Predictors of Children's Entertainment Television Viewing: Why are They Tuning In?

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Three hundred and twenty six 3- and 5-year-olds (N = 160 3-year-olds) participated in a longitudinal study of the sociological and ecological predictors of children's general audience and child entertainment viewing. Viewing was assessed through five weekly diaries for each child, completed by families over a two-year period. Concurrent analyses of program availability, family demographics/attributes, and child characteristics indicated that children who were frequent viewers of entertainment programs had parents who had limited education, access to cable, and incorporated television into their activities. Although parental regulation and encouragement played a role in children's viewing experiences, particularly at 5 and 7 years of age, the strongest long-term predictors on children's entertainment viewing were parents' education, family size, and the age and sex of the child. Parents need to become more aware of their role in shaping their children's viewing habits. Responsibility for improving children's television viewing experiences, however, should not rely solely with parents but must be shared by educators, broadcasters, and legislators.

There is no denying that television plays a central role in the lives of children. Unlike other media, television grabs their attention when they are young (Hollenbeck & Slaby, 1979; Lemish & Rice, 1986; Meltzoff, 1988), and once established, viewing habits are reliable and consistent over time (Huston, Wright, Rice, Kerkman, & St. Peters, 1990; Tangey & Feshbach, 1988). The amount of time children devote to watching television has been an ongoing concern to many.

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because of the negative effects associated with it. Viewing four or more hours per day is related to poor school achievement (Williams, Haertel, Haertel, & Walberg, 1982), homogenized or mainstreamed perceptions of society (Gerbner, Gross, Morgan, & Signorielli, 1986), and perceptions of fictional portrayals as real or realistic (Potter, 1988).

The content of television, however, is not monolithic. The effects of television vary with the types of programs viewed. Watching quality educational programs, for example, is associated with better academic skills (Bogatz & Ball, 1971; Rice, Huston, Truglio, & Wright, 1990) and prosocial behavior (Rushton, 1982). Unfortunately, child educational programming (e.g., "Sesame Street") is only a small proportion of children's overall television viewing. Most of children's viewing time is spent watching child entertainment programs (e.g., cartoons) and, for older children, comedies designed for a general audience (Huston et al., 1990).

Thus far, parents have assumed sole responsibility for their children's viewing habits; however, they do not act alone. In fact, most television use occurs in a broader context of family and community, and children's "choices" about what to view may be heavily influenced by the people and institutions that surround them. Anderson and Bryant (1983) stressed a dynamic interaction between children's television viewing and numerous environmental and sociological factors. In their model, they demonstrated that program selection is influenced by program availability (i.e., the type of programs available on broadcast and cable television and the scheduled air time); the sociological context of the viewer (i.e., family demographics, resources, and schedules); and the individual characteristics of the child viewer (e.g., the child's cognitive ability and viewing preferences).

To date, few studies have examined television viewing in the broad context of the Anderson and Bryant model (1983). Pinon, Huston, and Wright (1989) used the model to predict young children's viewing of "Sesame Street." Their results indicated that children's viewing was more a function of the home environment than of characteristics of the individual child. That is, children's exposure to "Sesame Street" was reduced significantly by maternal employment, enrollment in day care or preschool, and the presence of an older sibling who usually controlled the television set.

The analyses in this article build upon Pinon et al.'s (1989) use of the Anderson and Bryant (1983) model by examining the sociological and ecological predictors of children's most frequent television viewing—that of commercial entertainment programs. Specifically, the purpose of this 2-year longitudinal study was to examine young children's viewing of entertainment television programs as a function of program availability, family and demographic attributes, and the individual characteristics of the child viewer. Unlike most studies that include only contemporaneous relationships, this data set sheds light on the role
of sociological and ecological factors prospectively as predictors of viewing two years later.

Program Availability
The amount of time children spend watching television is affected by viewing options and by the time available to watch. An increasing number of households own more than one television set, subscribe to cable TV, and own video equipment (Comstock, 1993), thereby facilitating a greater number of viewing options for children, as well as an increase in the family’s total viewing time (Nielsen, 1989, 1990; Webster, Pearson, & Webster, 1986).

Children’s television viewing is also affected by the amount of time they have to view. Those who attend grade school watch TV about three hours per week less than younger children do (Nielsen, 1990), and those who attend day care or after-school care because their parents work also are limited in their viewing time (Medrich, Roizen, Rubin, & Buckley, 1982). Parental employment, however, has also been associated with an increase in time spent watching television—a possible result of older children who are put in charge of their younger siblings, and use television as a safe form of entertainment (Medrich et al., 1982).

