DOCUMENT RESUME

ED 238 220	EC 161 136
AUTHOR TITLE	Austin, Bruce A.; Myers, John W, Viewing and Enjoyment of Prime Time Commercial Television among Deaf and Hearing Students.
PUB DATE	Nov 83
NOTE	23p.; Paper presented at the Convention of the Speech Communication Association (69th, Washington, DC, November 10-13, 1983).
PUB TYPE	Speeches/Conference Papers (150) Reports - Research/Technical (143)
EDRS PRICE DESCRIPTORS	MF01/PC01 Plus Postage. Captions; College Students; *Hearing Impairments; Recreational Activities; *Television Viewing

ABSTRACT

Questionnaires on television viewing were administered to 128 hearing students and 178 hearing impaired students in a technical college. In addition to the questionnaire which examined demographic information as well as viewing preferences and attitudes, all Ss were asked to report their average daily viewing time. Programs were categorized into comedy, drama, crime-drama, news magazine, and miscellaneous. Results revealed that hearing impaired Ss reported a significantly greater amount (nearly 1 hour more daily) of daily television viewing than hearing Ss. Hearing impaired Ss showed significantly more affinity toward television and were more likely to perceive TV as depicting reality than were hearing Ss. Further, hearing impaired Ss reported significantly greater frequency of viewing and greater enjoyment of captioned programs than programs without closed captions. Significant differences in viewing frequency were found for four of the five program categories and in level of enjoyment for two categories. Results suggested that although deaf Ss may watch more television than hearing Ss, they do not necessarily enjoy it more. (CL)



- U.S. DEPARTMENT OF EDUCATION NATIONAL INSTITUTE OF EDUCATION EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
- This document has been reproduced as received from the person or organization origination it
- Minor unlanges have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

VIEWING AND ENJOYMENT OF PPIME TIME COMMERCIAL TELEVISION AMONG DEAF AND HEARING STUDENTS

BRUCE A. AUSTIN

and

JOHN W. MYERS

Rochester Institute of Technology College of Liberal Arts Rochester, New York 14623

A Paper Presented

to

The Speech Communication Association 69th Annual Convention Mass Communication 11 November 1983 Washington, D.C.

> "PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

cas-la

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

EC/6/136



2

. . .

VIEWING AND ENJOYMENT OF PRIME TIME COMMERCIAL TELEVISION AMONG DEAF AND HEARING STUDENTS

Research on the television program preferences and viewing behaviors of myriad social groups has long been a subject for scholarly inquiry.¹ However, research attention to one significant group, accounting for more than 15 million persons in the U.S. alone,² has been largely neglected by mass media researchers even though this group tends to view more TV than other viewers. A review of empirical literature published from 1950 to 1978 on television and the deaf³ concluded that information about this audience was "scant at best."⁴ The present study offers the results of an investigation which compared deaf and hearing persons' self-reported frequency of viewing and level of enjoyment of commercial network prime time television programs.

Concern, and hence the need for research on, the deaf audience for television has been expressed in a variety of ways and on an international level. In Canada, the Broadcasting and Social Policy Branch of the Department of Communications released a report on television captioning for the deaf which surveyed its benefits and status.⁵ In the U.S. at the policymaking level, in February, 1977 the Federal Communications Commission required licensees to transmit legible messages concerning emergency announcements for hearing-impaired and other visually dependent viewers (61 FCC 2d [1977] pp. 18-22, Docket No. 20659); one month later the FCC authorized closed captioning of TV programs for the benefit of the hearingimpaired (63 FCC 2d [1977] pp. 378-392, Docket No. 20693). Legally,

