Television Viewing and Perception of Social Reality  
Among Native American Adolescents

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Abstract

Since the 1960s, communication scholars have attempted to examine television's contributions to viewers' perceptions of a wide variety of topics and issues. Unfortunately, little effort has been made to investigate the influence of television on adolescents' perceptions of social reality. This study investigates the relationship between television viewing and perceptions of social reality among Native American adolescents. It examines the relationship between television viewing and perceptions of sexism, sex roles, mean world, and television reality held by adolescents on five Indian reservations in South Dakota. It also attempts to examine how television viewing is integrated into these adolescents' lives and how television has become an important socializing factor among these Native Americans, who are very much unlike mainstream Americans in their culture, traditions, morality, and values. Within the clear limitations of sample and measures, the results reported in this study offer some support for the cultivation hypothesis. Although the findings are not statistically enormous, they seem to indicate that television viewing is related to 'Sexism,' 'Sex Roles,' and 'Mean World' indices.

Since television sets have become common household items, television has become the world's most common and constant learning environment. Although some critics say that television has lost its magic so that most people regard it simply as
furniture, it still offers fun, excitement, and imagination, and remains fascinating to the mass audience.

Television has become a substitute mother and baby sitter for many young children and a companion for adolescents in many cultures. On a given day in the U.S., half of all American adolescents spend three hours or more viewing television (Lowery and DeFleur, 1988). They tend to watch more television than do adults, prefer to watch adult programs, and usually watch as late into the night as do adults. Despite their emergence from the more limited world of childhood and their increased reliance on peers, adolescents continue to spend a great deal of their time watching television (Morgan and Rothschild, 1983 and Jeffres, 1986).

Since the 1960s, communication scholars have examined television's contributions to viewers' perceptions of a wide variety of topics and issues. Unfortunately, little effort has been made to investigate the influence of television on perceptions of social reality among adolescents, particularly in the areas of sexism, sex roles, mean world, and television reality.

The present study attempts to investigate one small piece of this critical puzzle. It investigates the relationship between the amount of television viewing and perceptions of social reality among Native American adolescents on Indian reservations, an atypical environment. It also attempts to examine how television viewing is integrated into Native American adolescents' lives and how television has become an important socializing factor among these Native Americans, who are very much unlike mainstream American adolescents in their culture, traditions, morality, and values.

This study assumes that the role of television in influencing social reality may vary from culture to culture. Some might argue that Native American adolescents are quite naive about television and that they are inordinately infatuated with television characters and events. Others might argue that television viewing may not produce cultivation effects among Native Americans, because their everyday environment is neither congruent with nor reinforcing to television's messages.

Valaskakis examined television viewing tastes and habits among the Inuit Indians of the Eastern and Central Arctic (1983). The findings revealed that the amount of different types of programming was significantly different among the Inuit Indians. When controlled for sex, males are more likely than females to watch sports and action/adventure programs on television. Accordingly, the underlying assumption is that, the Inuit males who are heavily engaged in television's sports fare, would underestimate the mean world of television.

Lonner et al. investigated television's symbolic impacts in shaping or directing viewers' attitudes, habits, comprehension, and other aspects of the behavior among 367 Native Alaskan children (1985). In order to test television's contribution to viewers' conceptions of social reality, they used sociocultural measures included
devices designed to measure if television influences such things as the perception of sex roles, various attitudes, aggression and frustration, and a variety of concepts placed in a semantic differential format. Their findings suggested that television does have effects on those who view it, these effects of television exposure can only be made in light of an informed knowledge of the people and their culture.

It is commonly agreed that television has become the source of the most broadly shared images and messages in history (Gerbner et al., 1986). Television's symbolic impacts in shaping or directing viewers' perceptions and behaviors toward others and society have been widely researched and documented in the United States as well as in other countries. Over the past 20 years, a large number of studies have found that those who spend more time watching television are more likely than light viewers to express views, beliefs, and assumptions that are congruent with television's depictions of life and society (Morgan and Rothschild, 1983).

Adolescents, who have fewer sources of information and less extensive real-world experience than do adults, are often particularly susceptible to these messages (Morgan and Rothschild, 1983). For example, heavy adolescent viewers express exaggerated apprehensions about their chances of encountering violence. Television viewing also contributes to adolescents' images about aging and age roles (Gerbner et al., 1980), to their notions about occupations (Morgan and Gerbner, 1982), to their health-related beliefs and practices (Gerbner, 1981), to their political orientations (Gerbner et al., 1984), and to their attitudes in many other areas.

