Children's Dispositions Toward Proprietary Drugs and the Role of Television Drug Advertising

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CONCERN has been expressed that Americans are becoming a nation of pill takers. Many critics contend that this behavior is learned in childhood and that it is encouraged by TV advertising for proprietary (advertised nonprescription or "over-the-counter") drugs. However, knowledge of childhood dispositions toward proprietary drugs is lacking, as is information on the potential relationship of TV drug advertising to these dispositions. This lack of information caused the Federal Communications Commission to deny a petition by the attorneys general of 19 states seeking to prohibit TV advertising for proprietary drugs until after 9:00 P.M., when fewer children would be in the audience (Attorneys General, 1975). Proprietary drugs cannot be advertised on children's programs, but they can be advertised during adult and family programs, which constitute about 85 percent of children's viewing (Adler et al., 1980). Presumably, the proposed ban

Abstract This study of 668 children aged 8 to 13 from diverse social backgrounds suggests that children are, to a measurable extent, influenced by exposure to TV advertising for proprietary drugs but that the net result is moderate dispositions rather than strongly favorable dispositions toward these products. Subgroup analysis confirms the generality of these conclusions: some subgroups appear to be more responsive to TV drug advertising but none show strongly favorable attitudes or behaviors toward proprietary drugs.

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could be reconsidered should subsequent evidence suggest that TV drug advertising does predispose children toward proprietary drugs to an undue extent.

Previous studies of dispositions toward proprietary drugs among children (Atkin, 1978) and teenagers (Milavsky et al., 1975) suggest two important but tentative conclusions examined in greater depth in the present study. The first is that young people's dispositions toward proprietary drugs are *not* strongly favorable, as many critics have assumed. Atkin (1978: 74), for example, asked 256 children aged 10 to 12 the following question: "When you get a cold/stomachache, how much do you take some medicine for it?" Response alternatives and percentage responses were: always (12.5 percent), usually (24.5 percent), sometimes (44.5 percent), never (18.5 percent). Similarly, Milavsky et al. (1975: 473) obtained the following results with a sample of teenage boys: "You should take some [proprietary] drug preparations: every day (3 percent), whenever you feel a bit bad (11 percent), only if you feel pretty bad (40 percent), only if you feel really bad (35 percent), never (11 percent)." The modal responses and the infrequent strongly favorable responses suggest moderate dispositions toward proprietary drugs in childhood and teenage years.

A second important but tentative conclusion from these prior studies is that children's and teenagers' dispositions toward proprietary drugs are only weakly related to their exposure to TV drug advertising. Using dependent measures similar to the one exemplified above, Atkin (1978) found correlations in the .07 to .22 range with children's exposure to TV drug advertising, with only about half of the correlations reaching the .05 level of significance. Milavsky et al. (1975) found a Tau C correlation of only .01 between the "willingness" measure described above and teenagers' exposure to TV drug advertising, although a slightly higher and significant correlation of .12 was found between exposure and usage of proprietary drugs.

Several criticisms may be made of these prior studies, however, which lead us to regard the two conclusions as tentative. Atkin (1978) focused on a limited set of proprietary drugs, including cold and stomachache remedies but excluding cough and headache remedies. Milavsky et al. (1975) used a vague definition in their "willingness" measure ("some drug preparations") and used isolated brand names rather than representative proprietary drug categories in their usage measure. (Usage is a questionable variable where children are concerned since children rarely control proprietary drug usage, although it may be more applicable to teenagers, as in the Milavsky et al. study. The present study examines requests to parents as well as usage). Atkin (1978) employed a hybrid and possibly uninterpretable measure of TV drug advertising exposure in which TV viewing was multiplied by reported attention to four proprietary drug commercials. Milavsky et al., on the other hand, employed a cumulative measure of TV drug advertising exposure which appeared to have considerable construct validity. However, neither study examined the reliability of measures, and information about reliability is essential for estimating the true population correlations from sample data.

Moreover, there exists the possibility that certain children may be more strongly predisposed towards proprietary drugs, and perhaps toward advertising for proprietary drugs, than other children. This possibility was examined in the Atkin and Milavsky et al. studies through partial correlation. However, these partial correlations were subject to the same potential problems noted above in conjunction with the overall results. Also, absolute levels of dispositions for various subgroups were not examined. The importance of examining subgroup trends that may be at variance with aggregate trends is clearly illustrated in Cronbach (1957) and Argyle and Delin (1965), where ample evidence is provided for relationships that apply only to certain subgroups of the population. In particular, it seems unlikely that all children are socialized similarly about proprietary drugs and that they are equally receptive to proprietary drug advertising. The "vulnerable subgroups" possibility was therefore reexamined in the present study.

