The relationship of students’ reading skills to TV watching, leisure time reading, and homework

Donald T. Searls
Nancy A. Mead
Barbara Ward

Although a TV set is a fixture in many households, controversy over television's influence continues to rage. This controversy most often centers on our children, with widely varying opinions propounded regarding TV's impact on children's personalities, propensity to violence and academic achievement.

It is difficult to observe the effect of television in isolation, since no similar group of nontelevision watchers exists for comparisons. Many studies of viewers have needed to focus on small samples of people or relatively limited aspects of their behavior. A broader picture has been provided by data from several U.S. state educational assessment programs, which have gathered data on students' TV watching behaviors and their relationship to academic achievement.

To enlarge on such information, the National Assessment of Educational Progress (NAEP) gathered data on the TV viewing habits of 9, 13, and 17 year olds across the U.S. during its 1979-80 assessment of reading skills. In this survey, 21,208 9 year olds, 30,488 13 year olds, and 25,551 17 year olds responded to questions about their backgrounds and to a wide range of items probing their reading comprehension skills. These data provide information...
on the amount of TV watched by different groups of students and allow comparisons of reading skills and TV watching.

The study also surveyed amounts of homework and leisure time reading done, permitting analysis of relationships among these activities, TV watching, and reading ability. These analyses give a hint as to whether TV watching supplants these other, more scholastically oriented activities and examine relationships between such activities and reading skills.

Other studies
A look at other studies helps place the National Assessment data in a context. Virtually no one in the U.S. is a television isolate. By 1979, some 98% of households had a TV set (U.S. Bureau of the Census, 1982). The average viewer watches from 6 to 7 hours daily (Comstock et al., 1978). Comstock reports that children aged 2 to 11 watch an average of 3.9 hours per day; teenagers average 3.1 viewing hours a day.

The California state assessment (California Department of Education, 1982) found similarly high viewing levels for younger children; data gathered during the spring of 1981 show that 35% of the state’s sixth graders watched 4 or more hours of TV a day. Viewing appeared to be related to socioeconomic status (SES) with those in the lower SES groups watching more TV.

Many studies also find a negative association between academic achievement and hours of television watched—that is, those who watch more TV tend to do less well in school (Hornik, 1981). The California study (1982) found that, in general, the more time spent watching TV, the lower sixth graders’ achievement in reading, writing, and mathematics. A previous National Assessment survey of 17 year olds’ math skills found lower math achievement among those who watched more TV (National Assessment of Educational Progress, 1978).

However, when socioeconomic status and intelligence (IQ) are statistically controlled, variations by amount of TV watched are often erased (Hornik, 1981). Neuman (1980), in her review of research, similarly supports the contention that when IQ and SES are statistically controlled, television is not a significant factor in predicting reading achievement. Some studies have found that effects do remain in the areas of reading comprehension and language usage (Morgan, 1982).

Studies generally confirm that TV does not interfere in any substantial way with the reading of books or achievement in reading (Childers and Ross, 1973; Neuman, 1980; Quissendenberry and Klasek, 1976; Starkey and Swinfod, 1974). Witty (1967), in a survey of media behavior from 1949 to 1965, found that the number of books read by children remained unaffected by the increasing amount of TV viewed.

Television may prove more injurious to higher than lower achieving students. The California assessment data showed a steeper achievement decline with increased TV viewing for sixth graders in higher SES categories, while students in lower socioeconomic groups showed some gains in achievement as TV viewing increased up to 3 hours a day. After that, achievement declined for these groups as well.

A New Jersey study of sixth through ninth graders (Morgan, 1982) found especially strong negative associations between increased TV viewing time and academic achievement for high IQ students.
students. Conversely, it found some positive associations for lower IQ students. Morgan postulates that heavy viewing may “damage” most those who might otherwise be high achievers. For lower achievers, TV may raise school performance. These research findings are not a blanket indictment of television. Overall, TV viewing does appear to be negatively associated with academic achievement—children who watch more generally tend to do less well academically—but it must be remembered that the amount of TV watched varies among population groups, with children from lower socioeconomic status groups watching more. When socioeconomic status and IQ are controlled, variations in achievement by amount of television watched become smaller.

National Assessment findings
A common expectation appears to be that television is a negative influence on children. Winn (1977) makes a strong case for this point of view. However, such a conclusion is not uniformly supported by other research or by the NAEP data. The National Assessment findings add a dimension to other studies by describing patterns for students at three ages—students at very different points in their lives. The NAEP data suggest that age is a major factor in determining how much television students watch and how their TV watching interacts with reading skills.

For younger students, reading performance improves as amount of television watched increases up to more than 4 hours daily. Highest reading scores for 9 year olds are associated with 3 to 4 hours of TV viewing. As students become older, the beneficial effects of television appear to decrease. By age 17, television bears the popularly expected negative association with academic achievement, that is, as time spent watching TV increases, reading achievement levels go down.

Television also appears to have a differential effect for students in different SES status groups. At each age, students from groups typically considered disadvantaged tend to watch more television. Higher reading levels for these groups tend to be associated with somewhat higher levels of TV watching than the national averages. Achievement falls off more rapidly with increased TV viewing for students from more advantaged circumstances.

