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ABSTRACT

A two-week consumer training program was designed to teach kindergarten children about advertising claims on commercial television programs. One objective of the program was to teach kindergarteners that commercials are designed to persuade people to buy products. Kindergarteners were taught to recognize the difference between commercials and other classes of television content. A second objective was to teach kindergarteners to look for information about products when they watched commercials. Children were taught to recognize four types of appeals made by commercials: product information appeals, fun and entertainment appeals, premium offers, and social acceptability appeals. These concepts were taught through a variety of physical activities (for example, having children raise their hands when a break occurred between a program and a commercial) and having children discuss their own experiences. The total time spent on training was about three and one-half hours over the two-week program. Performance was generally high by the end of the program. In addition, children who had participated in training performed better than a control group after an eight-month time delay. Following the delay, there was some decline in children's ability to identify commercials and understand persuasive intent, though performance level was still above that of the pre-training performance level. (SS)

TELEVISION WATCHING AS AN INFORMATION PROCESSING TASK: PROGRAMMING AND ADVERTISING

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My purpose today is to review some of my recent research on children's understanding of television advertising as it relates to our knowledge of how children watch television and the role of advertising in the task of watching television. Then, I would like to turn to a brief discussion of the development of a consumer learning program intended to help kindergarten children become more discriminating viewers of television advertising. Current policy concerns regarding the effects of television violence, advertising, and the effects of television watching per se have led a number of observers around the country to propose the development of programs on receivership skills--that is, programs to teach children to be better receivers or information processors of television messages. For instance, in November a national conference sponsored by several federal agencies will be held to discuss just such a national undertaking. While the threat of government intervention into particular broadcasting practices thought by some to be harmful to children, such as the current Federal Trade Commission investigation of television advertising to children, is still visible, other avenues for improving the television-child relationship are also fruitful areas for exploration. One of these areas is the development of programs to teach children to be better processors of television advertising.

For the past several years, I have been engaged in research on children's understanding of television advertisements. Most of this research, with my colleagues Daniel Wackman and Scott Ward, has involved examination of young, grade school children's attention to and memory for commercial claims, and their ability to distinguish programs from advertising content. Over the years we have engaged in observational studies of children's attention to

television advertising (Ward and Wackman, 1973 and Wartella and Ettema, 1974), and both survey (Ward, Wackman and Wartella, 1977) and experimental studies (Wackman, Wartella and Ward, 1979) of children's understanding of and memory for advertising information. Moreover we have been interested in the role advertising plays in product requests and consumer choices. We adopted the perspective that the way in which advertising influences consumer choices is by providing viewers with information about products, brand name, product attributes to be considered, choice strategies such as always buy the tooth-pastes with chloride, etc. Therefore, children's memory of product information from advertising, we thought, should be related to the kinds of information the children use in product decisionmaking.

In adopting this perspective, however, we gave little thought to the task of watching television advertising. It would seem reasonable to assume that in most instances when young, grade school children sit down in front of a TV set and watch a commercial, there is little "intention" to seek information to use in a purchase decision. Indeed, it is likely that watching a commercial is really subsidiary to the main activity--watching the television program. Directed and planful watching of television advertising may occur, if only rarely, and most likely at particular times during the year, such as Christmas time when children are seeking gift ideas (Caron and Ward, 1975). Yet children do watch advertisements, do request advertised products (Robertson and Rossiter, 1977) and seem to be influenced to choose advertised products over non-advertised products (Goldberg and Gorn, 1978). How then does watching television advertising fit into the task of watching television?

Watching TV programs and advertisements.

Television commercials serve as a major structural aspect of television programming. In this regard television commercials may pose particular demands

on viewers trying to process television content. For instance, Salomon and Cohen (1978) and Cohen and Salomon (1979) view television advertisements as functionally equivalent to the practice of channel switching; and furthermore, they assert that both commercials and channel switching may lead to shallow processing of television programming content. Shallow, that is, in the sense that children may not be investing much mental effort into making sense of the television programming.

From Salomon's point of view, and others interested in television programs per se, advertisements can be viewed as "interruptions" to the main processing task, that of making sense of the television program. Other researchers (Collins, 1979) have pointed out that television commercials may place stress on the abilities of children to make leaps and connections among story elements because of their interruption of the story plotlines.

If we view advertisements as "interruptions" to the main information processing task, that of making sense of the television program, then we would be concerned to minimize the role of advertising in television watching. One possible solution to the problem of advertising as an interruption, then, is to cluster advertisements at the beginning or end of programs to try to minimize the disruptiveness of the advertisements. Indeed this is one recommendation currently under consideration at the Federal Communications Commission in their investigation of children's programming practices (FCC Inquiry, 1978).

On the other hand, if we view advertisements role in breaking up other programming content as "punctuation" rather than interruption, then advertising may structurally serve a different role in the task of watching television.

By punctation, I mean that advertisements help structure television programming by denoting certain break points in action sequences. Changes from one program to the next program are demarcated by advertisements and announcements. Similarly, during the course of a television narative program, television commercials typically occur at regular intervals and serve to punctuate the flow of the narrative. One of the best examples I can think of is that of the old television program Mission Impossible, which seemed invariably to have a member of the IMF team at the verge of being discovered, the traditional cliffhanger, right before the commercial break twenty-five minutes into the program. After the commercial break, when the television program resumed, the IMF force would be saved from discovery and the mission would continue to successful completion. The commercials punctuated and highlighted the program suspense. As such a punctuation of the programming, advertising content thus can serve other roles in information processing. For instance, Lull (1979) suggests that the regularity and predictability of advertisements help set viewing rules regarding the "rhythm of viewing" and the commercial breaks help establish routinized patterns of talk in front of the television set. Lindlof (1979) suggests that commercial breaks may serve to provide viewers with time between parts of the program for thinking about the program story elements they had just seen, that is as a time for rehearsing, reflecting and inference-making. When viewed as punctuation, advertising seems far less of an intrusion to the processing of the programming content.

