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FUNCTIONAL SIMILARITY BETWEEN MEDIA; A CLUSTER ANALYSIS BASED ON MEDIA GRATIFICATIONS.

PUB DATE
76

NOTE

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.

DESCRIPTORS Books; Films; Higher Education; Mass Media; *Media Research; *Media Selection; Music; Newspapers; Periodicals; *Psychological Needs; Radio; *Student Attitudes; Television

ABSTRACT Questionnaire responses from 259 college students were employed to determine how eight media were used in the satisfaction of ten needs. It was found that television was the most generally satisfactory medium, averaged over the ten needs, and that film was the most need specific. Television and radio paralleled each other in their ability to satisfy the ten needs, as did newspapers and magazines. Three mass media--books, films, and recorded music--showed parallel patterns of need satisfaction with friendship. Two groups of needs were discovered from a cluster analysis of the ten need statements. Cluster one was composed of needs related to the individual's desire to remain in contact with society. Cluster two was composed of needs that were more individual in nature. Finally, comparisons with the results of the Israeli study by Katz, Gurevitch, and Haas (1973) indicated that similarity between the two studies was high. (Author/AA)
Functional Similarity Between Media:
A Cluster Analysis Based on Media Gratifications

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Paper presented to the Mass Communication Interest Group,
Western Speech Communication Association,
San Francisco, California,
November, 1976.
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Media gratification research shows an increasingly large following among communication researchers. Functionalist in nature, gratifications research seeks to determine the consequences of media use as sought by media users. As such, it differs from a large body of previous research that was primarily concerned with what the media did to its audience. Audience preferences were analyzed in terms of demographics, not audience needs. In gratifications research audience needs are important. Audience members are seen as being capable of choice and as having definite goals and needs that are purposely sought through various mass media activities.

Focus of Gratification Research

Gratification research is closely related to the larger body of research called functionalism. Gratifications are seen as expected consequences of certain media behaviors. This approach to gratification is close to Wright's (1959) definition of function as the consequence of regularized social activity. Gratifications researchers have tended to place less emphasis on the "social" nature of Wright's definition, and have generally relied on the individual as the unit of analysis. In this sense they are closer to Bauer's (1964) transactional model of mass media usage. In Bauer's model the individual is seen as entering a relationship with the mass media with certain expectations of benefits to be derived from the transaction. The mass media institutions also expect benefit from the relationship and each party will attend to the interests of the other only so long as each sees the transaction as beneficial to both.
In employing individual needs served by media to individual relations, researchers have tended to look at separate, although related, aspects of the mass media. Herzog (1941, 1944) asked audience members about the types of gratifications they received from listening to radio quiz shows and radio drama. Her research is typical of gratifications studies that ask audience members about specific types of media content. Katzman (1972) and Kinzer (1973) continue this trend, although their gratifications are inferred directly from content analyses of soap operas rather than from direct interviews with audience members. Other recent research that looks at the gratifications served by particular types of media content includes that of McQuail, Blumler, and Brown (1972). Using six radio and television programs, the authors found that four media-person interaction typologies result from a cluster analysis of the gratifications given by users of the six programs. The four categories include diversification, personal relationships, personal identity, and surveillance. The categories of gratifications derived by these authors closely resemble the gratification categories of filling time, relaxation or diversion, social, and personal gratifications suggested by Weiss (1969) although Weiss' categories were the result of reviewing literature in the area.

The second and most common approach is directed at the media rather than at media content. Berelson (1949) began this type of investigation when he attempted to find out the things people missed most when a newspaper strike deprived them of the daily paper. Among the newspaper gratifications that people missed was the feeling of security that goes with newspaper reading and the ritualistic aspect of newspaper consumption. Wolf and Fisk (1949) attempted to determine why children read comic books. Their findings indicate that comics serve to extend the child's environment and that comics assist the child in seeking tools for coping with the real world. Greenberg (1974) asked British
children for the reasons they watched television. Eight clusters of reasons were developed from their answers including passing time, diversion, learning, arousal, relaxation, companionship, and habit.