The measures for this study were developed following extensive open-ended discussions with children about their attitudes toward common illnesses and proprietary drugs. A draft questionnaire was then pretested with a large sample of younger and lower SES children to ensure that they as well as older and higher SES children could understand the questions and the rating procedures. Based on these results, a final questionnaire was developed for the main study which incorporated items contributing to the overall index measures with high reliability.

Children's dispositions toward proprietary drugs were conceptualized in terms of traditional cognitive, affective, and conative dimensions of attitude (McGuire, 1969), i.e., belief in the efficacy of proprietary drugs, liking to take them, and intention to take them; and two behavioral dimensions, i.e., requests to parents, and reported usage. The measures are shown with other measures employed in the study in Table 1. Each disposition measure is based on an index summed over the four most widely used proprietary drug categories: cold, cough, headache, and stomachache remedies (Target Group Index, 1975). Items for these indexes were interspersed throughout the questionnaire. Reliabilities as measured by Cronbach's coefficient alpha (α) with one exception were .70 or higher, indicating suitability for basic research (Nunnally, 1978). The exception was usage (α = .52), and this measure is discussed separately in the results section.

Children's exposure to TV drug advertising was measured in the same way as in the Milavsky et al. study (1975: 462), except that we used a current measure (one-month retrospective) rather than a cumulative one. Milavsky et al. demonstrated that the measure validly captures drug commercial exposure and not just general TV viewing level, although the two phenomena are of course highly related. We chose to measure current exposure, hoping to represent children's immediate responsiveness to TV drug advertising. Not having access to children's viewing histories, we could only examine possible cumulative exposure effects through the surrogate variable of age.

Five subgroups of children were identified as potentially more "vulnerable" than other children. It was expected that these children would exhibit more favorable dispositions toward proprietary drugs and stronger relationships between dispositions and exposure to TV drug advertising. These subgroups are as follows: (1) young children, who with less cognitive development and experience may be less discriminating toward proprietary drugs and proprietary drug advertising (the implicit counter-hypothesis, suggested by the long-run cumulative-effects position, is that older children would be more favorably disposed toward these products and toward TV drug advertising); (2) children from educationally "disadvantaged" families, who may receive less instruction about proprietary drugs and the way they are advertised and therefore may be more favorably disposed toward these products and toward advertising for them; (3) children who suffer frequently from the types of illnesses for which proprietary drugs are intended, with the expectation that more frequent illness may be instrumental in developing favorable dispositions toward proprietary drugs and toward proprietary drug advertising as a potentially relevant source of information about illness relief; (4) high illness anxiety children, for whom anxiety may function as a relevant motivational (emotional drive) variable which increases dispositions toward proprietary drugs and enhances responsiveness to proprietary drug advertising; and (5) (a subset of) older children who are occasionally allowed to take proprietary drugs without parental supervision, and who therefore may exhibit less "restrained" usage behavior and take a more personal interest in proprietary drug advertising.

These five subgroups generate five "pairs" of directional hypotheses to be tested in the study. In order to infer that TV drug advertising increases children's vulnerability to these products, it would have to

