The television camera is selective in the information it conveys. Since the effect image size has on receiver behavior is important, television production texts perpetually include discussions of camera shots and refer to close-ups as providing the most information. Yet none of the surveyed research has systematically controlled and examined the effect of camera shots on other communication variables. This study was concerned with the effect of differing camera shots on interpersonal attraction. Two professional comedians, used as stimulus objects, performed two comedy routines, each approximately three minutes in length. The two routines were videotaped. Cameras were placed side by side taking long, medium, and close-up shots of the two comedians. A 30-item, 7-interval likert type measurement instrument was constructed for the properties of attraction. Factor analysis of the items resulted in a three-factor solution of attraction: task, physical, social. Resulting data gave strong evidence that interpersonal attraction for television performers is a multidimensional construct, with the dimensions operating independently. (Author/JM)
THE EFFECT OF CAMERA SHOT ON INTERPERSONAL ATTRACTION FOR COMEDY PERFORMERS

By

Thomas A. McCain and Gregory R. Repensky

Communication Research Center—Illinois State University

Presented at the 58th Annual Convention of the Speech Communication Association

Chicago, Illinois, 1972
The Effect of Camera Shot on Interpersonal Attraction for Comedy Performers

One of the most perplexing problems facing researchers and scholars of mass communication concerned with assessing social effects of the mass media is a fundamental theoretical issue involving the characteristics of the mediated communication transaction. That is, how is mass communication similar or different from interpersonal or group communication? If we are meaningfully to assess the social consequences of the mass media, we must be able to differentiate between mass communicated messages and other communication contexts.

Schramm suggests that the processes are similar and that differences between mass communication and other forms of communication are differences of degree rather than kind (Schramm, 1954). Westly and MacLean in proposing their model for mass communication research suggest that mass communication differs from interpersonal communication to the degree that the number of sense modalities is minimized and feedback is constrained (Westly and MacLean, 1957). Thayer noted that mass communication is not differentiated necessarily by the size of the audience, but by the non face-to-face nature of the encounter and by the condition that the receiver(s) has (have) no established interpersonal relationship(s) with the source (Thayer, 1968). The differences of degree remain as empirical questions which must be tested in order to evaluate the mass media in a social context.

What is disturbing to us as we survey the mass communication literature is that so little research has focused on known interpersonal communication variables as they operate in the mass communication context. The present study is an attempt to begin filling this research void by examining the effect one media variable (camera shot) has on a receiver variable (interpersonal attraction). Our basic assumption is that mass communication differs from interpersonal communication by degree rather than kind; that
receivers (television viewers) of mediated mass communication messages (televised comedy routine) evaluate and respond to sources in the communication process (television performers) utilizing interpersonal communication criteria (interpersonal attraction).

Attraction concerns "judgements about whether we 'like' another person, whether we desire to associate or spend time with him, whether we 'feel good' in his presence, etc." (McCroskey, Larsen, Knapp 1971, p.38). Interpersonal attraction can be best thought of as an hypothetical construct. Receivers, consciously or unconsciously ask such questions as: "Would I like to associate with him?", "Would I enjoy his presence?" Television provides exposure for thousands of people who are desirous of establishing an attractive interpersonal image. Press agents and publicity men, "image makers" and campaign staffs, advertisers and public relations experts are all concerned with making their product attractive to individuals. Politicians, performers, and comedians alike utilize the media in order to establish interpersonal attraction with the television audience. Politicians seek votes and support for programs; performers and comedians seek a following who will view programs, buy records, attend films or go to night clubs. The successful television performers and politicians are by definition those who are attractive to the television audience in one way or another.

The television camera is selective in the information it conveys. Directors make judgements about how a performer or event will be shot. The range of camera shots with which we are presently concerned are long shots, medium shots, and close-ups. Long shots are generally considered as orientative in nature or as cover shots. According to most writers the more important camera shots for television are the medium shots and close-ups. Zettle writes "The size of the television screen is small. To show things clearly, you must show them relatively large within the frame of the screen" (Zettle, 1961 p. 342). But to use close-ups may well distort the
action the source wishes to share, it may further, as we suggest, effect the interpersonal attraction of the performer. Fairlie (1967), in his critique of television news, noted that "the close-up, especially, can distort in the crudest way and make what is simply unprepossessing actually repellent. . . . We never do see anyone in real life as close in as the camera can go, except in one position and in one activity: when making love" (pp.133, 134). The obvious fact remains that camera shots are manipulated in every television presentation including news events, political advertising, and the presentation of violent action. The effect image size has on receiver behavior is an important area in which to focus our attention.