The previously cited studies look at the gratifications served by a single medium. Studies comparing gratifications across several media have been more difficult to locate. One such comparative study by Brown, Cramond, and Wilde (1974) found that television, when made available in a previously television free community, displaced the use of books, radio, and comics in roughly equal degrees. Whether or not the sudden removal of television from a community would lead to the return of the other media is not within the study. However, the idea of a functional equivalency between particular media is implicit in this type of research.

The most ambitious and thorough exploration of media gratifications over a wide variety of media was conducted by Katz, Gurevitch, and Haas (1973). Based on the responses of 1500 Israeli adults to thirty-five need statements, the authors found that both needs and media grouped in meaningful ways. Fourteen clusters of needs were suggested. These ranged from needs relating to the strengthening of knowledge of self (to know myself, to develop good taste, to want to study), weakening contact with self (overcome loneliness, kill time, escape from the reality of everyday life), strengthening knowledge of society (to keep up with the way government performs its functions, to get to know the qualities of our leaders, to obtain useful information about daily life), to strengthening experience with others (to participate in the experiences of other people).

After developing the fourteen need clusters, the authors apply smallest space analysis (Guttmann, 1968) to eight of the need items to determine how the media group together. Based on this technique and correlational analysis
the authors conclude that political and personal uses of television and radio are closely related, that newspapers are used for similar political needs as radio and television but that newspapers are used differently for personal reasons than the electronic media, and that books and film group together for political needs but not for personal needs. Television appears to be the most diffuse medium, serving the widest variety of needs for its users. Finally, radio is determined to be the best substitute for television, books the poorest.

Our study adopts the basic methodology and approach suggested in the Katz, Gurevitch, and Haas (1973) article. In one sense it may be considered a replication of the earlier study. The goal of the present research is to determine if a sample of subjects from a different population, interviewed at a different time, with an analysis based on a different method of clustering, will yield similar findings. Are the gratifications found as relevant in the earlier study characteristics of the media (similarity would be expected) or are they characteristics of an Israeli audience (dissimilarity would be the expectation).

Methodology

Initially, students in an introductory telecommunication research class were used to reduce the 35 need statements of the Israeli study to a more manageable 20 statements. These statements were then pretested on a non-probability sample of 55 college students. Based on the responses to the pretest, 10 of the need statements were selected for inclusion in the final questionnaire.

Katz, Gurevitch, and Haas (1973) included books, television, radio, newspapers, and cinema in their Israel study. This research extended the list of media to include magazines and recorded music. In addition, one interpersonal medium, friends, was explicitly included in this design. A
five point scale, ranging from strongly agree to strongly disagree, was provided for each need statement as it applied to each of the eight media. The order of the need statements was randomly selected for each medium and a different randomly selected order for the mediums occurred with each 25 questionnaires. In all, each subject would fill out 80 need statements, ten statements for each of the eight media. The format of the gratification items can be seen in Figure 1.

The questionnaires were self-administered and were completed by 259 students enrolled in telecommunication and communication courses at a large Western and a large Midwestern university. The questionnaires were administered during November of 1975 and to different classes during January of 1976.

Of the 259 subjects completing the questionnaire, 27.1% were in their Freshman year of college, 29.1% were in their Sophomore year, 27.1% were Juniors, and 16.7% were Seniors. Males made up 61.2% of the subjects and females accounted for 38.8%

To determine both the functional similarity of the media and the patterns existing within the gratification items, a clustering method developed by Holzinger and Harman (1941) was used. Basically, the method relies on maximizing a B coefficient (coefficient of belonging). The process is one of comparing an item's average correlation with items in a cluster to its average correlation with items outside of the cluster. If the within cluster average is at least 1.3 times the without cluster average, the item is considered as part of the cluster. The process begins with selecting the highest inter-correlation between two items and adding additional variables on the basis...
of their correlations. For a description of this and other clustering methods see the review done by Bailey (1974).