--- 3



in April 1981, the District of Columbia Circuit Court ruled that television licensees have a duty to provide "meaningful access to commercial broadcasting" to the hearing-impaired in Gottfried v. FCC.⁶ The three commercial television networks and PBS have, in varying degrees, all shown an interest in the deaf televiewer: by participating in actual closed captioning of their programs (PBS, ABC, and until recently, NBC), through testing alternative captioning services such as teletext (CBS), and by presenting programs which focus on deafness (e.g., Silent Victory: The Kitty O'Neil Story). The advertising industry has expressed an interest in captioned commercials⁷ and retailers such as Sears offer closed caption decoders for sale. Even television program producers, independent of their network affiliation, have expressed interest in captioning for the deaf: Jane Edmondson of the National Captioning Institute reported that NBC's Diff'rent Strokes will be captioned despite the network's withdrawal from closed captioning.⁸ Finally, there is a concern that the behavioral impact of television on deaf televiewers may be both different and more serious than for hearing persons. Braverman and Cronin have noted that "deaf viewers bring a unique set of learning strategies to the viewing situation."9 This assertion, when coupled with the results of Schiff's research ¹⁰ (which found that deaf individuals differed significantly from hearing persons in extraction of social information from specific facial regions and gross motor activity as well as deaf persons' tendency to judge moderately hostile interactions as more hostile than hearing persons'), may suggest a relationship to Gerbner and Gross' concept of a "scary world"¹¹ for heavy televiewers: deaf viewers may be even more prone to interpret the world as hostile and mean than hearing viewers.

4

-2--

What, then, is the state of research on television and the deaf? In particular, what is known about the program viewing habits and level of enjoyment among the deaf as compared to the hearing? While much has been written about the development and different forms of captioning, ¹² and research exists on the amount of time the deaf spend with television, comparative (between deaf and hearing), and even noncomparative, studies on the deaf's TV viewership and affective response to what they watch are virtually nonexistent. In 1974 Freebairn wrote that there was "a surprising lack of information about. . . viewing preferences of deaf audiences" -- a statement which still remains true.¹³

Research on television viewing among the deaf clearly indicates that most of the deaf watch television and they watch more TV than hearing persons. An 1963 study by Sternberg, for instance, found that deaf students viewed more hours of TV than did hearing students. More recent research found a positive linear relationhsip between the severity of hearing impairment and the amount of television viewed. Sendelbaugh¹⁵ found significant differences between hearing, hearing-impaired, and deaf persons in the number of hours spent watching television: viewers with the greatest hearing impairment watched the most amount of television and normal hearing viewers the least. In addition to relatively heavy televiewing, as a group, the deaf also expressed a positive attitude toward TV: Ewell and Braverman's¹⁶ study of 201 hearing-impaired college students concluded that based on responses to an adjective checklist, "the positive feelings had the largest response."

5



- 3-

Noncomparative studies of the deaf audience's program preferences almost uniformly suggest that viewing among the hearingimpaired is "consistent with the viewing patterns of the larger U.S. population";¹⁷ this despite the intuitive notion that one might expect the deaf to prefer less verbal programs to those which rely more extensively on dialogue. Fitzgerald and Jensema's¹⁸ survey of 2,232 owners of closed captioned TV adapters found that Disney's Wonderful World and movies attracted the largest audience and that "most viewers appear to prefer commercial programming." Blatt and Sulzer¹⁹ found that over 60% of their sample of hearingimpaired individuals checked as "favorites" (from list of seven program categories but not individual programs) news, action/ adventure, comedy, and sports; drama/soap opera, variety, and public affairs averaged a 33.4% response. In Jensema and Fitzgerald's²⁰ survey of deaf persons the respondents were asked to indicate which of 22 program categories (but not individual programs) they would most prefer to have captioned. Here it was found that movies, news, and comedy all exceeded 50% of the responses; public affairs received 4.9%, drama 27%, and "crime & cops" 22.5%. Based on their own findings, Ewell and Braverman concluded that "choice of programs to be captioned and live interpreted can be made on the basis of national[program] ratings."²¹

Among the few comparative research studies, some suggest that deaf and hearing viewers have similar TV program preferences,²² although the deaf may have a more narrow range of preferences.²³ Other comparative reports indicate a contrary conclusion. Specifically, Liss and Price²⁴ collected parental logs of 120 third, sixth, and ninth graders' viewing behaviors and preferences. Their findings

6



-4-

showed no significant difference in the <u>number</u> of program categories preferred between deaf and hearing children. However, the deaf watched cartoons and crime-dramas significantly more often than the hearing children; news, sports, and game shows were significantly preferred by the hearing children over the deaf.