The television performers' desire for close-ups, we are told, are often the crux of conversation in the Green Rooms before television talk-variety shows. The guests and stars of these programs are very conscious of close-ups and are continually comparing and complaining about the number of close-ups they "get" from the director. The inference is, of course, that close-ups are most desirable for selling themselves to the television audience. Television production texts and critical evaluations of television perpetually include discussions of camera shots and refer to close-ups as providing the most information. Yet no previous research known to us has systematically controlled and examined the effect of camera shots on other communication variables. In order to test specific effects of differing camera shots we hypothesized the following: Varying camera shots will result in differences in interpersonal attraction ratings for comedy performers previously unknown to receivers.

**PROCEDURE**

In order properly to assess the relationship between camera shots and interpersonal attraction, the study required that our stimulus objects have three unique characteristics:

1. Stimulus objects had to be professional performers with television
experience and a thorough understanding of the complexities of television production.

2. More than one person was needed in order to assess differential effects of attraction and image size.

3. Stimulus objects had to differ in terms of physical characteristics.

The comedy team of Joey Edmonds and Thom Curly met the criteria. In the past two years they have appeared on late night and daytime talk-variety shows over two dozen times including multiple appearances on The Tonight Show with Johnny Carson, The David Frost Show, The Dick Cavett Show, The Merv Griffin Show and The Mike Douglas Show. Thom is well over six feet tall, with dark hair and swarthy complexion, while Joe is considerably shorter and of fair complexion. While on a college concert tour of the midwest Edmonds and Curly agreed to spend a day in the Communication Research Center at Illinois State University. The fact that they were both old friends of one of the authors may have had some influence on their decision to participate in the study.

Three standard camera shots of varying image size were chosen: a long shot which revealed the subjects from ankle to head; a medium shot which showed the subjects from waist to head; and a close-up shot which included the subjects' heads and shoulders only. The subjects performed two comedy-routines, each lasting approximately two minutes. Particular sketches were selected because they required a limited amount of subject movement therefore making camera movement unnecessary. The selected routines also demonstrated a range of Edmonds' and Curly's comic talents. The two routines were video-taped in the Communication Research Center at Illinois State University using one-half inch Sony video equipment. Three cameras equipped with zoom lens were placed side by side; one with a long shot of the performers, one with a medium shot, and the third with a close-up. Each
camera was connected to a separate video-tape recorder so that all three conditions were recorded on the same take. The cameras were placed approximately 20 feet from the performers so as to minimize any effect the slight camera angle difference between the shots might have on the composition.

DEVELOPMENT OF A MEASURING INSTRUMENT.

No previous research has investigated interpersonal attraction in the television setting, consequently no measuring instruments were available. Previous research has suggested that interpersonal attraction is a multi-dimensional construct (Kiesler and Goldberg, 1968). On the basis of previous research on interpersonal attraction, which has been summarized elsewhere (McCroskey, Larson, Knapp, 1971, Chapter 3), we constructed a 30-item, seven-interval, Likert-type measure.

Subjects in the study were students enrolled in four sections of a basic course in mass communication and five sections of a course in communication education in the elementary school. Since subjects were available only in intact groups, the classes were randomly assigned to experimental conditions. All subjects saw both comedians in either a long, medium or close-up camera shot condition. Only one comedian was evaluated in each section.

DATA ANALYSIS

Principle components factor analysis with varimax rotation was utilized for testing the measuring instrument. The criterion for termination of factor extraction was an eigenvalue of 1.00. For a factor to be meaningful it was required that at least two items be loaded on the factor. To be loaded on any one factor an item had to have a loading of .60 or higher with no loading on another factor above .30.

The dimensions of interpersonal attraction obtained from the factor analysis of the measuring instrument were analyzed separately in a 3X2 analysis of variance design. This included three levels of camera shot
(long, medium, close-up) as one independent variable and the two comedians (Edmonds, Curly) serving as the two levels of the other independent variable. The .05 criterion was set for significance for all statistical tests. When significant F-ratios were obtained, two-tailed t-tests were employed to facilitate interpretation of the results.