In the world of television, men outnumber women at least three to one (five to one on children's programs: Gerbner and Signorielli, 1979), and women appear in limited and stereotyped roles (Busby, 1975). Women on television age faster than men, and are mainly cast in romantic or family parts (Morgan and Rothschild, 1983). When they are shown working outside the house, they usually have lower-status jobs and are rarely able to mix family and career with much success (Morgan and Rothschild, 1983).

Prior studies have suggested that adolescents who spend more time watching television are more likely to hold beliefs that conform to the television world's assumptions about sex roles. Television cultivates such notions as the belief that women are happiest at home raising children and that men are born with more ambition (Morgan, 1982), as well as stereotypical ideas about gender-related qualities and behaviors (Rothschild, 1979). Others, such as Frueh and McGhee (1975), Kimball (1977), McArthur and Eisen (1976), and Gross and Jeffries-Fox (1978) report similar findings. Sex-role images embedded within fictional programs and the cultivation of these images thus provide a good test for the exploration of television viewing and social conceptions.

Conceptually, this study is based on the hypothesis that heavy exposure to television cultivates images and attitudes which reflect television's most stable and
repetitive portrayals (Gerbner et al., 1980). The basic hypothesis of cultivation analysis is that the more time one spends living in the world of television, the more likely one is to report conceptions of social reality that can be traced to television portrayals (Gross and Morgan, 1985). Gerbner et al. want to determine whether those who spend more of their time with television are more likely to answer these questions in ways that reflect the potential lessons of the television world (give the "television answer") than are those who watch less television. From their annual research findings, they found that, while viewers might differ in their demographic characteristics, the amount of television viewing can make a difference in terms of their conceptions of social reality (Gerbner et al., 1980a). For instance, people's different degrees of sex-role stereotypes can be traced back to the independent contribution of TV viewing just like others such as sex, age, class, and education.

Gerbner and his research team have studied the structure of American television content and the impact of television since 1968. They argue that television functions as a society's storyteller, communicating a culture's values and myths and cultivating a set of beliefs in the minds of the audience. They also argue that such effects may be dangerous in as much as television frequently presents a distorted, unrealistic view of the world--particularly the world of crime and violence.

Over the past two decades, Gerbner and his research team have obtained a great deal of evidence to support the cultivation hypothesis: the more time one spends 'living' in the world of television, the more likely one is to report perceptions of social reality which can be traced to television's most persistent representations of life and society.

Using data collected by the National Opinion Research Center (NORC), Gerbner and Gross (1976) found that heavy television viewers scored higher on a 'Mean World' index than did light viewers. Sample items from this index included: "Do you think most people would try to take advantage of you if they got a chance or would they try to be fair?"; "Would you say that most of the time people try to be helpful or that they are mostly just looking out for themselves?"; and "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" Data from NORC samples showed that heavy viewers were more suspicious and mistrustful.

Subsequent studies addressing various issues of violence found that heavy viewers are more likely than light viewers to think that it is dangerous to walk alone in a city at night, to express unwillingness to walk alone in one's own neighborhood, and to overestimate the prevalence of violence in society and their own chances of being involved in violence (Gerbner and Gross, 1976; Gerbner et al., 1979a/b, 1980a).

In addition, in their study of TV's impacts on people's perceptions of aging, they found that heavy viewers, especially young viewers, tend to "perceive old people in
generally negative and unfavorable terms. Heavy viewers believe significantly more than light viewers that old people are a vanishing breed" and "men seem to age slower and enjoy life longer than women" (Gerbner et al., 1980b, p. 46). Other studies included aspects such as sex-role stereotyping and socialization (Gerbner and Signorielli, 1979); health and medicine on TV (Gerbner et al., 1981b); occupational stereotyping (Gerbner et al., 1981; and Morgan, 1982); and political orientations (Gerbner et al, 1982, 1984).

In approach and basic methodology, the present study is designed to parallel the cultivation project of the Annenberg research team. Specifically, it attempts to illuminate some possible consequences of television's contribution to Native American adolescents by investigating the contribution of television programs to their perceptions of social reality in the areas of sexism, sex roles, mean world, and perceived reality of television.

**Method**

A self-administered questionnaire was given, in July 1992, to 458 Native American junior and senior high school students in South Dakota. The survey was conducted on five Indian reservations in South Dakota: Pine Ridge, Rosebud, Crow Creek, Lower Brule, and Yankton.