In addition to time spent away from home, broadcast schedules play a role in viewing habits. For example, children who are not at home during the morning hours (when children’s educational programs typically air) watch more entertainment programs than educational programs. Young children who stay at home, however, may be exposed to more hours of television, but potentially to more hours of educational programs as well (Pinon et al., 1989).

Family Demographics and Attributes

Demographics. A consistent finding in television research is the relationship among television viewing, family income, and parental education. The less income and education families have, the more television is central to their daily lives (Condry, 1989). However, the ability of more affluent families to afford extra cable options has facilitated an increase in the viewing they do, thus possibly leading to a reduction in the viewing gap across socioeconomic levels (Condry, 1989).

Family Structure. The number of family members, the composition of the family, and the ages of children and their siblings also affect viewing habits. Large households watch television more often than small households, and families with children watch more than those without (Nielsen, 1993; Sario, Jason, & Lonack, 1988). In addition, younger, as opposed to older children, most often watch television with parents or siblings, resulting in greater viewing of general audience programs and less of child-oriented programs (St. Peters, Fitch, Huston, Wright, & Eakins, 1991). Older children, who more often watch television
by themselves or with a sibling, are more likely to be the ones to select the programs viewed (Gunter & Svennevig, 1987), and therefore watch more child-oriented entertainment programs. Last, the type of program viewed is a function of a sibling’s age. The presence of a younger sibling increases the likelihood of watching informative programs, whereas the presence of an older sibling is associated with an increase in viewing child entertainment programs (Wright, St. Peters, & Huston, 1990).

**Parental Attitudes and Regulation of Television.** Although parents’ own viewing preferences do not predict young children’s viewing when parents are not present, an earlier analysis of this data set indicated that parents’ program choices often determine young children’s exposure to adult programs (i.e., young children often accommodate parents’ viewing choices) (St. Peters et al., 1991). Furthermore, when parents choose to use television as a background for most home activities, children are likely to be frequent viewers (Comstock, 1989; Neuman, 1986).

Parental regulation of television is also associated with viewing, as parents who regulate more often have children who view fewer entertainment programs (Murphy, Talley, Huston, & Wright, 1991). Regulation is not necessarily restrictive in nature. Parents report that they regulate their children’s TV watching not only by limiting the time of day, amount of viewing, and types of programs viewed (Comstock, 1989; Sarlo et al., 1988), but also by encouraging selective viewing of educational or quality entertainment programs (St. Peters et al., 1991).

**Alternative Activities.** Comstock (1989) suggests that children watch television when other attractive opportunities are absent. In one study, children who engaged in household chores or in activities outside the home were frequently light television viewers (Neuman, 1986). However, providing children with alternatives to television is probably “easier said than done.” Not all families can sacrifice the time or resources that alternative activities for children usually require. Therefore, television provides a quick and inexpensive source of entertainment.

**Child Characteristics.** In addition to the home environment, children’s interests in viewing are guided by their own characteristics such as sex and age. Boys watch more television than girls, particularly cartoons and action-adventure programs (Huesmann & Eron, 1986; Huston et al., 1990). Moreover, boys’ attention to television, compared with girls’, varies less across programs or across variations in form and content (Huston & Wright, 1989).

Developmental changes in knowledge and cognitive abilities also contribute to children’s viewing preferences. Preschoolers tend to watch less complex programs with redundant content and high temporal integration (Anderson & Col-
As children mature, they become more skilled at applying available story schemata, knowledge, and cognitive operations to comprehend complex story plots, montage, form, and temporally separated events. With such changes in cognitive functioning, children's television viewing becomes more varied and includes more programs targeted toward a general audience (Huston et al., 1990; Rubin, 1986).

The study presented here significantly adds to our understanding of children's entertainment television viewing in three ways. First, the study makes it clear that the effects of watching television vary with the type of programs viewed. Thus, predictors must be determined for specific program types, rather than viewing in general. In our analysis, programs designed for children (primarily cartoons) are examined separately from those intended for a general audience. Research has provided information on ecological predictors of total viewing and of viewing educational programs, but little is known about predictors of viewing entertainment programs per se. Entertainment programming has been highly criticized for its distorted and undesirable social content, which has been associated with negative effects, ranging from sex-role and racial stereotypes to aggressive behavior (Huston et al., 1992).