The data collected are analyzed with the following objectives in mind.

1. Which of the eight media used in this study best serve the ten selected needs?

2. Which media seem more general in their use for satisfying the selected needs and which media seem most specialized?

3. Which media show similar patterns (clusters) of need satisfaction? Which media seem to serve parallel functions?

4. Which needs seem to show similar patterns of satisfaction across the various media? Which needs cluster together?

5. Do the results of this study support the findings of the Katz, Gurevitch, and Haas (1973) research?

Results

Table 1 gives the mean scores and the rank order of the mean scores for each of the eight media (includes friends) over the ten gratification items. The relative usefulness of a particular medium in satisfying any of the ten needs is indicated by a high mean score. The highest mean score for a particular need statement receives the rank of 1.

Table 1 about here

The first four need statements seem best served by newspapers, then magazines. Over each of these first four needs the newspaper is ranked first (has the highest mean score). Magazines receive the second highest rating except for keeping up with the way government is doing its job. Here it ranks third, behind television. These four needs are served least well by films (rated seventh across all four needs) and by recorded music (rated eighth in
each case). Television, radio, and friends fall somewhere between the extremes. Books seem to serve these four needs slightly less well than television, radio, or friends but considerably better than film or recorded music.

Needs five through eight seem to be most effectively served by friends or records. Magazines and newspapers are least important as sources of need satisfaction for these four items. Books, film, radio, and television occupy space between these two extremes.

Virtually all of the media, with the exception of newspapers, are seen as being entertaining. Film and recorded music rank highest for this function. However, they are closely followed by radio, television, friends, books, and magazines. Each of these media has a mean score of 4.08 or above. Newspapers fall below this level of agreement, with a mean score of only 3.51. The entertainment value of newspapers is comparatively limited.

The need to kill time is best handled by television, recorded music, magazines, radio, and friends. The least effective media for killing time are newspapers, books, and films.

Perhaps the most interesting information to be derived from Table 2 comes from comparing the average rankings of each of the media over the ten need statements. The media rank from most general (lowest average ranking) to least general (highest average ranking) in the following order: First, television with an average rank of 3.6; second, friends with a 3.6 average ranking; third, magazines with a 4.2 average; fourth, radio averaging 4.4; fifth, recorded music with a 4.5 average ranking; sixth, newspapers averaging 4.6 in the rankings; seventh, books, with average rankings of 5.3; and eighth, films with a 5.8 average rank. Television is ranked first over friends because of its lower variation in ranks across the need statements.

Television, the medium that ranked first only for killing time, stands out as the medium most useful in satisfying all ten of the listed needs. Friends
function nearly as well as television for need satisfaction but are limited as sources of satisfaction in certain areas (knowing the quality of our leaders, keeping up with the way government is doing its job). Film and books are the least satisfactory media over all ten need statements. This seems somewhat surprising when one considers that the subjects for this study were college students (supposedly interested in books) and might be expected to maintain a lively interest in film.

Table 2 presents the rank order intercorrelations between each of the eight media over the ten need items. Kendall's tau rank order statistic was used in calculating the correlations. A high correlation means that two media show a similar ranking of mean scores over the ten need statements. A negative correlation indicates that needs highly ranked for one medium are ranked very low for the other medium.

Table 2 about here

The data presented in Table 2 show the strongest media similarity existing between television and radio. The .82 rank order correlation indicates that mean scores over the ten gratification items for radio showed a very similar ranking as the mean scores for television. In terms of satisfying the ten listed needs, radio and television would appear to be nearly interchangeable.

The next highest relationship, a correlation of .78, occurs between two of the print media. Magazines and newspapers show similar rankings over the need statements. Rather surprisingly, books (the other print medium) show only a weak relationship with magazines ($r = .25$) and with newspapers ($r = .02$).