The lengthy questionnaire assessed a variety of opinions, depth and breadth of knowledge, and media beliefs and habits. It begins with measures of basic demographics, such as religion, family structure, political orientation, parental education and occupation, as well as students' educational and occupational aspirations. Questions to elicit opinions include a number related to sexism, sex roles, marriage, mean world, and family. Questions about media use include a series of questions relating to specific magazines, newspapers, radio listening, and television viewing. The series of questions about television viewing is extremely detailed. There are questions about viewing at different times during the week and on weekends, as well as about viewing of cable television.

Many previous studies have focused primarily upon adults or children. This study, however, focuses on junior and senior high school students on South Dakota Indian reservations for several reasons. First, high school is a very important time in Native American adolescents' lives, because it is the time to decide whether to leave reservations for education and employment in cities or to continue their lives on reservations. Second, it is also the time in which most teenagers are on their own for the first time so that they may form attitudes and opinions without direct influence by their parents. Finally, it is also a time in which many Native American adolescents develop or change their notions about drinking, smoking, and drug use (Drinking and drug use are the No. 1 enemy on reservations, followed by unemployment, which
reaches nearly 90 percent on South Dakota reservations). Basing its selection of population on the above assumptions, this study surveyed junior and senior high school students attending five schools on South Dakota Indian reservations.

The analysis was begun by examining two-to-n-way contingency patterns, assessing general differences in the perceptions and/or behavior of light, medium, and heavy viewers, overall, and for specific subgroups one at a time. This study also examined respondents while simultaneously controlling for their gender, age, parents' education, family income, and school performance.

Since crosstabular analyses do not fully guard against the possibility of spuriousness within any given demographic groups, this study focused on partial correlations for respondents within specific demographic classifications while simultaneously implementing relevant controls. It also developed and used indices formed by summing responses to questions relating to a specific topic, such as sexism, sex roles, marriage, mean world, family, and television world. These indices were tested for reliability in terms of unidimensionality (a single orthogonal factor) and internal homogeneity (Cronbach's alpha and/or Armor's theta) to insure that each item actually belongs in the index. Confirmatory factor analysis was conducted on each set, and in each case only a single factor with an eigenvalue of more than 1.0 was found (Eigenvalues ranged from 1.52 to 2.07, representing between 50.6 and 55.4 percent of the total variance for each set). The dimensions tapped by the indices are as follows:

**Sexism:**

Three variables designed to measure students' orientations toward sexism stereotypes. The three items were:

"Overall, men are smarter than women";

"Men are born with more drive to be ambitious and successful than women";

and

"Marriages are better when the husband works and the wife runs the home and cares for the children."

(Eigenvalue 1.57, Total Variance 52.3%, and Alpha=.53).

**Mean World:**

Three variables reflecting notions of fear and interpersonal mistrust, such as the beliefs that

"You can never be too careful in dealing with people;"

"People will take advantage of you if they get the chance;" and

"Most people are just looking out for themselves."

(Eigenvalue 1.66, Total Variance 55.4%, and Alpha=.59).
Sex roles:
Three variables measuring students' orientations toward traditional sex roles in terms of reinforcing the traditional husband's role, wife's role, and married women's social participation. For sex roles index, respondents were asked to agree or disagree with the three statements:
"Husbands should do some household chores like cooking, cleaning house, and washing dishes";
"Fathers are just as good as mothers at caring for children"; and
"It is alright if my mother works outside the home like my father."
(Eigenvalue 1.52, Total Variance 50.6%, and Alpha=.51).

TV Reality:
Four variables measuring students' perceived reality of television. The format for the reality items was based on past studies of perceived reality. The specific items were:
"The fighting on TV is just like the fighting you see in real life";
"Actors on TV yell at each other the same way people yell in real life";
"People on TV shows are just like people in the real world"; and
"TV shows tell about life the way it really is."
(Eigenvalue 2.07, Total Variance 51.9%, and Alpha=.69).

Findings
The sample is 51.9 percent male and 48.1 percent female; 26 percent 8th graders, 25.6 percent 9th graders, 18.5 percent 10th graders, 16.3 percent 11th graders, 13.5 percent 12th graders; and 25.4 percent of the students' fathers and 26.1 percent of their mothers attended at least some college. Respondents are aged from 12 to 20 (the mean age is 15.7 years, SD=1.58). The sample is lower-middle class, but shows a good deal of socioeconomic diversity. In terms of religion, 22.7 percent are Episcopal, 52 percent are Catholic, 13.7 percent are Christian, 6.9 percent are Native American religion, and only 1.9 percent indicate they do not affiliate themselves with any specific religion.