Table 1. Variables and Measures

Variable	*Measure*		*Coefficient α*
Exposure variable			
TV drug advertising exposure	Number of proprietary drug commercials per program as obtained from Broadcast Advertisers Reports (1977) weighted by viewing frequency, based on past month's viewing of a randomly selected list of 35 shows excluding shows during school hours and after 11:30 P.M.		.73
Disposition variables			
Belief in efficacy of proprietary drugs	Four-item index.[a] Sample item: "When I have a cold, cold medicine can make me feel better." Scoring: 1 = strongly disagree to 4 = strongly agree.[b]		.81
Affect toward taking proprietary drugs	Four-item index.[a] Sample item: "When I have a cold, I like to take cold medicine." Scoring: 1 = strongly disagree to 4 = strongly agree.[b]		.81
Intention to take proprietary drugs	Four-item index.[a] Sample item: "When I have a cold, I want to take cold medicine." Scoring: 1 = never to 4 = always.[c]		.75
Requests for proprietary drugs	Four-item index. [a] Sample item: "When I have a cold, I ask my parents for cold medicines." Scoring: 1 = never to 4 = always.[c]		.76
Usage of proprietary drugs	Four-item index.[a] Sample item: "Since school started in September, how many times have your parents given you cold medicines?" Scoring: 1 = never to 5 = five or more times.[d]		.52
Subgroup variables			
Age	Younger children = grade 3 (33%)	Older children = grades 5 and 7 (67%)	n.a.[e]
Education level of primary head of household	Low education = primary head did not finish high school (20%)	High education = primary head high school graduate or higher (80%)	n.a.[e]
Illness frequency	High illness = top quartile on 4-item illness frequency index.[a] Sample item: "How many times a year do you get colds?" Scoring: 1 = never to 5 = five or more times.[d] (25%)	Low illness = lower three quarters of sample on the illness frequency index. (75%)	.70
Illness anxiety	High anxiety = top quartile on 4-item illness anxiety index.[a] Sample item: "I worry a lot about getting colds." Scoring: 1 = strongly disagree to 4 = strongly agree.[b] (25%)	Low anxiety = lower three quarters of sample on the illness anxiety index. (75%)	.84

Table 1. ***(Continued)***

Variable	*Measure*		*Coefficient α*
Medicine control	Self-administration = grade 7 children who checked other than "never" responses on 4-item medicine control index.[a] Sample item: "Do your parents let you take cold medicine without asking them?" Scoring: 1 = never to 4 = always.[c] (68%)[f]	No self-administration = remainder of grade 7 children, who responded "never" to all four items on the medicine control index. (32%)[f]	.80

[a] Four-item indexes are based on the four symptoms most often treated by proprietary drugs: colds, coughs, headaches and stomachaches; and on the corresponding o-t-c medicine categories: cold medicine, cough medicine, headache medicine and stomachache medicine. Item scores were averaged to obtain mean index scores.

[b] Actual response format for these Likert-type scales was: NO ☐ no ☐ yes ☐ YES ☐, scored 1, 2, 3 and 4, respectively. This format has been found appropriate for children of the present age range (see Rossiter, 1977).

[c] Actual response format for these frequency questions was: ☐ never ☐ sometimes ☐ most times ☐ always, scored 1, 2, 3 and 4, respectively.

[d] Children were asked to circle a number, corresponding to the exact frequency, from the series 1, 2, 3, 4, 5+, where 5+ indicated five or more times.

[e] Single item measure for which internal consistency reliability is not applicable.

[f] Subgroups based on medicine control were confined to the oldest children in the sample (seventh grade) as the incidence of self-administration was very small below this age level.

be shown, first, that the particular subgroup has more strongly favorable dispositions toward proprietary drugs than other children, and, second, that their dispositions are more strongly related to TV drug advertising exposure.

The five subgroups are not mutually exclusive. However, it was felt that the policy relevance of the present research would be served better by examining relatively large and easily identifiable subgroups of children based on single classificatory variables than by examining the smaller subgroups that result when multiple identifying variables are used.

The sample for this study was drawn from inner city and suburban areas of Philadelphia, in March 1977. Parental permission letters were distributed to 1,050 children in six school districts (12 schools), representing a range of SES backgrounds, in the third, fifth, and seventh grades, an age range encompassing 8- to 13-year-olds. Of this number, 17 percent did not complete or return parental permission letters or were absent from school on the test date. A further 6 percent provided incomplete data (defined as one item or more omitted) or exhibited extreme language problems, and were deleted from the analysis. Another 2 percent were randomly removed from the sample because they were siblings of other children in the sample, and a follow-up interview with mothers was planned to obtain SES data, with each mother reporting on only one child. In 11 percent of cases, mothers and guardians could not be located or satisfactorily interviewed after two callbacks, resulting in further sample reduction. The various loss factors were judged unavoidable within the resources of the study. Losses did not appear to be systematic by age or SES groups.

The final sample for this analysis comprised 668 children, approximately equally divided by sex, at three grade levels: third (N = 218), fifth (N = 222) and seventh (N = 228). The SES profile of the sample, according to equally weighted head of household occupational and educational status, was as follows: upper middle class, 14 percent; lower middle class, 31 percent; working class, 34 percent; and disadvantaged, 21 percent. A large proportion of the disadvantaged group happened to be black, whereas the other SES groups were predominantly white. However, race was not a theoretically relevant variable in our study and thus was not specifically recorded.