A second contribution of this study is that the participants ranged in age from 3 to 7 years. Most research has reported the viewing habits of grade school children. Because of significant developmental changes, it is unreasonable to impose generalizations drawn from older children on the viewing experiences of younger children. Third, we describe how children's viewing patterns and the predictors of viewing change with time. Most studies have been limited by cross-sectional survey data for a specific point in time.

**METHOD**

**Sample**

The initial sample in this 2-year longitudinal study consisted of 326 children and their families. Two cohorts of children, who were within 3 months of their 3rd ($N = 160$) or 5th ($N = 166$) birthdays at the onset of the study, were chosen. Within each of these cohorts there were two “subcohorts”: children with birthdays from February through August began the study in Spring 1981; children with birthdays from September through the following February began in Fall 1981.

The sample, which was recruited through birth records and advertisements, represented a wide range of educational and occupational levels, but it was a volunteer sample in which white, nuclear, relatively stable families were predominant. The educational level of each parent was coded on a 6-point scale ranging from 1 (less than high school) to 6 (graduate or professional degree). The mean education level for fathers was 3.78 ($SD = 1.40$); for mothers, the mean was 3.35 ($SD = 1.23$). Most parents were high school graduates (96.6% of
the fathers, 98.1% of the mothers); and about half had completed a bachelor’s degree (53% of the fathers, 41.1% of the mothers).

Occupational status was rated on the Duncan Scale, which ranges from 1 to 99 (Duncan, 1961). Although individual occupations receive different ratings on the Duncan scale, they can be understood from the following average ratings: professional and technical workers = 75; managers, officials, and proprietors = 57; clerical and sales workers = 17–18; laborers = 7. The mean occupational status for fathers was 52.73 (SD = 23.90); for mothers, it was 52.18 (SD = 18.52).

Design
The design, illustrated in Table 1, was a combination of cross-sequential and cohort sequential formats (Nesselroade & Baltes, 1979). This design allows for examination of the effects of age independent of cohort and time of measurement. It balances the fluctuations between the spring and fall seasons within age groups so that age effects can be separated from seasonal variations.

Home Viewing
Viewing was assessed on the basis of diaries maintained by parents for 1 week in the spring and 1 week in the fall for each of 2 years (a total of five diaries). Other than direct observation, diaries have been found to be the most valid method of assessing viewing (Miller, 1987). Viewing by all family members was recorded in 15-min intervals from 6:00 a.m. to 2 a.m. each day. The spring and fall seasons were sampled to avoid the extremes of heavy viewing during the winter and light viewing during the summer.

### TABLE 1
**Design of Longitudinal Study: Ages of Children (Years) at Time of Measurement**

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<tr>
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<tbody>
<tr>
<td></td>
<td>Time of Measurement</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Spring</td>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td>Birth Cohort</td>
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<td></td>
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</tr>
<tr>
<td>1978/Spring</td>
<td>Wave 1</td>
<td>Wave 2</td>
<td>Wave 3</td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td>(3.5)</td>
<td>(4)</td>
</tr>
<tr>
<td>1978/Fall</td>
<td>Wave 1</td>
<td>Wave 2</td>
<td>Wave 3</td>
</tr>
<tr>
<td></td>
<td>(3)</td>
<td>(3.5)</td>
<td>(4)</td>
</tr>
<tr>
<td>1976/Spring</td>
<td>Wave 1</td>
<td>Wave 2</td>
<td>Wave 3</td>
</tr>
<tr>
<td></td>
<td>(5)</td>
<td>(5.5)a</td>
<td>(6)</td>
</tr>
<tr>
<td>1976/Fall</td>
<td>Wave 1</td>
<td>Wave 2</td>
<td>Wave 3</td>
</tr>
<tr>
<td></td>
<td>(5)</td>
<td>(5.5)</td>
<td>(6)</td>
</tr>
</tbody>
</table>

*a* Entered kindergarten.

*b* Entered first grade.
Parents were instructed to record as a "viewer" anyone who was present for more than half of a 15-min interval in which the television was turned on. This definition was adopted to avoid parental judgments about when the child was "watching," but it undoubtedly resulted in a slight overestimate of true viewing. Comparing diary measures with videotapes made in the home during viewing, Anderson, Field, Collins, Larch, and Nathan (1985) found that diaries slightly overestimated children's viewing time. The correlation between the two methods, however, was 0.84 for preschoolers' viewing, indicating that diaries are a valid method of assessing television viewing.