Four media--film, recorded music, friends, and books--show similar patterns of rankings over the need statements. Film is most strongly paralleled by recorded music ($r = .73$) followed by friends ($r = .69$), and books ($r = .60$).
After film, recorded music is most strongly related to friends ($r = .60$) and to books ($r = .42$). The relationship between friends and books is also reasonably strong ($r = .47$). The interesting aspect of these three media forms is that three of them—books, recorded music, and film—are generally considered as being "mass" media. Friends, an interpersonal medium, shows patterns of need satisfaction that seem to parallel the patterns exhibited by these three mass media.

To determine the actual clustering relationship existing between the eight media a cluster analysis was performed on the table of intercorrelations. Three clusters resulted from the analysis. Cluster I was composed of two media, radio and television. Both media are easily available, inexpensive to operate, and require little direct effort on the part of audience members. Cluster II contained magazines and newspapers, both print mediums that are heavily used by the subjects in this study (subjects averaged 4.9 days per week reading the newspaper and listed 2.7 magazines as regularly read). Not quite as available as television and radio, magazines and newspapers are readily consumed by members of this age group. Both media are likely more demanding on their users than either television or radio.

Cluster III contained the remaining four media. Grouping with the one interpersonal medium, friends, were films, books, and recorded music. In the case of each of these mediums high audience involvement (for books, friends), relatively high cost (films, books, recorded music) or a combination of both (film and books) seems to be the most commonly shared characteristics.

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Figure 2 about here
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Figure 2 presents a graphic demonstration of the intermedia relationships. Solid lines show the two media in Cluster I, large dashes are used for Cluster II, and short dashes are used for Cluster III. The vertical axis measures the rank order correlations existing between the media. The horizontal axis places each medium. Numbers within the graph identify the graph of a particular medium. For instance, a dot labeled "2" is seen next to the .82 position for television. This is the correlation between (1) television and (2) radio. The graph best illustrates the parallel patterns for media within a cluster and the interrelationships between the various clusters. From the graph it appears that television and radio hold a position somewhat between the media of Cluster II (magazines and newspapers) and Cluster III (film, recorded music, friends, and books). Very differing patterns of need satisfaction exist between Clusters II and III.

Table 3 presents the rank order correlations between each of the ten need statements over the eight media. A high correlation between two need statements means that the rank ordering of one need statement's mean scores across each of the eight media closely resembles the media ranking for another need statement. A negative correlation means that media ranking highly for one need rank in an opposite pattern for the other need.

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Table 3 about here

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Inspection of Table 3 indicates that four of the need statements relating to the individual's needs for contact with other members of society show very high correlations. Getting to know the quality of our leaders, keeping up with the way government does its job, obtaining information about daily life, and feeling involved in important events, are connected by correlations ranging
from .64 to .93. Needs that are more personal in nature tend to show negative correlations with these needs. Killing time is an exception, showing slightly positive correlations ranging from .00 to .21.

The interrelations among the need statements become more clearly defined after cluster analysis. Two clusters resulted from the analysis.

Cluster I contains needs relating to the individual's desire to maintain contact with society. Knowing the quality of our leaders, keeping up with the way government does its job, obtaining information about daily life, and feeling involved in important events are needs grouping in Cluster I. For each of these needs the pattern of the media's usefulness in satisfying the needs is parallel. There is some consistency in the way subjects use media to maintain a relationship to society.

Cluster II is characterized by needs that are individually oriented. The needs to overcome loneliness (parasocial interaction in the case of the mass media), to release tension, to be entertained, and to get away from the usual cares and problems of everyday life (escape?) group together in Cluster II. The use of the media to satisfy these four needs is closely ranked across the four need statements.

Two of the ten need statements, the need to learn about myself and the need to kill time, failed to meet the requirements for inclusion into either Cluster I or Cluster II. The patterns of media satisfaction for each of these needs differs from the patterns shown by the other eight need statements.