Results

Children's dispositions toward proprietary drugs, for the total sample, are shown in Table 2. With the exception of one dispositional

Table 2. Mean Dispositions Toward Proprietary Drugs and Correlations with TV Drug Advertising Exposure (Total Sample)

Measure	*Total Sample (N = 668)* Mean	S.D.	*Correlation with Exposure (Uncorrected)*[a]	*Correlation with Exposure (Corrected)*[b]
Belief[c]	3.2	.6	.12*	.16*
Affect	2.6	.8	.13*	.17*
Intention	2.5	.8	.16*	.21*
Requests	2.5	.8	.22*	.30*
Usage[d]	2.5	1.3	.06*	.10*
TV drug ad exposure[e]	13.8	8.2		

[a] All correlations are partialed for grade level; significance levels are based on 1-tailed tests.
[b] Correction for attenuation = $r_{xy}/(\sqrt{r_{xx}}\ \sqrt{r_{yy}})$.
[c] Range for first four measures is 1 to 4 with 4 = highest.
[d] Range for usage measure is 0 to 5 with 5 = highest.
[e] Measured in terms of number of 30-second drug commercials per week.
* $p < .05$.

measure, belief in the efficacy of proprietary drugs, the children's mean dispositions are very close to the midpoint of each scale. Specifically, the "average" 8- to 13-year-old child: agrees but does not strongly agree that proprietary drugs are effective; exhibits rather neutral affect, neither liking nor disliking to take these products; intends to take proprietary drugs about half the time when common illness symptoms occur; requests proprietary drugs about half the time when common illnesses occur; and, with parents presumably playing a deciding role, takes these products about 20 times a year (i.e., an average of five times a year for each of the four drug categories). The somewhat higher mean responses for the belief measure are an exception to the midpoint trends of the other measures. Children seem to exhibit considerable belief in the efficacy of proprietary drugs.

The relationship of advertising to children's proprietary drug dispositions is also shown in Table 2. It should be noted that all correlations, which are Pearson product-moment coefficients, have been adjusted for the effects of less than perfect reliability in the component measures and are thus upper-limit estimates. Unadjusted correlations are shown in Table 2 to give an indication of the effect of this adjustment. Also, with the exception of age-specific results, all correlations have been partialed for grade level to eliminate a spurious increase in correlation due to mutually declining dispositions and exposure levels with increasing age.

According to our estimate, the average child is exposed to about 14 drug commercials per week, or approximately two each day in a typical day of TV viewing. The correlations between exposure and dispositions are, for the most part, relatively small, although all are statistically significant. Because of children's relatively strong beliefs in the efficacy of proprietary drugs, noted above, we further analyzed the relationship of this dispositional variable to advertising exposure (r = .16) and to proprietary drug use (r = .20, not shown) through partial correlation analysis controlling, respectively, for use and exposure. This analysis suggested that children's belief in the efficacy of proprietary drugs may be partly the result of presumably favorable usage experience as well as partly conditioned by advertising, regardless of usage experience. The correlations from which these relationships are inferred, however, are not large. Somewhat larger is the correlation between current exposure and requests for proprietary drugs (r = .30), where the shared variance is almost 10 percent.

Children's requests do not translate directly into usage, however. The correlation between advertising exposure and usage of proprietary drugs is quite small (r = .10). Because of the low reliability of the usage measure, we separately examined the correlations for each type of proprietary drug entering into the usage measure. These correlations were .13 for stomachache remedies, .09 for cough remedies, .04 for cold remedies, and .01 for headache remedies. The low overall usage correlation therefore seems adequately representative of the individual relationships. It is consistent with the supposition that parents mediate children's proprietary drug requests and thereby control children's use of these products.

Turning now to the subgroup hypotheses, it may be recalled that the hypotheses form "pairs." An inference of greater vulnerability for a particular subgroup requires significantly more favorable mean dispositions *and* significantly higher correlations of these dispositions with TV drug advertising exposure. Subgroup means are shown in Table 3 and subgroup correlations in Table 4.