RESULTS

Factor analysis resulted in three factors which we labeled "physical attraction", "social attraction," and "task attraction". These factors accounted for 23, 17, and 17 per cent of the common variance respectively. Table 1 reports the items chosen for further analysis and their obtained factor loadings. For each factor the 5 items with the most satisfactory loadings were selected. Thus the three measures subsequently analyzed yielded a potential range of scores from 5 (low attraction) to 35 (high attraction).

PHYSICAL ATTRACTION

Analysis of variance resulted in two significant F-ratios, those for Comedian (F=57.36) and interaction of Comedian and Camera Shot (F=5.99). Subsequent t-tests indicated that Edmonds was perceived as significantly more physically attractive in the close-up condition than in the long or medium shot conditions while Curly was perceived as significantly less physically attractive in the close-up condition than in the other conditions. Curly was perceived as more physically attractive than Edmonds in both the long and medium shots but was not significantly more attractive in the close-up condition. (See table 2)

SOCIAL ATTRACTION

Analysis of the social attraction data resulted in no significant F-ratio.
TASK ATTRACTION

Analysis of the task attraction data resulted in a significant F-ratio for the interaction between comedian and camera shot (F=6.97). Subsequent t-tests indicated that Edmonds was perceived as significantly less task attractive in the close-up condition than in the other conditions while Curly was perceived as most task attractive in the close-up condition. Only in the close-up condition did the two comedians differ in task attraction. (See Table 2).

DISCUSSION

For the comedy team of Edmonds and Curly these results have some meaningful implications. Since they are a team who work well together and depend on each other for success, it would appear if they wish audiences to perceive them similarly in terms of physical attractiveness that subsequent television appearances should emphasize close-ups. The differences in physical attraction according to shot could also have implications for particular pieces of comic material. When it is important for a particular routine that Curly be suave or handsome in comparison to his partner, they could use medium and long shots advantageously to emphasize this point. The most important point is that the use of close-ups do different things for the two comedians. Knowing that close-ups increase Joe's physical attractiveness and decrease the perceived physical attractiveness of Thom, we suggest that they should consider their camera-shot selection carefully in subsequent television appearances. It should be remembered that Curly, the taller of the two men, was perceived as more physically attractive in the two shots that emphasize the height discrepancy between the two (long and medium shots). The task attractiveness of the two comedians had opposite effects from physical attractiveness in terms of the size of the shot. While there were no differences between the two in the medium and long shot
conditions, the close-up showed Curly to be significantly more task attractive, and Edmonds significantly less. This may well be reflective of the straight-man—funny man roles which the two comedians play. When a close-up shows Joe, a straight man and the foil of all the action, in comparison to Curly's outlandish schemes and actions, he is perceived as less of a worker. Thom, who "carries" the humor of the sketches through use of funny lines and suggestions, is perceived as the better worker. Since the task in a comedy routine is to get the audience to laugh and Curly is apparently most responsible for the laughter in the context of the routines, he is viewed as the more responsive worker. That this was not true for all shot conditions, only the close-up, is important. For it underscores the importance of the close-up in revealing salient cues undetected by longer shots.

It is certainly true that there are more variables affecting degree of interpersonal attraction than just camera shots. As mentioned earlier, the height of the performers may effect initial attraction. Similarly, physical appearance including clothing and hair styling may effect initial attraction. The type of communication may well effect the interpersonal attraction of television performers. For dramatic actors or talk-show hosts the expectations of receivers could very well be different than those for political figures or teachers. Further the desired dimensions of interpersonal attraction for television sources will vary according to the type of communicator. Politicians and teachers would prefer to have higher task and social attraction than may other users of the media. On the other hand, movie actors and actresses seem often to equate physical attractiveness with success.

Of particular importance for further research is that our data gives strong evidence that interpersonal attraction for television performers is a multi-dimensional construct, with the dimensions operating independently. The fact that a person is handsome and physically attractive does not assure
similar attractiveness for social or task orientations. We would suggest that further research on interpersonal attraction in the mass communication setting be undertaken using other types of performers, especially politicians and teachers.