A significant drawback to the Liss and Price study is their reliance on parental logs as a method for reporting their sample's viewing behavior. On the basis of several studies, "parental reports of what is viewed (by their children) have generally been found to be undependable."²⁵ A second and perhaps more serious methodological weakness of most of the above studies is the method by which programs were coded. Blatt and Sulzer, Jensema and Fitzgerald, and Liss and Price all had their samples respond to preconstructed program categories rather than individual programs. Two problematic consequences result from this. First, both the meaning and meaningfulness of any given category (e.g., action/adventure) may not be shared between respondents, or between respondents and researchers, or both. Second, the difficulty of making comparisons between studies over time is increased due to lack of uniformity in program coding procedures. The present study employs a method which addresses both of these concerns.

METHOD

Sample The sample for this study was comprised of entering freshman students at a technical college located in the northeast. These students were attending pre-classes freshman orientation held during July, 1982. A total of 383 hearing students attended the freshman orientation. Questionnaires were administered by the second author to 128 (or 33.4% of the total number of) hearing students. A total of 313 hearing-impaired students attended the

7



-5-

freshman orientation. Resident Hall Advisors administered questionnaires to 178 (or 56.9% of the total number of) hearing-impaired students. Thus the sample totals 306 respondents to the questionnaire, 42% hearing and 58% hearing-impaired.

For the sample as a whole, 38% were female and 62% were male; these percentages parallel the composition of the college's population. Among just the hearing students 68% were male; among just the hearing-impaired students 58% were male. There was no significant difference between deaf and hearing students by sex (x^2 = 2.946, df = 1, p = .086). Thi age range for the entire sample was from 16 to 40 years (\bar{X} = 18.85, Md = 18.35). Among the hearing students the age range was 16 to 24 years (\bar{X} = 18.07); among the hearingimpaired students the age range was 16 to 40 years (\bar{X} = 19.43). Results of a t-test showed that the hearing-impaired were significantly older than the hearing students (t = 4.87, df = 299, p <.001). Ninety-four percent of the entire sample was white, 3% were black, 2% hispanic, and 1% oriental.

<u>Instrument</u> The questionnaire consisted of demographic items, a list of TV shows with response options to measure the respondents' frequency of viewing each, a list of TV shows with response options to measure the respondents' enjoyment of each, attitudinal statements, and other items which comprise a separate study.²⁶ The respondents' level of television exposure was determined by having them report the number of hours and minutes they watch TV "on an average daily basis." Self-reporting by the respondents, rather than parental logs or some other method, was elected in response to the drawback noted to Liss and Price's study. Still, the usual cautions regarding self-reporting are applicable.

8



-6-

The second methodological weakness noted above was the use of preconstructed program categories rather than individual programs. The following procedures were used to reduce the potency of this weakness and to ascertain the respondents' frequency of viewing and their enjoyment of various television programs. Two separate but identical lists of program titles were constructed. TV Guide was consulted and program titles listed in the local edition were compiled over a four week period prior to distributing the questionnaire. This resulted in a list of 45 regularly scheduled prime time commercial network programs (i.e., no specials or movies, cnly series, were included). Of the 45 programs, CBS and ABC accounted for 17 shows each and NBC the remaining 11 programs. TV Guide identifies programs which are closed captioned with a "(CC)" next to the program's title. None of the CBS shows included in the list carried closed captioning. NBC had three closed captioned shows on the list and ABC had ten.

To conduct comparisons between frequency of viewing and extent of enjoyment for the TV shows by program category among the present sample, as well as to enable more accurate and directly comparable future comparisons between program categories, each of the 45 programs was coded by category following the procedures specified by Austin in his content analyses.²⁷ The category or "type" of each program was coded according to <u>TV Guide</u>'s content sidebar (e.g., <u>Alice</u> -Comedy). This methodology offers the advantage of standardization of program categories. Using this procedure five program categories resulted from the list of 45 programs: Comedy (20 programs), Drama (12 programs), Crime-Drama (7 programs), News Magazine (3 programs), and Miscellaneous (3 programs: <u>Real People</u>, <u>That's Incredible</u>, and

ÿ



-7-

<u>Walt Disney</u>). The program categorization employed here tends to largely remove the difficulty of making comparisons between prearamtypes by viewing or enjoyment over time since it offers a uniform program coding procedure. This method renders most the concern over the possible lack of shared meaning of a preconstructed pregram label both between respondents and between respondents and researchers since categories are constructed post hoc. A caveat to this statement, though, is that the efficacy of <u>TV Guide</u>'s program coding is dependent upon <u>TV Guide</u>'s own coding reliability.