Younger children have significantly more favorable mean dispositions toward proprietary drugs than older children do, although, interestingly, their usage rate is not significantly higher. Younger children are also exposed to significantly more TV drug advertising than older children, a difference of about 15 versus 13 commercial exposures per week. However, the correlational results do not indicate that younger children are more strongly influenced than older children by TV drug advertising. Only one of five correlations is significantly higher for younger children and on three measures the age differences are in the opposite direction. Consequently, the results do not support the hypothesis that younger children are more strongly affected than older children by exposure to TV drug advertising. Neither, inci-

Table 3. Mean Dispositions Toward Proprietary Drugs (Subgroups)[a]

	Age		Parent Education		Illness Frequency		Illness Anxiety		Self-Administration[b]	
	Younger (N=218)	*Older (N=450)*	*Low (N=132)*	*High (N=529)*	*High (N=171)*	*Low (N=497)*	*High (N=166)*	*Low (N=502)*	*Some (N=155)*	*None (N=55)*
Belief	3.5*	3.0	3.2	3.2	3.3	3.2	3.5*	3.1	2.9	2.9
Affect	2.8*	2.4	2.6	2.6	2.7*	2.5	2.9*	2.5	2.4	2.3
Intention	2.7*	2.4	2.6	2.4	2.7*	2.4	2.6*	2.4	2.4*	2.1
Requests	2.8*	2.4	2.5	2.5	2.7*	2.4	2.7*	2.4	2.2	2.3
Usage	2.6	2.4	2.5	2.5	3.2*	2.4	2.7*	2.4	2.3	2.1
TV drug ad exposure	15.2*	13.1	17.2*	12.9	15.2*	13.3	17.2*	12.7	11.7	13.7

[a] Scale ranges as in Table 2.
[b] Seventh grade only.
* Significant mean differences in the direction of the first-mentioned subgroup in each pair (one-tailed tests). $p < .05$.

Table 4. Correlations of Proprietary Drug Dispositions with TV Drug Advertising Exposure (Subgroups)[a]

	Age		Parent Education		Illness Frequency		Illness Anxiety		Self-Administration[b]	
	Younger (N=218)	*Older (N=450)*	*Low (N=132)*	*High (N=529)*	*High (N=171)*	*Low (N=497)*	*High (N=166)*	*Low (N=502)*	*Some (N=155)*	*None (N=55)*
Belief	−.02	.28	.06	.20	.23	.13	.26*	.07	.23	.29
Affect	.22	.14	.13	.17	.28*	.12	.39*	.02	.12	.26
Intention	.29*	.16	.44*	.12	.15	.22	.43*	.09	.19	.23
Requests	.26	.33	.39	.27	.25	.30	.43*	.21	.33	.34
Usage	.03	.15	.12	.10	.00	.09	.04	.07	.38	.23

[a] Correlations corrected for attentuation as in Table 2. All except those in the first and last two columns have been partialed for grade level since they involve children of different ages (see text).
[b] Seventh grade only.
* Significant differences in the direction of the first-mentioned subgroup in each pair (one-tailed tests). $p < .05$.

dentally, do they support the counter-hypothesis that older children are more vulnerable due to cumulative exposure.

Children from educationally "disadvantaged" families are exposed to a considerably higher level of TV drug advertising than children from other families: an average of 17 versus 13 commercial exposures per week. The correlational results suggest that disadvantaged children are somewhat more strongly affected by TV drug advertising than other children; exposure seems to have a rather sizable influence on their behavioral tendencies in the form of intentions (r = .44) and requests (r = .39) for these products. However, the comparison of mean results shows that educationally disadvantaged children do not differ from other children in terms of proprietary drug dispositions or usage levels. It seems, therefore, that the variance in behavioral tendencies is more highly related to TV drug advertising exposure for educationally disadvantaged children than for other children but that their mean tendencies toward proprietary drug usage are no different. Thus, on the basis of lack of mean differences we must reject the vulnerability hypothesis for the educationally disadvantaged subgroup.

Children who have a relatively high illness frequency are significantly more favorably disposed toward proprietary drugs than other children on four out of five measures, including usage, with the latter finding not unexpected. These children also are exposed to somewhat more TV drug advertising. However, the correlational results lend little credence to the argument that higher exposure results in more favorable dispositions, with the minor exception of the correlation for affect, indicating the tendency to like (or not mind) taking these products when symptoms occur. The more favorable dispositions of children who are more frequently ill appear to be unrelated to TV drug advertising exposure. The lack of correlational support in this case leads us to reject the vulnerability hypothesis for this subgroup.