A total of 271 participants returned four ($N = 27$) or five ($N = 244$) diaries and were, therefore, considered to have sufficient data for analysis. To determine whether there was selective retention, $t$ tests were performed comparing the retained sample with those who were lost. The lack of significant differences between the two groups indicated that the retained sample was comparable to the original sample on demographic variables, family composition, and television viewing environments.

**Program Categories.** To categorize available television programs, an extensive coding system was developed (Center for Research on the Influences of Television on Children, CRITC, 1983). Programs were classified on the following four dimensions: (a) intended audience (child or general); (b) informative (yes or no); (c) amount of animation used (full, partial, none); and (d) program type (real-world events and information, comedy, drama, action adventure, and variety). For purposes of this study, two categories of viewing were analyzed: entertainment programs targeted toward children (consisting primarily of cartoons) and entertainment programs targeted toward a general audience (e.g., situation comedies, drama, action adventure, and variety). Because the viewing data was positively skewed, they were transformed using a square root ($X + 1$) transformation. Frequency distributions of these variables indicated that the viewing data approximated a normal distribution.

**Predictors of Children's Entertainment Viewing**
Prior to the first viewing diary, a staff member visited the participant's home to explain the diary procedure and to interview a parent (usually the mother). The information obtained from the initial parent interview included parental demographics, family composition (e.g., presence of older and young siblings), television program availability (e.g., number of available channels), parental regulation and encouragement of the child's television viewing, the child's involvement with television, and how much the child enjoyed print materials. Within 3 months of their last diary, 261 parents participated in another individual interview, during which updated information on the previously mentioned variables was collected. Additional information regarding parents' and children's use
of print materials and parental attitudes toward television viewing was also obtained.

**Program Availability.** As an index of children's access to entertainment programs, the number of television sets in the home, and subscription to cable TV were measured. Cable subscription was coded on four levels: (a) no cable (broadcast television only); (b) basic cable (included independent channels from outside the broadcast area and special interest channels, excluding Nickelodeon); (c) basic cable plus one pay movie channel (usually HBO); and (d) basic cable plus two or more pay movie channels (HBO and Cinemax—a few families had begun to receive the Disney Channel by the time of the last diary of the study). The opportunity to watch television is also affected by children's school enrollment. Therefore, the number of hours per week that the younger children regularly attended preschool or day care, and the amount of time the school-aged children spent away from home were calculated.

**Family Demographics and Attributes.** The highest level of education attained by each parent was coded and then averaged to obtain an overall parental education score. Although the occupational status of the parents was obtained, it was not included in the analyses because of its high correlation with parental education level, $r = .53$, $p < .001$. Family composition was measured by the number of family members and the presence of older and younger siblings in the home.

Parental encouragement of television viewing was measured using a sum score of the following items rated on a 5-point Likert scale (1 = never, 5 = very often): (a) the family watches TV regularly together, (b) the child is encouraged to watch particular programs; and (c) the child is encouraged to watch at particular times of day. Parental regulation of television was measured by asking for their views on: (a) allowing the child to turn the television on alone without asking; (b) setting limits on the time the child could watch television; and (c) the prohibition of certain programs. Parental attitudes toward television were categorized as positive or negative based on 14 items stating the potential benefits (7 items) or negative consequences (7 items) of watching television. Parents responded to each item using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Parental use of print material was measured by their own estimate of how often they read books, magazines, and newspapers. Estimates for each type of print were based on a 7-point scale (1 = never, 7 = several times a day). Parental encouragement of reading was computed by combining responses to three questions: (a) How often do you or someone else read to your child? (b) How often do you suggest your child read or look at a book; and (c) How often does your child want to be read to more than you and others can manage?

**Child Characteristics.** Besides age and sex, the child's interest in television and print were measured. The degree to which children incorporated television
into their lives (e.g., how often they talked or asked questions about television or used television characters and themes in play) was assessed by employing 11 Likert items. For each item, parents rated their child's involvement with television using a 5-point scale (1 = never, 5 = very often). Responses were summed to form a total score labeled "TV focus." Children's enjoyment of print was measured on the basis of parental ratings of their child's enjoyment of books, magazines, and frequency of library visits. Parents rated the frequency with which their children looked at or read books, magazines, and newspapers, on a 7-point scale (1 = never, 7 = several times a day).