Exposure to television programs was measured with the open-ended question, "On an average weekday (and weekend), how many hours do you spend watching television?" Sixty-three percent reported spending over three hours viewing television on an average day (Mean TV viewing hour, 2.89 hours). Respondents were trichotomized into light (less than 1.75 hour, 33%), medium (1.76 to 3.33, 33%), and heavy viewers (over 3.34 hours, 34%). The dependent measures are derived from a total of 13 items which deal mainly with respondents' attitudes toward family, dating, marriage, divorce, sex roles, sexism, and their perceived reality of television.
Of the various demographic variables considered, Pearson Correlations reveal highly significant relationships between television viewing and grade ($r=-.29$, $p<.05$), age ($r=-.26$, $p<.001$), father's education ($r=-.31$, $p<.05$), mother's education ($r=-.23$, $p<.001$), income ($r=-.21$, $p<.05$), and school performance (gamma = $r=-.18$, $p<.05$). Younger students (3.02 hours), those with less educated parents (3.25), low incomes (3.41), those who have small families (3.12), and those who have no religious affiliation (2.91) are more likely to be heavy viewers (see Table 1). On the contrary, older students (2.12 hours), those with educated parents (2.31), high incomes (2.45), those who have large families (2.48), and those who have religious affiliation (2.51) tend to view less.

### Table 1

<table>
<thead>
<tr>
<th>Relationship between Amount of Viewing with Demographic Variables</th>
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<tbody>
<tr>
<td>Television Viewing</td>
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<tr>
<td>Light %</td>
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<tr>
<td>---------</td>
</tr>
<tr>
<td>Sex</td>
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<tr>
<td>Male (N=235)</td>
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<tr>
<td>Female (N=218)</td>
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<tr>
<td>Grade</td>
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<tr>
<td>8th Grade (N=118)</td>
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<tr>
<td>9th Grade (N=116)</td>
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<tr>
<td>10th Grade (N=84)</td>
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<tr>
<td>11th Grade (N=74)</td>
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<tr>
<td>12th Grade (N=61)</td>
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<tr>
<td>Age</td>
</tr>
<tr>
<td>12-14 (N=105)</td>
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<tr>
<td>15-17 (N=274)</td>
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<tr>
<td>18-20 (N=69)</td>
</tr>
</tbody>
</table>

Father's Education

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No College (N=103)       32.7        37.9    -.31**
Some College (N=302)     38.4        33.5

Mother's Education
No College (N=112)       30.8        32.3    -.23***
Some College (N=313)     39.6        26.5

Income (Monthly)
Under $10,000 (N=97)    26.1        33.9    -.21*
$10,000-$20,000 (N=105)  34.5        31.8
Over $20,000 (N=126)    32.5        35.6

School Performance (Self-report)
Bad                      28.4        43.2    -.18**
Moderate                 32.5        34.8
Good                     43.5        29.8

Student's Religion
Episcopal (N=73)         32.9        28.8
Catholic (N=167)         31.3        33.4
Christian (N=44)         33.4        38.2
Native Indian (N=22)     27.8        34.8

*  p < .05
** p < .01
*** p < .001

For further analysis, television viewing was compared with each index. Table 2 shows simple and partial correlations of the amount of television viewing and four indices with each of five demographic variables (sex, grade, father education, mother education, family income, and school performance), simultaneously controlling for all of the other background factors.

As Table 2 on the next page indicates, female students who watch more television tend to be more sexist. For female students, the simple correlations between television viewing and 'Sexism' index are negative. When simultaneous controls are implemented for grade, parents education, family income, and school performance, it still remains negative and significant in all cases. However, television
viewing does not go with greater sexism for male students. Examination of the individual first-order partials clearly shows that father education and school performance seems to eliminate the simple associations.

In contrast, for males, television viewing is negatively related to 'Sex Roles' in all cases when controlling for various demographic variables. As shown in Table 2, those who watch more television are less likely to express liberal values on gender-roles and women's status. Interestingly, the relationships between the amount of television viewing and attitudes about sex roles tend to be positive for females, despite the somewhat important finding that females are more traditional and conservative while males are more progressive and liberal. For females, greater television viewing goes with an intensely protective attitude toward traditional sex roles. In contrast, males who watch more television are likely to take more "liberal" positions on the sex-role attitudes.

