONAL CELL SIZES ON DIMENSIONS
OF MEDIATED INTERPERSONAL ATTRACTION

Source of Variance	<u>SS</u>	<u>df</u>	<u>MS</u> ^c	<u>F</u> ^a
Physical Attraction				
Angles (A)	22.77	1	22.77	.35
Image Size (B)	5.53	1	5.53	.09
Newscaster (C)	219.73	1	219.73	3.39
AXB	.05	1	.05	.00
AXC	38.14	1	38.14	
BXC	5.32	1	5.32	
AXBXC	254.50	1	254.50	3.97 ^b
Error	9427.26	147	64.13 (64.83)	
Task Attraction				
Angle (A)	179.40	1	179.40	8.20 ^b
Image Size (B)	18.95	1	18.95	.87
Newscaster (C)	13.60	1	13.60	.62
AXB	21.30	1	21.30	.97
AXC	10.51	1	10.51	
BXC	2.87	1	2.87	
AXBXC	2.72	1	2.72	
Error	3265.10	147	21.21 (21.87)	
Social Attraction				
Angle (A)	4.51	1	4.51	.19
Image Size (B)	9.43	1	9.43	.19
Newscaster (C)	213.72	1	213.72	4.27 ^b
AXB	.64	1	.64	.01
AXC	6.25	1	6.25	
BXC	1.51	1	1.51	
AXBXC	16.43	1	16.43	
Error	7486.48	147	50.93 (50.07)	

^a F ratios for main effects and AXB interactions are corrected for experimental error.

^b Significant at the .05 level.

^c Values in parentheses are corrected error terms (see procedures section).