RESULTS

Data from the first two viewing diaries were combined as an index of Time 1 viewing, and the final two diaries were collapsed as an index of Time 2 viewing. The diaries were combined to average seasonal variations in viewing across the spring and fall seasons. At Time 1, the cohorts were each 3 or 5 years old; at Time 2, they were 5 or 7 years old.

Descriptive information about viewing is presented in detail by Huston et al. (1990). On average, the children spent 18.6 hr per week watching television over the 2-year period. About 27% of the viewing time was devoted to entertainment programs targeted for children (primarily cartoons), and about 41% was devoted to general audience entertainment programs.

Progression of Analyses

Separate multiple regressions were performed on viewing of the two categories of television entertainment programs (child and general audience). To assess concurrent relations, regressions were computed to predict Time 1 viewing from indices collected at Time 1; Time 2 viewing was predicted from measures collected at Time 2. Longitudinal patterns were analyzed by predicting children's Time 2 viewing from measures collected at Time 1. To control for the variance accounted for by earlier learning, viewing at Time 1 was entered into these equations first.

Forced-entry multiple regression analyses were conducted in two stages. First, within each predictor category (program availability, family demographics and attributes, and child characteristics), multiple indices were entered to obtain the strongest representatives from each category. This was done to preserve power and eliminate possible redundancy and covariation among the independent variables. Second, the strongest predictors from each category (variables with a significance level of $p < 0.10$ or better), were entered into a final equation that included variables from all three predictor categories.

The variables used in the initial regressions, run separately by predictor category, are as follows: (a) program availability: number of television sets in the home, cable TV subscription, and younger children's preschool attendance and/or older children's time away from home; (b) family demographics and
TABLE 2
Predictors of Entertainment Viewing at Time 1 (3 and 5 Years of Age)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Child Entertainment</th>
<th>General Audience Entertainment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>$R^2$</td>
</tr>
<tr>
<td>Child's age</td>
<td>.08</td>
<td>.02</td>
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<tr>
<td>Child's sex (1 = M, 2 = F)</td>
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<td>.03</td>
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<tr>
<td>Program Availability</td>
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<tr>
<td>Cable subscription</td>
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<td>.09</td>
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<tr>
<td>Family Demographics &amp; Attributes</td>
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<td>.16</td>
</tr>
<tr>
<td>Family size</td>
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<td>TV encouragement</td>
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<tr>
<td>Child Characteristics</td>
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<tr>
<td>TV focus</td>
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<td>.19</td>
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<tr>
<td>Child enjoys print</td>
<td>-.10</td>
<td>.20</td>
</tr>
</tbody>
</table>

$F(9, 274) = 7.62^{***} \quad F(9, 274) = 12.77^{***}$

Note. Variables are listed in order in which they were entered. $R^2$ represents total variable accounted for after entry of the given predictor.

+ = $p < .10$. * = $p < .05$. ** = $p < .01$. *** = $p < .001$.

attributes: parental education level, mother’s time at work, number of family members (family size), presence of older and younger siblings, parental regulation and encouragement of television viewing, parents’ positive and negative attitudes toward television viewing, parents’ use of print, and parental encouragement of their child’s use of print; and (c) child characteristics: age (cohort) and sex of child, TV focus, child’s enjoyment of and use of print. For all equations, age (cohort) and sex of the child were entered first. The results of the concurrent analyses are shown in Tables 2 and 3; the longitudinal analyses are presented in Table 4.

Concurrent Predictors

Child Cohort and Sex. There were no overall effects of cohort or sex at either time of measurement.

Program Availability. Cable subscription was positively related to children’s viewing of child entertainment programs at both Time 1 and Time 2. A similar trend occurred for general audience entertainment programs, but it was significant only at Time 1. This may be the result of the limited availability of programs
## TABLE 3

Predictors of Entertainment Viewing at Time 2 (5 and 7 Years of Age)

<table>
<thead>
<tr>
<th>Predictors</th>
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<th>General Audience Entertainment</th>
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<tbody>
<tr>
<td></td>
<td>Beta</td>
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<td>.00</td>
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<tr>
<td>Child's sex ($1 = M, 2 = F$)</td>
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<tr>
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<td>.25</td>
</tr>
<tr>
<td>Child enjoys print</td>
<td>-.05</td>
<td>.25</td>
</tr>
</tbody>
</table>

$F(10, 224) = 7.63^{**}$

$F(10, 224) = 14.74^{**}$

**Note.** Variables are listed in order in which they were entered. $R^2$ represents the total variance accounted for after entry of the given predictor.