Figure 3 shows the correlation profile for the eight need statements included in Clusters I and II. Needs belonging to Cluster I are indicated by the solid line graph. Needs grouping in the second cluster are graphed by dashed lines. A visual inspection of Figure 2 shows the close relationship existing between needs in the same cluster and the nearly opposite relationship to needs found in the other cluster. Patterns of media use to satisfy needs...
to maintain contact with society are negatively related to the pattern of use for satisfying needs that are individually oriented.

Comparison with Katz, Gurevitch, and Haas (1973)

In many ways the findings of the two studies are remarkably similar. In Israel television ranked as the most useful medium for only one of the need statements, the need to kill time. The same finding held true for our sample of university students. Television was the least specialized medium for the Israeli sample. It was the most general medium for the university subjects. Television was functionally most similar to radio in the Israel study. It clustered with radio in this study.

The need statements from the university study clustered quite closely to the groupings developed by Katz, Gurevitch, and Haas. Our Cluster I is the same as the Katz et. al. needs for strengthening knowledge of society with the exception that our clustering method included the need to feel involved in important events. This appears in a different group in the Katz et. al. article.

Cluster II, the personally oriented needs cluster, is a combination of two of the groupings from the Israel study. The needs to overcome loneliness and to escape from the reality of everyday life are grouped by Katz et. al. as needs to weaken contact with the self. The needs to release tension and to be entertained appear as needs to strengthen gratification, experience with self. The need to learn about myself grouped separately in the Katz et. al. research. It failed to cluster in the university study.

The need to release tension grouped with the needs associated with weakening contact with the self in the Israel study. It did not cluster with that group of need statements in the university sample. Generally, the overall similarity between the two studies is high. This is extremely interesting in relation to parallel functions for television since television was fairly new at the time of the Israel study and its distribution limited.
Conclusion

The purpose of this research was to determine how eight media were used in the satisfaction of ten gratification items. It was found that television was the most generally satisfactory medium over the ten needs and that film was the most need specific. Television and radio paralleled each other in their ability to satisfy the ten needs. So did the two most available print media, newspapers and magazines. Three mass media--books, films, and recorded music--showed parallel patterns of need satisfaction with the one interpersonal medium, friends. Two groups of needs were discovered from a cluster analysis of the ten need statements over the eight media. Cluster I contained needs related to the individual's desire to maintain contact with society. Cluster II contained needs that were more individual in nature. Finally, comparisons were made between the results of this study and the results of the Israeli study done by Katz, Gurevitch, and Haas (1973). The similarity between the two studies was surprisingly high.

What can be said about media satisfaction of needs? First, media do seem to function differentially in need satisfaction and there does seem to be some cross-cultural consistency between media utilization by an Israeli sample and by a sample of American university students. The patterns of media utilization also seem relatively consistent across the two cultures. The media appear to cluster together on the basis of involvement, cost, and availability. Low cost media that are uninvolving and readily available (radio and television) have patterns of use that fall between the patterns of easily available print (newspapers and television) and more involving and expensive forms of media (books, recorded music, films, friends). At least over the ten needs discussed in this paper, television is not as likely a substitute for friends as are books or recorded music. However, the reliance on recorded music may well be limited to this age group.
Future efforts in this area might do well to develop determinants of the needs that are satisfied by the media. The idea that needs should be placed in some consistent theory of needs has already been suggested by others. It would seem that such an approach to theory is warranted here. Within the individual's own catalogue of needs, how important is it to kill time or to be entertained?