Table 2

<table>
<thead>
<tr>
<th>Males:</th>
<th>Sexism</th>
<th>Sex Roles</th>
<th>Mean World</th>
<th>TV Reality</th>
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<tbody>
<tr>
<td>Simple r</td>
<td>.09*</td>
<td>-.12*</td>
<td>.09</td>
<td>.07</td>
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<tr>
<td>Grade</td>
<td>.01</td>
<td>.08</td>
<td>.12*</td>
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<tr>
<td>Father Education</td>
<td>-.14*</td>
<td>-.23**</td>
<td>.04</td>
<td>.07</td>
</tr>
<tr>
<td>Mother Education</td>
<td>.10</td>
<td>-.07</td>
<td>.18*</td>
<td>.09</td>
</tr>
<tr>
<td>Family Income</td>
<td>.25**</td>
<td>-.12*</td>
<td>.06</td>
<td>.04</td>
</tr>
<tr>
<td>School Performance</td>
<td>-.16*</td>
<td>-.16*</td>
<td>.03</td>
<td>.03</td>
</tr>
<tr>
<td>All</td>
<td>.06</td>
<td>-.12*</td>
<td>.06</td>
<td>.05</td>
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</table>

<table>
<thead>
<tr>
<th>Females:</th>
<th>Sexism</th>
<th>Sex Roles</th>
<th>Mean World</th>
<th>TV Reality</th>
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<tr>
<td>Simple r</td>
<td>-.17*</td>
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<td>.09</td>
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<td>Grade</td>
<td>-.14*</td>
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<td>-.14*</td>
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<td>84</td>
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</table>
In order to see whether there are any within-group variations in this pattern, partial correlations were run between television viewing and 'Sex Roles' index within each sub-group, simultaneously controlling for all other relevant variables. When within-group controls for demographics are implemented simultaneously, the relationships between television viewing and males are negative and significant in most cases, whereas, for females, the relationships are positive, but very weak and not significant at all.

Similar patterns can be found by examining the relationship between amount of television viewing and 'Mean World' index. Overall, there is significant negative association among females between television and this index \( r = -.18, P < .05 \). As Table 2 reveals, the relationship remains statistically significant, when controlled by grade and parents' education. The relationship for male students, however, remains positive. When controlling for key demographic variables, the association holds up both grade and mother's education. Thus, the associations between television viewing and 'Mean World' index are rendered spurious by family income and school performance.

'TV Reality' index was designed to determine whether the reality index made a significant contribution to the relationships between exposure to television and students' perceived reality of television. Analysis of simple correlations controlling for various demographics reveals very weak positive associations between the amount of viewing and 'TV Reality' in most cases. As Table 2 shows, very weak positive relationships are observed in most cases: Partial correlations reveal no associations between television viewing and 'TV Reality' index. Overall, the results are not supportive of the assumed role of television in determining the impact of exposure to television on students' perceived reality.

**Discussion**

Within the clear limitations of sample and measures, the results reported in this study offer some support for the cultivation hypothesis. Although the findings are
not statistically enormous, they seem to indicate that television viewing is related to 'Sexism,' 'Sex Roles,' and 'Mean World' indices. However, the findings suggest that television viewing has a minimal effect in generating students' perceived reality of television.

Despite the somewhat weak and mixed finding, it is interesting to note that television viewing is significantly related to 'Sexism' index for female students. Respondents heavily engaged in television's fare would overestimate 'Sexism' index more often than those who are light viewers. When controlled, males are more likely than females to take liberal attitude toward 'Sexism' questions.

This study also indicates that television viewing programs among Native American adolescents has a minimal effect in generating their conceptions of social reality. Given the importance of television as a cultural medium and a transmitter of cultural values, this study investigated the contribution of television viewing to Native American adolescents' conceptions of social reality in terms of proper roles of males and females, of family values, and of perceived reality of television.

Although this study does not present strong evidence of cultivation among Native American adolescents, several limitations should be noted. First, the findings, of course, are based on a cross-sectional survey, and inferences about causal relationships are subject to other interpretations. The hypothesized causal relationship between television viewing and cultivation can be tested more rigidly in longitudinal studies.

Second, the sample is drawn from junior and senior high schools on South Dakota Indian reservations. Perhaps, Native American adolescents who live in urban areas might reveal somewhat different findings. The present analysis raises some questions: it did not consider the various geographic differences. Regional differences should be considered and tested in future analysis.

It seems reasonable to assume that, because television is such a far-reaching cultural force, television's symbolic message may reflect other cultural forms within the broader social context. In this sense, this study strongly attests to the importance of studying cultivation analysis in different cultural settings. It seems clear that further cultivation analysis, equipped with more deliberately designed approach, is urgent. This problem can possibly be solved through more cross-cultural studies. Further replications in more cultures are desirable.

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Morgan, Michael and George Gerbner

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