+$ = p < .10$. $* = p < .05$. $** = p < .01$. $*** = p < .001$.

received without cable service in the locale of the study. Basic cable service provided reception to two independent channels that featured cartoons and syndicated situation comedies.

Children’s scheduled time away from the home and the number of television sets in the home were not significant predictors of the amount of time children spent watching entertainment programs.

**Family Demographics and Attributes.** The level of education of parents was one of the most powerful and consistent predictors of entertainment television viewing. Children of more highly educated parents were less likely to watch entertainment television programs targeted toward children or a general audience than were children of less-educated parents.

Family structure variables were weak predictors once education of parents was controlled. Family size was associated with heavy viewing of child entertainment programs at Time 1. This relation, however, was not significant for general audience entertainment programs, nor was it a significant predictor of Time 2 child or general audience entertainment viewing. Contrary to predictions,
mother's time at work, and the presence of younger or older siblings, another index of family composition, were not related to viewing in the initial equations.

Parental rules about television viewing did play a significant role in children's television viewing habits, particularly at Time 2. Parents who reported regulating viewing had children who watched fewer child and general audience entertainment programs at Time 2. The same pattern was observed with general audience entertainment programming at Time 1.

Conversely, parental encouragement of television viewing was positively related to general audience viewing, but only at Time 2. Regulation and encouragement were not correlated with each other; they were orthogonal. Negative and positive parental attitudes about television did not predict viewing in the initial equation, probably because they share variance with regulation and encouragement, respectively.

Parental encouragement of children's use of print, assessed at Time 2, played a minor role in older children's entertainment viewing. Encouragement of reading was related to relatively low viewing of general audience entertainment programs at Time 2, but this effect was weak. Similarly, parental modeling of reading played an insignificant role in children's viewing. Parents' own uses of print did not predict children's viewing in the initial equations.

Child Characteristics. Children's involvement with television content, referred to as "TV focus," was the best predictor of concurrent entertainment viewing. At Time 1, when children were either age 3 or 5, TV focus was positively related to viewing of both child and general audience entertainment programs. Similarly, at Time 2, children who incorporated television into their daily routines tended to be heavy viewers of entertainment television.

Although parental ratings of their child's enjoyment of print were associated with children's concurrent television viewing only marginally, an interesting pattern did emerge. Young children who enjoyed spending time with print were less likely to watch cartoons at Time 1 than were children who did not express an interest in print. A similar trend existed at Time 2 for viewing of general audience programs.

Longitudinal Patterns in Viewing
The regressions assessing Time 1 predictors of Time 2 viewing included controls for Time 1 viewing. Therefore, the dependent variables in these analyses are the residuals that indicate change over the 2-year period.

Child Cohort and Sex. The younger cohort increased viewing frequencies over the 2 years more than the older cohort. That is, viewing of both child and general audience entertainment programs increased more from ages 3 to 5 years than from ages 5 to 7. In addition, boys showed a greater increase than girls in child entertainment viewing.
**Program Availability.** Similar to the significant concurrent relationship between cable TV subscription and entertainment viewing, cable options assessed at Time 1 predicted child entertainment viewing over time. The more options families had, the more the children viewed. No such relationship was found with viewing of general audience entertainment programs.

Preschool attendance, although meeting the $p < .10$ criterion for entry into the final equation, did not account for a significant amount of variance in viewing at Time 2. In addition, as with the concurrent analyses, the number of television sets in the home was not a significant predictor.

**Family Demographics and Attributes.** Parental education level at Time 1 negatively predicted viewing of general audience entertainment at Time 2. Children who increased their viewing of general audience entertainment television programs during the 2-year period were likely to be part of a large family and have parents with limited formal education.