The respondents were first asked to indicate how often they watched each of the 45 shows which were presented in alphabetical order. A five-point response option, identical to that used by Roloff and Greenberg,²⁸ for each show was provided: "not at all," "not very often," "some of the time it's on," "most of the time it's on," and "every time it's on." Responses were coded so that a 1 indicated infrequent and a 5 indicated frequent viewing of each program. The respondents were also asked to indicate the extent to which they enjoyed each of the 45 programs. A separate (from the first set) alphabetical listing of the 45 programs was presented and a five-point response option, ranging from "very unenjoyable" to "very enjoyable," was provided for each program. Responses were coded so that a 1 indicated the least favorable and a 5 indicated the most favorable level of enjoyment.

Rubin's two separate five-item indices of attitudes toward the television medium and its content were presented in the questionnaire.²⁹ The "attachment index" measured respondents' attraction to TV by their responses to the following: "I would rather watch TV than do anything else", "I could easily do without television



•

-- 8-

for several days", "I would feel lost without television to watch", "If the TV wasn't working, I would not miss it", and "Watching TV is one of the most important things I do each day." The "reality index" measured respondents' perception to how true to life TV was felt to be according to their responses to the following: "Television presents things the way they really are in life", "If I see something on TV, I can't be sure it really is that way", "Television lets me really see how other people live", "TV does not show life as it really is", and "Television lets me see what happens in other places as if I were really there." A five-point Likert scale, ranging from "strongly disagree" (coded as 1) to "strongly agree" (coded as 5) was presented for each of the ten statements.

To test for differences between deaf and hearing respondents two-tailed t-tests were used on data gathered at the interval level. The justification for using inferential statistics with a nonprobability sample may be found in Winch and Campbell.³⁰

RESULTS AND DISCUSSION

Hearing-impaired respondents reported a significantly greater amount of daily television viewing than hearing respondents (t = 3.30, df = 291, p <.001). In fact, the hearing-impaired reported nearly one hour more daily televiewing than the hearing (\bar{X} = 221.40 and 163.68 minutes respectively). Results of t-tests performed on the reality and attachment indices (see Table 1) indicate that the hearing-

TABLE 1 ABOUT HERE

impaired showed both significantly more affinity toward television

٥



-9-

and were more likely to perceive TV as depicting reality then were hearing respondents. The present results on amount of exposure, attachment to TV, and perceived realism of TV, together and especially in tandem with Schiff's findings regarding the deaf's nonverbal cue-reading, are provocative. These findings are indeed suggestive of a possible and plausible relationship among deaf televiewers to cultivation hypotheses raised by Gerbner and his colleagues. This, of course, awaits more direct confirmation.

Mean scores for, frequency of viewing and level of enjoyment of closed caption and no caption programs are displayed in Table 2.

TABLE 2 ABOUT HERE

As can be seen, hearing-impaired respondents reported significantly greater frequency of viewing and greater enjoyment of captioned programs than did the hearing respondents. The hearing-impaired also reported significantly greater frequency of viewing and greater enjoyment of captioned programs than programs without closed captions. On the other hand, no significant difference (p > .05) was found between hearing-impaired and hearing respondents for frequency of viewing cr enjoyment of programs that were <u>not</u> closed captioned; nor were there significant differences (p > .05) among the hearing respondents for frequency of viewing or enjoyment of programs in the captioned or no-captioned categories. These data suggest that while the deaf do not differ from the hearing in viewership or enjoyment of programs without captions, significantly greater viewership and enjoyment occurs amon, the deaf for programs which do carry closed captions.



-10-

From the list of 45 programs, deaf and hearing respondents differed significantly (minimum of $p \rightarrow .05$) in their frequency of viewing on 29 shows. In all but four cases (<u>WKRP in Cincinnati</u>, <u>60 Minutes</u>, <u>MASH</u>, and <u>Little House on the Prairie</u>), the hearingimpaired respondents reported significantly greater frequency of viewing than the hearing respondents. Only one of the four programs (<u>Little House</u>) in which the hearing reported greater viewing is closed captioned. In terms of program enjoyment, the deaf and hearing differed significantly (minimum of p < .05) on 30 shows. Hearing respondents reported greater enjoyment than the hearingimpaired for 16 of the 30 shows.