TV may provide external stimulation that younger children and members of disadvantaged groups are less likely to obtain on their own. It may also provide certain levels of information and language that broaden these students’ awareness of their environment and expand their vocabularies. However, for older or more advantaged students, TV watching may interfere with time available for reading, homework, and other activities.

Following are highlights from the NAEP survey.

• Time spent watching television declines with age; younger students are much more avid viewers. Fully one quarter of the 9 year olds watch more than 4 hours of TV a day, and another fourth watch 3 to 4 hours. A shift is evident by age 13, with 17% of the 13 year olds watching over 4 hours and 31% viewing 3 to 4 hours a day. Among 17 year olds, TV viewing drops sharply; 38% watch less than 1 hour a day and 8% view more than 4 hours.

• Students at each age who watch over 4 hours of TV daily display the poorest reading skills. Beyond that, the
### Reading comprehension scores of U.S. 9, 13, and 17 year olds who watch various amounts of television, by type of community

<table>
<thead>
<tr>
<th>Age group and community type</th>
<th>Watch under 1 hour</th>
<th>Watch 1-2 hours</th>
<th>Watch 3-4 hours</th>
<th>Watch over 4 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age 9</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>1.5</td>
<td>3.0</td>
<td>5.2</td>
<td>-1.7</td>
</tr>
<tr>
<td>Disadvantaged urban</td>
<td>-14.7</td>
<td>-15.5</td>
<td>-14.2</td>
<td>-8.5</td>
</tr>
<tr>
<td>Advantaged urban</td>
<td>9.8</td>
<td>10.8</td>
<td>11.2</td>
<td>13.0</td>
</tr>
<tr>
<td><strong>Age 13</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>-3.9</td>
<td>-2.9</td>
<td>-2.0</td>
<td>-1.2</td>
</tr>
<tr>
<td>Disadvantaged urban</td>
<td>-9.8</td>
<td>-7.8</td>
<td>-6.9</td>
<td>-7.9</td>
</tr>
<tr>
<td>Advantaged urban</td>
<td>8.5</td>
<td>10.8</td>
<td>9.7</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Age 17</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>-0.7</td>
<td>0.3</td>
<td>1.4</td>
<td>-1.8</td>
</tr>
<tr>
<td>Disadvantaged urban</td>
<td>-10.4</td>
<td>-8.3</td>
<td>9.6</td>
<td>-11.1</td>
</tr>
<tr>
<td>Advantaged urban</td>
<td>5.9</td>
<td>7.4</td>
<td>6.2</td>
<td>4.2</td>
</tr>
</tbody>
</table>


relationship of TV watching and academic achievement depends heavily on the age of the students. Among 9 year olds, reading performance improves as amount of TV viewing increases up to 3 to 4 hours of TV a day. The reading achievement of 13 year olds peaks with 1 to 2 hours of TV watching and drops off with greater viewing. Only for 17 year olds is there a direct negative association between reading achievement and hours of television watched. Those 17 year olds who watch the least TV are the best readers, and performance steadily declines with increased amounts of viewing.

- At all ages, males watch more TV than females. Members of groups typically considered disadvantaged, including residents of poor urban areas, Blacks, and those whose parents have less education, tend to watch more TV than the national average.

- Students from advantaged groups tend to exhibit TV watching patterns of students older than themselves (that is, watching less than average), while those from disadvantaged groups often display patterns characteristic of younger students (that is, watching more TV than the average for their age group).

- Disadvantaged youngsters tend to exhibit achievement patterns of students younger than themselves, that is, higher than average levels of TV viewing continue to benefit their school performance as they become older. Advantaged youngsters, on the other hand, show achievement patterns like those of older students. For them,
higher reading performance is associated with less TV watching.

- Spare time reading is most popular with 9 year olds and less with 13 and 17 year olds. Of the 9 year old group, 40% read for 1 hour or more a day, compared with 26% of 13 year olds and 24% of 17 year olds.

- From 1 to 2 hours of spare time reading are associated with highest reading performance within each category of TV watching time. Thus, moderate amounts of spare time reading do appear to have a favorable impact on reading skills. Highest reading levels occur among groups that combine 1 to 2 hours of reading with what appears to be the optimal amount of TV for their age group—3 to 4 hours for 9 year olds, 1 to 2 hours for 13 year olds, and under 1 hour for 17 year olds.

- Homework is not high on the list of teenagers’ activities. About a third of the 13 and 17 year olds do homework for an hour or more a day; 36% of the 13 year olds and 44% of the 17 year olds either had no homework assigned the previous day or did not do their assignments.

- For 17 year olds, reading performance increases as amount of time spent on homework increases, with those doing over 2 hours of homework showing the best reading. Among 13 year olds, the highest reading ability is seen among those doing 1 to 2 hours of homework a day. When homework and TV watching are examined together, 17 year olds display the best performance when they watch little (under an hour) or no TV and do more than 2 hours of homework, while 13 year olds appear to do best with moderate amounts (1 to 2 hours) of each.

- Students who watch TV extensively and also report spending a great deal of time doing spare time reading or homework are among the poorest readers. Since the hours in a day are limited, the results suggest that these students may be watching TV and reading or doing homework at the same time, or they may have misperceptions of the time actually spent in various activities. Also exhibiting lower reading levels are teenagers who watch excessive amounts of TV (over 4 hours) and either do not do their homework or have none assigned.

References