<table>
<thead>
<tr>
<th>TABLE 4</th>
<th>Time 1 Child and Family Attributes Predicting Time 2 Entertainment Viewing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Predictors</strong></td>
<td></td>
</tr>
<tr>
<td>Child entertainment</td>
<td>General audience entertainment</td>
</tr>
<tr>
<td>Beta</td>
<td>$R^2$</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Child's age</td>
<td>$-.17$</td>
</tr>
<tr>
<td>Child's sex ($1 = M, 2 = F$)</td>
<td>$-.11$</td>
</tr>
<tr>
<td>Program Availability</td>
<td></td>
</tr>
<tr>
<td>Cable subscription</td>
<td>$+.10$</td>
</tr>
<tr>
<td>Preschool attendance</td>
<td>$-.01$</td>
</tr>
<tr>
<td>Family Demographics &amp; Attributes</td>
<td></td>
</tr>
<tr>
<td>Parental education</td>
<td>$-.09$</td>
</tr>
<tr>
<td>Family size</td>
<td>$+.07$</td>
</tr>
<tr>
<td>TV regulation</td>
<td>$-.10$</td>
</tr>
<tr>
<td>TV encouragement</td>
<td>$+.09$</td>
</tr>
<tr>
<td>Child Characteristics</td>
<td></td>
</tr>
<tr>
<td>TV focus</td>
<td>$+.05$</td>
</tr>
<tr>
<td>Child enjoys print</td>
<td>$+.06$</td>
</tr>
</tbody>
</table>

$F(11, 249) = 12.49^{***}$  $F(11, 249) = 32.28^{***}$

**Note.** Variables are listed in order in which they were entered. $R^2$ represents the total variance accounted for after entry of the given predictor.

$+ = p < .10$.  $^* = p < .05$.  $^{**} = p < .01$.  $^{***} = p < .001$.  


Parental regulation of television viewing was associated with a marginal reduction in viewing child entertainment programs, but encouragement of viewing predicted marginal increases over the 2-year period for both child and general audience programs. Mother’s time at work, parental attitudes about television, parents’ use of print material, and their encouragement of children’s print use were not significant predictors.

**Child Characteristics.** Neither TV focus nor enjoyment of print at Time 1 predicted changes in entertainment viewing over the 2-year time span.

**DISCUSSION**

Children’s television viewing habits remain a concern for many parents and educators. The results of the study reported here indicate that many factors influence children’s entertainment television viewing. That is, program choices are made in the broad context of sociological and ecological factors, as well as characteristics of the individual viewer. Consistent with previous studies of older children’s viewing, children who are frequent viewers of entertainment programs tend to have parents with limited education, subscribe to one or more cable TV options, and place few restrictions on their children’s television viewing. The more children are involved with television content, the more they watch entertainment programs at both younger and older ages. Longitudinal analyses indicate that cable subscription, parent education, and family size have significant long-term effects, beyond the variance accounted for by the viewer’s age and sex.

Parents do play an influential role in their young children’s viewing. Parental television regulation was consistently associated with children watching fewer entertainment programs. Surprisingly, parental television regulation during the preschool years was not related to viewing child entertainment programs at ages 3 and 5, and only marginally related to a reduction in child entertainment viewing 2 years later. It appears that parents are more concerned about their child’s exposure to adult content and their older children’s exposure to cartoons. Similarly, a recent survey commissioned by The Annenberg Public Policy Center of the University of Pennsylvania revealed that 70% of parents of preschoolers were happy with the quality of programming for their young children and believed that television had a positive influence on their children. In contrast, only 25% of the parents of elementary-school-aged children expressed positive feelings about programming aimed at their children (Hart, 1996). Parents’ belief that television for young children is fairly innocuous may lead to inconsistent regulation of viewing during the preschool years.

Conversely, parental encouragement of television viewing was moderately associated with increased entertainment viewing. The more parents encouraged viewing, the more their 5- and 7-year-old children watched child and general
audience entertainment programs. Parental encouragement of television viewing may be a function of relying on television as a relatively inexpensive source of entertainment for the entire family. Despite the rising costs of cable, subscription fees tend to be cheaper than entertaining the whole family outside of the home. This may be particularly true for large families or for those with limited incomes.

Parents who encourage television viewing are not simply pro-television (St. Peters et al., 1991). Instead, many are selective about the programs their children view, promoting beneficial age-appropriate programs, and restricting programs not deemed suitable for children. The availability of quality educational television programs is greatest during the preschool years, which means parents with school-aged children have fewer suitable program choices. This range of quality age-appropriate programs may explain why parental encouragement was not related to preschoolers’ entertainment viewing and only weakly associated with entertainment viewing over the 2 years.