Table 3 presents the mean scores for frequency of viewing and

TABLE 3 ABOUT HERE

level of enjoyment according to the five program categories. Overall, significant differences between hearing and deaf respondents for frequecy of viewing were found for four of the five program categories. Significant differences were also found on the enjoyment dimension for two of the five program categories. This suggests that while the deaf may be watching more television than the hearing, they are not necessarily enjoying it more.

As can be seen in Table 3, within each program category significant differences between deaf and hearing respondents for frequency of viewing and/or level of enjoyment were found. While the deaf viewed Comedy programs significantly more often than the hearing, there was no significant difference between the two groups in terms of subsequent enjoyment. Hearing respondents, however, expressed somewhat (but not significantly) greater enjoyment for Comedy programs.



One plausible explanation for this finding is that perhaps comedy shows have a large amount of verbal material (in addition to, e.g., sight gags and slapstick) which precludes full enjoyment of such programming among the deaf. Further, despite the fact that nine out of the 20 programs coded as Comedy were close captioned, enjoyment of such material may be as much dependent on delivery of the humorous material as it is the content.

-12-

Programs coded as Drama were both viewed and enjoyed significantly more by the deaf. As was found for Comedy programs, Crime Dramas were viewed significantly more often by the deaf but no significant difference between deaf and hearing was found for enjoyment, although hearing persons reported somewhat greater enjoyment. This latter finding is somewhat counter-intuitive in that popular conceptualization of Crime Drama programming suggests that it is highly action-oriented, with less emphasis on dialogue. The implication, therefore, is that the deaf might find such programming more enjoyable because of the dominance of visually accessible action over verbiage. While there was no significant difference in frequency of viewing News Magazine programs, hearing respondents reported significantly greater enjoyment of such programs. As was suggested earlier for enjoyment of Comedy shows, News Magazine programs are probably very verbal, thereby limiting the deaf audience's potential for full enjoyment of such programs. Moreover, unlike Comedy shows, none of the News Magazine shows were closed captioned. The deaf also reported significantly greater frequency of viewing the three programs coded as Miscellaneous but did not differ from the hearing in level of enjoyment.



The results reported here offer several avenues for further inquiry. Why do the deaf watch so much more television than the hearing when, due to their impairment, they are, in a sense, "deprived" of "half" of the message? Perhaps they are using television as a social substitute. The hearing-impaired are often cut-off and many times cut-out from social participation and inclusion when interacting in a largely hearing and aurallyoriented world. Television, of course, makes no social judgments and demands no special social skills. This hypothesis is supported by the present results insofar as the deaf showed a significantly greater affinity toward the medium than did the hearing. Thus, future research might profitably investigate the relationship between the deaf and such concepts as loneliness and alienation in relation to their television use.

Differences concerning program viewing and enjoyment between the deaf and hearing may be attributable to the degree of verbal orientation of various categories of TV shows. Whether or not a given program is closed captioned does not seem to fully explain the deaf's viewing behavior, especially since they did not differ from their hearing counterparts on frequency of viewing or enjoyment for shows that were not close captioned. Content analysis of the comparative reliance on dialogue to advance the plot of various program categories, coupled with the accuracy of comprehension among deaf and hearing viewers for the programs, may further our knowledge in this area.

As with most studies, the present study was conducted with several limitations. The method of sample selection was not random due to the time available to the respondents in relation to other



· .

-13-

activities they were engaged in as a part of their orientation program. The composition of the sample with regard to sex and age also limits the generalizability of the findings. Still. this study showed significantly different televiewing behaviors between the deaf and hearing that, while certainly not conclusive, are both suggestive and internally consistent. The deaf differed from the hearing in their amount of overall televiewing, affinity to television, perceived reality of TV, use and enjoyment of captioned programs, and enjoyment of different program categories. A second limitation to this report is that only prime time commercial network programs comprised the TV program sample. Additionally, specials and motion pictures were not included. Future research might include programs presented by Public Broadcasting as well as nonprime time shows, specials, and movies. Nevertheless, the results reported here show a consistent trend pointing to significant differences between the deaf and hearing and their relationship to television.