Of similar importance are findings about the nature of television close-ups. In spite of what the textbooks say, it may be too early to make generalizations about the effect close-ups have on receiver behavior. We are unable to determine at this point if close-ups are really providing more relevant information allowing receivers to make better judgements, or if close-ups are distorting relevant information important for receiver judgements. The close-ups of Edmonds increased his physical attractiveness but decreased his task attraction. The opposite was true for Curly. Further research manipulating camera shots is needed in order to generalize to other kinds of television performers. The effect of camera shot on other source variables, particularly source credibility, is needed in order to put these results in proper perspective. The length of time a particular camera shot is held likewise needs further examination. It may very well be that the static nature of our shots for the duration of the comedy routines influenced the attractiveness ratings of the performers. Subsequent investigations should manipulate this variable.

Our next step is to assess the effect camera shot has on interpersonal attraction for performers already known by receivers and to measure the differences between non-mediated performances and mediated performances. We hope that this will lead toward an understanding of the degrees that distinguish mass communication from other communication contexts.
## Table 1

Factor Loadings for Items Used in Interpersonal Attraction Measure

<table>
<thead>
<tr>
<th>Item</th>
<th>Physical</th>
<th>Task</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.83</td>
<td>-.01</td>
<td>.20</td>
</tr>
<tr>
<td>2</td>
<td>.84</td>
<td>.06</td>
<td>.15</td>
</tr>
<tr>
<td>3</td>
<td>.81</td>
<td>.14</td>
<td>.21</td>
</tr>
<tr>
<td>4</td>
<td>-.75</td>
<td>-.03</td>
<td>-.08</td>
</tr>
<tr>
<td>5</td>
<td>-.76</td>
<td>-.08</td>
<td>-.08</td>
</tr>
<tr>
<td>6</td>
<td>.03</td>
<td>-.65</td>
<td>.06</td>
</tr>
<tr>
<td>7</td>
<td>-.12</td>
<td>-.75</td>
<td>-.12</td>
</tr>
<tr>
<td>8</td>
<td>.09</td>
<td>.73</td>
<td>.03</td>
</tr>
<tr>
<td>9</td>
<td>.12</td>
<td>.74</td>
<td>.18</td>
</tr>
<tr>
<td>10</td>
<td>-.02</td>
<td>.67</td>
<td>.19</td>
</tr>
<tr>
<td>11</td>
<td>.18</td>
<td>.18</td>
<td>.63</td>
</tr>
<tr>
<td>12</td>
<td>.20</td>
<td>.06</td>
<td>.68</td>
</tr>
<tr>
<td>13</td>
<td>-.05</td>
<td>-.06</td>
<td>.68</td>
</tr>
<tr>
<td>14</td>
<td>.20</td>
<td>.13</td>
<td>.74</td>
</tr>
<tr>
<td>15</td>
<td>.19</td>
<td>.16</td>
<td>.74</td>
</tr>
</tbody>
</table>

Eigenvalue: 3.40 2.62 2.61

Items Employed

1. I find him (her) very attractive physically.
2. I think he (she) is quite handsome (pretty).
3. He (she) is very sexy looking.
4. He (she) is somewhat ugly.
5. He (she) is not very good looking.
6. He (she) is a typical goof-off when assigned a job to do.
7. He (she) would be a poor problem solver.
8. You could count on him (her) getting a job done.
9. I have confidence in his (her) ability to get the job done.
10. If I wanted to get things done I could probably depend on him (her).
11. He (she) would be fun to work with.
12. I would like to have a friendly chat with him (her).
13. I feel I know him (her) personally.
14. I think he (she) could be a friend of mine.
15. He (she) would be pleasant to be with.
<table>
<thead>
<tr>
<th>Performer</th>
<th>Dimension</th>
<th>Camera Shot</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Long</td>
</tr>
<tr>
<td>Edmonds</td>
<td>Physical</td>
<td>20.51ae</td>
</tr>
<tr>
<td></td>
<td>Social</td>
<td>24.69</td>
</tr>
<tr>
<td></td>
<td>Task</td>
<td>23.20a</td>
</tr>
<tr>
<td>Curly</td>
<td>Physical</td>
<td>28.79ce</td>
</tr>
<tr>
<td></td>
<td>Social</td>
<td>23.79</td>
</tr>
<tr>
<td></td>
<td>Task</td>
<td>23.42</td>
</tr>
</tbody>
</table>

*Means on same attraction dimension with same subscript are significantly different, P < .05. Potential score range on each dimension is from 5 (low attraction) to 35 (high attraction) with a score of 20 representing the hypothetical neutral position.*
REFERENCES