Contrary to the finding that time spent away from home reduced child educational viewing (Pinon et al., 1989), children’s viewing of entertainment programs was not affected by day care, school, or other extracurricular activities. Unlike educational programs that typically air on weekdays during the times children are at day care or in school, child-oriented entertainment programs typically air after school hours and on the weekends in order to attract a sizable audience.

Program availability was determined in part by parents’ access to cable. For the children in this sample, cable improved poor television reception and provided children with greater access to entertainment programs designed for them. Cable subscription, however, was not associated with any long-term increase in children’s general audience entertainment viewing. This may be partly due to the prevalence of situation comedies and family dramas on broadcast stations.

Given the considerable changes in the media environment that have taken place since the early 1980s when these data were collected, the issue of program availability in children’s entertainment viewing today could be called into question. The majority of families now own videocassette recorders (which have been associated with increased exposure to movies; Greenberg & Heeter, 1987; Morgan, Alexander, Shanahan, & Harris, 1990), and most cable TV companies supply a large number of channels (Lichty, 1989). Dorr & Kunkel (1990), however, have argued that children’s viewing preferences have remained relatively stable, with broadcast programming preeminent. The prime-time share of broadcast viewing exceeds 80% (Comstock, 1993).

The results of a recent longitudinal study of young children’s viewing habits provide additional support for the argument that television program choices are predominately entertainment (Wright & Huston, 1995). Young children watch approximately 7 to 8 hr per week of entertainment television as opposed to just under 2 hr per week of educational programming. Thus, the basic developmental and environmental variables affecting program selection and exposure identified in this study are likely to continue to operate.
Children have their own preferences for what they want to watch on television (Watkins, 1985) and how they spend their leisure time. Contrary to popular opinion, children are active viewers, and they are inquisitive about what they observe on television. For example, children who often talk about television or incorporate television content in their daily activities (e.g., pretend play) were frequent viewers of entertainment at both younger and older ages. Surprisingly, however, their focus on television in early years did not predict their later viewing. It may be that the focus on television content in play and daily activities was an outcome rather than a contributor to viewing.

Because it is commonly thought that television interrupts or displaces children’s reading time, we examined the relationship between children’s attitudes about print and their viewing. However, we found no strong evidence that children’s enjoyment of books displaces entertainment viewing. As proposed by Neuman (1986), children’s media activities are formed by the behaviors and attitudes expressed by their parents. Thus, parents are able to promote both quality television programs and reading, teaching children that one activity does not have to replace the other.

CONCLUSIONS

Children’s television viewing occurs in a broad social context in which parental television regulation and modeling are only a part. Parents cannot be held solely responsible for what their children view or learn from television, but they need to be aware of the factors that shape their children’s television viewing experiences. According to the Communication Act of 1934, broadcasters are also responsible for serving the “public convenience, interest, or necessity” (Communications Act, Section 303a).

The Children’s Television Act of 1990 is the most recent attempt to ensure that broadcasters, in fulfillment of their licensing agreement, serve the public interest of their child audience. One of the four primary elements of this law establishes that each broadcast station serve the educational and informational needs of children up to age 16 (P.L. 101-437). Because educational/informational programming was broadly defined as content that will further the positive development of the child in any respect, including the child’s cognitive and intellectual or emotional and social needs (Kunkel & Canepa, 1994), broadcasters have submitted questionable programs such as “The Jetsons,” “GI Joe,” “Teenage Mutant Ninja Turtles” as so-called educational shows for children to meet the FCC requirements for license renewals (Aufderheide & Montgomery, 1992). Without specific definitions of educational and informative programming; how age-specific the programming needs to be; when programming should be aired; and a specified minimum amount of programming, the Children’s Television Act has had a minimal effect on the availability of “quality” “educational” children’s programs on the commercial airwaves.
Television is a powerful educator that has enormous potential for reaching children. Many of the entertainment programs, however, may lead to harmful effects because of their violent content and the societal distortions portrayed. Considering the stability of children’s television viewing habits and the increased availability of entertainment programs, it is critical that we obtain a better understanding of the variables that contribute to the development of children’s program choices.

The results of our study show that demographic factors as well as child characteristics play a significant role in what children watch on television. Given the spectrum of potential influences over children’s television viewing, it is clear that we as a society play a role in determining their viewing habits. Increasing the amount of quality educational programming for all children with access to broadcast television, in conjunction with parents monitoring their children’s viewing and educators teaching children critical viewing skills should result in more beneficial uses of television as a powerful educational tool.

REFERENCES