-14-



¹See George Comstock, Steven Chaffee, Natan Katzman, Maxwell McCombs, and Donald Roberts, <u>Television and Human</u> <u>Behavior</u> (New York: Columbia University Press, 1978) for a review of this literature.

²Jerome D. Schein and Marcus T. Delk, Jr., <u>The Deaf Pop-</u> <u>ulation of the United States</u> (Silver Spring, Maryland: National Association of the Deaf, 1974), p. 25.

³While there are distinct differences between individuals classified as "hearing-impaired" and "deaf," for purposes of stylistic simplicity this article will use the terms interchangably, except where noted.

⁴Bruce A. Austin, "The Deaf Audience for Television," Journal of Communication 30: 25-30 (Spring 1980).

⁵J.R. Lucyk, "Television and the Hearing-Impaired" (Ottawa, Canada: Government of Canada, Department of Communications, September 1979).

⁶See J. Heldman, "Television and the Hearing Impaired," <u>Federal Communications Law Journal</u> 34: 93-161 (Winter 1982).

⁷"Advertiser Interest in Captioned TV Shows Grows," <u>Advertising</u> <u>Age</u>, April 10, 1978, p. 59.

⁸Norman Black, "NBC to Halt Closed Captioning," AP report in (Rochester, New York) <u>Democrat and Chronicle</u>, August 26, 1982, p. 5C.

⁹Barbara Braverman and Barry Jay Cronin, "Television and the Deaf," unpublished manuscript, no date, National Technical Institute for the Deaf, Rochester, New York, p. 11.



¹⁰William Schiff, "Social Perception in Deaf and Hearing Adolescents," <u>Exceptional Children</u> 39: 289-297 (January 1973); William Schiff, "Social-Event Perception and Stimulus Pooling in Deaf and Hearing Observers," <u>American Journal of Psychology</u> 86: 61-78 (March 1973); William Schiff and Erica Saxe, "Person Perception of Deaf and Hearing Observers Viewing Filmed Interactions," <u>Perceptual and Motor Skills</u> 35: 219-234 (August 1972).

¹¹See for instance, George Gerbner and Larry Gross, "The Scary World of TV's Heavy Viewer," <u>Psychology Today</u> 9: 41-45, 89 (April 1976).

¹²See for example: Barbara Braverman, "Television Captioning Strategies: A Systematic Research and Development Approach," <u>American Annals of the Deaf</u> 126: 1031-1036 (December 1981); Doris C. Caldwell, "The Line 21 System: Closed-Captioned Television for Hearing-Impaired Viewers," <u>Media Information Australia</u>, no. 19: 56-60 (February 1981); Melody A. Hertzog, "Captioning Research: An Annotated Bibliography," unpublished manuscript, June 1979, National Technical Institute for the Deaf, Rochester, New York; W. Lawrence Patrick, "Television for the Deaf and Hearing-Impaired," unpublished manuscript, May 1978, University of Maryland.

¹³Thomas Freebairn, <u>Television for the Deaf: Selected Projects</u> (New York: Deafness Research and Training Center, New York University, 1974), p. 34.

¹⁴Martin L. A. Sternberg, "A Study of Some Factors Influencing the Use of Mass Communication Media Among Deaf College Students," unpublished M.A. thesis, American University, 1963.



¹⁵Joseph W. Sendelbaugh, "Television Viewing Habits of Deaf and Hard-of-Hearing Teenagers in the Chicago Metropolitan Area," unpublished Ed.D. dissertation, Northern Illinois University, 1977.

¹⁶Elizabeth Ewell and Barbara Braverman, "NTID Television Audience Analysis 1977-1978," unpublished manuscript, no date, National Technical Institute for the Deaf, Rochester, New York, p. 4.

¹⁷Ewell and Braverman, p. 9.

¹⁸Molly Fitzgerald and Carl Jensema, "Closed-Captioned Television Viewing Preferences," <u>American Annals of the Deaf</u> 126: 536-539 (August 1981).

¹⁹Joseph Blatt and James S. Sulzer, "Captioned Television and Hearing-Impaired Viewers: The Report of a National Survey," <u>American Anna's of the Deaf</u> 126: 1017-1023 (December 1981).