Knowing that particular media are useful in satisfying particular needs may be a function of their typical content or a function of other constraints operating on the media. This research does not answer these questions although it suggests that availability, cost, and involvement may well be the underlying dimensions of media differentiation. Finally, researchers in this area must continue to use alternative methodologies to arrive at answers that support (or fail to support) the research of others in the field.
Figure 1

Gratification Items and Questionnaire Format

NEWSPAPERS

Listed below are ten reasons that some people have given for reading a NEWSPAPER. We would like to know how well these statements match the reasons you have for reading a newspaper. For each of the statements please check whether you strongly agree, agree, are neutral, disagree, or strongly disagree with the statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I read newspapers to keep up with the way government is doing its job.</td>
<td></td>
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<td></td>
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<tr>
<td>2. I read newspapers to obtain information about daily life.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3. I read newspapers to get away from the usual cares and problems of everyday life.</td>
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<tr>
<td>4. I read newspapers to be entertained.</td>
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<tr>
<td>5. I read newspapers to overcome loneliness.</td>
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<tr>
<td>6. I read newspapers to release tension.</td>
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<tr>
<td>7. I read newspapers to get the feeling that I'm involved in important events.</td>
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<tr>
<td>8. I read newspapers to kill time.</td>
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<tr>
<td>9. I read newspapers to get to know the quality of our leaders.</td>
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<td></td>
</tr>
<tr>
<td>10. I read newspapers to help learn about myself.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 2
Correlation Profile for Three Media Clusters

Cluster I
Cluster II
Cluster III

MEDIA ABBREVIATIONS: TV = Television; RAD = Radio; MAG = Magazines; NP = Newspapers; FILM = Cinema; RM = Recorded Music; BOOK = Books.
Figure 3
Correlation Profile for Two Need Statement Clusters

Cluster I
Cluster II

NEED STATEMENTS: QL = To get to know the quality of our leaders; GJ = To keep up with the way government is doing its job; IDL = To obtain information about daily life; IE = To feel I'm involved in important events; OL = To overcome loneliness; TEN = To release tension; C&P = To get away from usual cares and problems; ENT = To be entertained.
<table>
<thead>
<tr>
<th>Need Statement</th>
<th>Books</th>
<th>Friends</th>
<th>Magazines</th>
<th>Newspapers</th>
<th>Films</th>
<th>Radio</th>
<th>Recorded Music</th>
<th>Television</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To get to know the quality of our leaders.</td>
<td>2.87 (5)</td>
<td>2.27 (6)</td>
<td>3.54 (2)</td>
<td>3.86 (1)</td>
<td>1.97 (7)</td>
<td>2.95 (4)</td>
<td>1.73 (8)</td>
<td>3.26 (3)</td>
</tr>
<tr>
<td>2. To keep up with the way government is doing its job.</td>
<td>2.81 (5)</td>
<td>2.35 (6)</td>
<td>3.57 (5)</td>
<td>4.08 (1)</td>
<td>1.94 (7)</td>
<td>2.79 (4)</td>
<td>3.27 (8)</td>
<td>3.57 (2)</td>
</tr>
<tr>
<td>3. To obtain information about daily life.</td>
<td>2.68 (5)</td>
<td>2.97 (6)</td>
<td>3.57 (5)</td>
<td>3.94 (2)</td>
<td>2.62 (7)</td>
<td>3.12 (4)</td>
<td>3.09 (8)</td>
<td>3.57 (3)</td>
</tr>
<tr>
<td>4. To feel I'm involved in important events.</td>
<td>2.79 (5)</td>
<td>3.97 (6)</td>
<td>3.65 (5)</td>
<td>2.75 (2)</td>
<td>3.20 (7)</td>
<td>2.75 (4)</td>
<td>3.20 (8)</td>
<td>3.57 (4)</td>
</tr>
<tr>
<td>5. To overcome loneliness.</td>
<td>3.61 (5)</td>
<td>3.80 (6)</td>
<td>3.65 (5)</td>
<td>3.16 (2)</td>
<td>2.69 (7)</td>
<td>3.80 (4)</td>
<td>3.16 (8)</td>
<td>3.57 (5)</td>
</tr>
<tr>
<td>6. To learn about myself.</td>
<td>3.14 (5)</td>
<td>3.68 (6)</td>
<td>3.77 (5)</td>
<td>2.87 (2)</td>
<td>2.36 (7)</td>
<td>3.87 (4)</td>
<td>3.41 (8)</td>
<td>3.57 (6)</td>
</tr>
<tr>
<td>7. To release tension.</td>
<td>3.14 (5)</td>
<td>3.68 (6)</td>
<td>3.77 (5)</td>
<td>2.87 (2)</td>
<td>2.36 (7)</td>
<td>3.87 (4)</td>
<td>3.41 (8)</td>
<td>3.57 (6)</td>
</tr>
<tr>
<td>8. To get away from usual cares and problems.</td>
<td>4.14 (5)</td>
<td>4.22 (6)</td>
<td>4.14 (5)</td>
<td>4.08 (2)</td>
<td>4.65 (7)</td>
<td>4.08 (4)</td>
<td>4.65 (8)</td>
<td>4.55 (3)</td>
</tr>
<tr>
<td>9. To be entertained.</td>
<td>3.31 (5)</td>
<td>3.71 (6)</td>
<td>3.77 (5)</td>
<td>2.88 (2)</td>
<td>4.00 (7)</td>
<td>3.87 (4)</td>
<td>3.03 (8)</td>
<td>4.55 (4)</td>
</tr>
<tr>
<td>10. To kill time.</td>
<td>2.93 (5)</td>
<td>3.94 (6)</td>
<td>3.77 (5)</td>
<td>2.95 (2)</td>
<td>3.48 (7)</td>
<td>3.87 (4)</td>
<td>3.03 (8)</td>
<td>4.55 (5)</td>
</tr>
</tbody>
</table>
### Table 2