The vulnerability hypothesis is, however, supported for children with more anxiety about illness. These children exhibit significantly more favorable dispositions toward proprietary drugs on all five measures. Their exposure to TV drug advertising is also considerably higher than that of other children, at an average of 17 versus 13 commercial exposures per week. The correlational results in this instance reveal a fairly strong relationship between exposure and dispositions. Four of the correlations for this subgroup are significantly higher than the correlations for the remainder of the sample, and three are comparatively large (on the order of r = .40). The exception is the small correlation between exposure and usage. Overall, the means and correlational results support the hypothesis that children with more anxiety about illness are a vulnerable subgroup but, even in this subgroup, children's dispositions toward proprietary drugs do not seem to be strongly favorable.

Older children who are occasionally allowed to take proprietary drugs on their own initiative constitute the final subgroup investigated in this study. The mean results and the correlational results both lead to rejection of the hypothesis that such children are more vulnerable to TV drug advertising than their seventh-grade peers. However, current exposure to TV drug advertising does appear to have a moderately large correlation with proprietary drug usage among such children (r = .38). The latter finding suggests that as parental control is lessened, which occurred in our sample for about three out of four older children, TV drug advertising may affect behavior. It is important to note that we are talking about short-run variation rather than long-run or cumulative effects. The results of Milavsky et al. suggest that the long-run effects of TV drug advertising on proprietary drug use by teenagers, where parental control may be even lower, is quite small (Tau C = .12). Also, even though older children's discretionary use may vary substantially with advertising exposure, our mean results suggest that their overall usage rate is no different from that of children of like age whose usage is parentally controlled. The lack of mean differences therefore leads us to reject the vulnerability hypothesis for this subgroup.

Discussion

The findings of the present study lend general and broader support to the findings of previous studies indicating that children (Atkin, 1978) and teenagers (Milavsky et al., 1975) are not strongly disposed toward usage of proprietary drugs. Children's rather moderate dispositions are to a modest extent influenced by their exposure to proprietary drug advertising on television (to the extent that influence can be inferred from simple correlational relationships) but this influence cannot be regarded as substantial unless 10 to 20 percent shared variance is regarded as substantial. Neither is there an age trend indicative of cumulative or long-run influence. In fact, children's dispositions toward proprietary drugs decline significantly as they grow older and are never very strong.

The present study obtained these findings with broad measures of children's proprietary drug dispositions and upper limit correlation estimates with TV drug advertising exposure that gave every chance for "effects" to emerge. Although the exposure-disposition relationships were examined only through correlation, which does not imply cause and effect, it may be noted that demonstration of strong correlations would be an essential step in a causal inference. Modest correlations, indicating less than 20 percent shared variance, in conjunction with moderate mean levels of dispositions, suggest that the argument that TV drug advertising produces strongly favorable dispositions toward proprietary drugs in childhood would be difficult to sustain in light of the present evidence, even for ostensibly "vulnerable" subsegments of the child population.

It is possible that multivariate analysis, examining the role of TV advertising in the context of other personal and social factors (see Shimp and Dyer, 1979), would find TV drug advertising to be an even smaller contributor to children's proprietary drug dispositions than we have found here. This possibility is suggested in an alternative (regression) analysis of the total sample data by Robertson et al. (1979). The present analysis chose to ignore the complexity of multivariate possibilities (beyond the exposure variable in interaction with the respective subgroup variables) in the interest of providing straightforward, if artificially isolated estimates of the role of TV drug advertising. Consequently, the advertising correlations should be regarded as upper limit estimates of exposure "effects" which are probably not reached in reality but are nevertheless informative, as upper limit estimates, for policy makers.

What do the present findings suggest for public policy? Current policy prohibits TV advertising for proprietary drugs on children's programs and does not allow such advertising at other times to be expressly directed to children. Further restrictions on TV drug advertising, e.g., until after 9:00 P.M. as proposed in the attorneys general petition to the FCC, do not seem warranted. Our findings indicate that children are exposed to TV drug advertising while watching general or adult programs, and that this advertising may to a small extent influence their attitudes and behaviors toward these products—at least on a short-run basis. However, children's attitudes and behaviors toward proprietary drugs remain at levels which can be described as moderate. Moreover, as children grow older and accumulate more experience with proprietary drugs and TV drug advertising, their dispositions toward these products become even more moderate. In other words, TV drug advertising does not seem to influence children to an extent that may be regarded as socially harmful or worthy of further legislative attention.

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