²⁰Carl Jensema and Molly Fitzgerald, "Background and Initial Audience Characteristics of the Closed-Caption Television System," <u>American Annals of the Deaf</u> 126: 32-36 (February 1981).

²¹Ewell and Braverman, <u>op. cit.</u>, p. 9.

²²Sternberg, <u>op. cit.</u>

²³Sendelbaugh, <u>op. cit</u>.

²⁴Marsha B. Liss and Debora Price, "What, When, and Why Deaf Children Watch Television," <u>American Annals of the Deaf</u> 126: 493-498 (August 1981).

²⁵Comstock <u>et al.</u>, <u>op. cit.</u>, p. 217.

²⁶Copies of the questionnaire are available from the senior author.



²⁷See Bruce A. Austin, "Public Interest Programming by Commerical Network Affiliates," Journalism Quarterly 56: 87-91, 147 (Spring 1979); Bruce A. Austin, "People's Time in a Medium-Sized Market: A Content Analysis," Journalism Quarterly 57: 67-70 (Spring 1980); Bruce A. Austin, "Prime Time Television in a Medium-Sized Market: A Content Analysis," <u>Communication Quarterly</u> 27: 37-40 (Summer 1979); Bruce A. Austin, "Prime-Time TV Programming Following Introduction of Independent Broadcaster," <u>Journalism</u> <u>Quarterly</u> 59: 627-632 (Winter 1982).

²⁸Michael E. Roloff and Bradley S. Greenberg, "TV, Peer, and Parent Models for Pro- and Antisocial Conflict Behavior," <u>Human Communication Research</u> 6: 340-351 (Summer 1980).

²⁹Alan M. Rubin, "An Examination of Television Viewing Motivations," <u>Communication Research</u> 8: 141-165 (April 1981).

³⁰Robert F. Winch and Donald T. Campbell, "Proof? No. Evidence? Yes. The Significance of Tests of Significance," <u>American Sociologist</u> 4: 140-143 (May 1969).



TABLE 1

Mean Scores for Deaf and Hearing on the Attachment and Reality Indices.

	Deaf	Hearing	Significance
Attachment			
I would rather watch TV than do anything else	2.233	1.659	.000
I could easily do without television for several days	3.563	3.929	.008
I would feel lost without television to watch	2.371	1.730	.000
If the TV wasn't working, I would not miss it	2.823	3.262	.004
Watching TV is one of the most important things I do each day	2.261	1.616	.000
Summated results	2.647	2.438	.002
Reality			
Television presents things the way they really are in life	2.798	1.897	.000
<pre>If I see something on TV, I can't be sure it really is that way</pre>	2.920	3.286	.005
Tclevision lets me really see how other people live	2.920	2.254	.000
TV does not show life as it really is	3.034	3.540	.000
Television lets me see what happens in other places as if I were really there	3.244	2.857	.002
Summated results	2.984	2.767	.008



TABLE 2

Mean Scores for Frequency of Viewing and Level of Enjoyment of Television Programs With and Without Closed Captions

	Captioned TV Shows		TV Shows Without Captions		
	Frequency of viewing	Enjoyment	Frequency o	of Enjoyment	
Deaf	2.870 ^{ac}	3.372 ^{bd}	2.050 ^C	2.539 ^d	
Hearin	g 2.093 ^a	2.965 ^b	1.854	2.737	

acd_{Means} differ at p ≁.001

^bMeans differ at p < .01



TABLE 3

Mean Score for Frequency of Viewing and Level of Enjoyment by

Program Category Among Deaf and Hearing

·	Deaf	Hearing	Significance	
Comedy				
Frequency of viewing Enjoyment	2.315 2.751	2.050 2.895	.001	
Drama				
Frequency of viewing Enjoyment	2.302 2.791	1.681 2.375	.000	
Crime-Drama				
Frequency of viewing Enjoyment	2.292 2.783	1.968 2.881	.000 .335	
News Magazine				
Frequency of viewing Enjoyment	1.910 2.333	2.073 3.046	.146 .000	
Miscellaneous				
Frequency of viewing Enjoyment	3.684 4.491	2.688 4.190	.000 .125	