**Rank Order Intercorrelations Between the Eight Media**

<table>
<thead>
<tr>
<th></th>
<th>Books</th>
<th>Friends</th>
<th>Magazines</th>
<th>Movies</th>
<th>Newspapers</th>
<th>Radio</th>
<th>Recorded Music</th>
<th>Television</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>---</td>
<td>.47</td>
<td>.25</td>
<td>.60</td>
<td>.02</td>
<td>.38</td>
<td>.42</td>
<td>.29</td>
</tr>
<tr>
<td>Friends</td>
<td>---</td>
<td>-.20</td>
<td>.69</td>
<td>-.33</td>
<td>.20</td>
<td>.60</td>
<td>.02</td>
<td>.38</td>
</tr>
<tr>
<td>Magazines</td>
<td>---</td>
<td>-.16</td>
<td>.78</td>
<td>.33</td>
<td>-.16</td>
<td>.38</td>
<td>.16</td>
<td>.29</td>
</tr>
<tr>
<td>Movies</td>
<td>---</td>
<td>-.38</td>
<td>.25</td>
<td>.73</td>
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**NOTE:** The correlations used in this table are Kendall's tau rank order statistics. They are compiled based on the rankings of the mean scores for each need statement applied to each medium. Correlations of .38 and above are significant at the .10 probability level, correlations of .47 and above are significant at the .05 level, and correlations of .60 and above are significant at the .01 level.
Table 3
Rank Order Intercorrelations Between Ten Need Statements

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<th>IDL</th>
<th>IE</th>
<th>OL</th>
<th>LM</th>
<th>TEN</th>
<th>C&amp;P</th>
<th>ENT</th>
<th>KT</th>
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</tbody>
</table>

NOTE: The correlations used in this table are Kendall's tau rank order statistics. They are compiled based on the rankings of the mean scores for each medium as applied to each need statement. Correlations of .50 and above are significant at the .10 probability level, correlations of .57 and above are significant at the .05 probability level, and correlations of .71 or higher are significant at the .01 level.

NEED STATEMENTS: QL = To get to know the quality of our leaders; GJ = To keep up with the way government is doing its job; IDL = To obtain information about daily life; IE = To feel I'm involved in important events; OL = To overcome loneliness; LM = To learn about myself; TEN = To release tension; C&P = To get away from usual cares and problems; ENT = To be entertained; KT = To kill time.
References


Guttman, L. (1968) "A general nonmetric technique for finding the smallest coordinate space for a configuration of points." Psychometrika 33: 469-506.