It's difficult to discern from the empirical evidence regarding children's attention to and memory for advertising, when and whether advertising is serving as an interruption or as punctuation. Observational studies of attention to

television content suggests that children may be as likely as adults to tune out when commercials come on the air. For instance, Bechtel, Achelpol and Akers (1972) report in their observational study of television watching in the home that commercials accounted for the largest block of non-watching behavior. Nearly one-fourth of all non-watching time was time when commercials were televised. Furthermore, they found that the one-to-ten year old children they observed, watched the commercials only 40 percent of the time the commercials were on television as compared to the eleven to nineteen year old age group who watched the commercials 55 percent of the time they were on the air.

Further support for the finding that children tune out of commercials comes from a recent in-home observational study by Winick and Winick (1979). In a discussion of children's viewing styles, they report that commercials were regarded as relatively unimportant. They report that a child as young as two left the room regularly every time a commercial was shown. However, they provide no data regarding the frequency with which this occurred.

Other observational studies in more controlled environments also report less attention to commercials than to programs such as Zuckermen, Zigler and Stevenson's (1978) study of children's attention behavior.

On the other hand, there is observational support for the notion that advertising content is a focal processing task. For instance, Wartella and Ettema (1974) found that nursery, kindergarten and second grade children's attention to commercials increased at the onset of the commercial then decreased as the commercial continued. In this sense the change in content on the television screen as indicated by the onset of the commercial represented the kind of bit change Anderson and his colleagues (1979) have discussed as elements children use to monitor the television screen.

Furthermore, in the same observational study which was conducted in classrooms in schools, there were instances of children who were not watching the program who turned to full attention at the onset of the commercials.

Furthermore, there is indication that children remember very well advertising claims. In our own work we have found children as young as kindergarteners scoring about 40 percent on recognition tests of childrens memory for specially produced food commercials they had just seen in a half hour cartoon program (Wackman, Wartella and Ward, 1979). Similarly, Alexander (1979) reports a content analysis of children's discussions with mothers about Christmas wish lists. She noted that kindergarten and third grade children use exact wordings of advertising claims for toy products in requesting these products for Christmas.

These findings indicate that sometimes children tune out of the commercial suggesting that the commercial is serving as an intrusion to the child's watching of the program and at other times they may be paying even more attention to the commercial than to the program. The level of involvement of the viewers in the program, then, may be indicated by their response to the commercial breaks. When viewers are investing effort at making sense of the program, the commercial may indeed be very disruptive, and therefore, something to tune out. On the other hand, if shallow processing is going on, the punctuation of the program by the commercials, may actually erve to heighten attention to the television set and thus, increase attention to the commercial.

A third possibility is that young children may not be making any distinction between the television program and the television commerical. It may be that there is no discrimination- that programming unfolds as a mass of bit changes but that these major demarcation points of commercials are not noticed by children. This third possibilitv would seem to be the case most likely for very young

viewers, those below ages five or six. Evidence for this position resides in research regarding children's ability to discriminate television programs from television commercials. Discrimination has typically been assessed in two ways: by attention data indicating shifts in attention when commercials come on the air and by verbal measures of children's abilities to articulate a program/commercial distinction. For instance, Ward and Wackman (1973) report that five to eight year old children's attention remained static across program commercial separations. Their observational study was conducted by mothers watching their children watch television in their own homes; and as such there may be substantial methodological difficulty. According to various survey research studies (Ward et al, 1977; and Winick and Winick, 1979), children mention perceptual characteristics, such as programs are long and commercials are short, when they are asked to discriminate programs from commercials.

In a recent study, Palmer and McDowell (1979) examined the success of the three networks attempts to make a clear separation between programming and commercial content as required by the FCC's 1974 Children's Report. Sixty kindergarten and first grade children were assigned to one of four viewing groups, a control group which showed a television program and commercials with no separators and three experimental groups each one utilizing a particular network program/commercial separator format. The programs were then stopped at predetermined points during the commercials and during the program, and children were asked whether what they had just seen was part of the show or part of the commercial. Children in the control groups were able to distinguish programs from commercials as well as children in any of the experimental groups; about two-thirds of the identifications of commercials made were correct by these children.

The cues the kindergarten and first grade children use to discriminate between the programs and the commercials are by and large perceptual cues, such as length of the commercials. Few children as young as kindergarteners or first graders are able to articulate a distinction between programs and commercials based on the selling intent of the advertisers (Ward, Wackman and Wartella, 1979; and Robertson and Rossiter, 1974). These data, however, do not necessarily indicate that the children are unaware that something new is on the set when a television commercial is aired, but rather that they have difficulty identifying what that something new is.

It seems likely then that closer examination should be given to children's processing of both programs and commercials and in particular, the relationship between the two. How the children respond to the commercial breaks very well may be indicative of how much effort they are investing in processing the programs. The first step in this process though is assurance that children can discriminate the presence of a program as distinct from a television commercial. My colleagues Dan Wackman and Scott Ward and I recently developed and tested a pilot program to teaching kindergarteners how to discriminate programs from commercials.

Consumer Learning Program.

Between October 1977 and December 1978, Dan Wackman, Scott Ward and I conducted several experimental studies of kindergarten and third grade children's memory for advertising information and use of information in product decision-making (Wackman, Wartella and Ward, 1979). Our previous research indicated that a majority of kindergarteners had only rudimentary understanding of the persuasive aspects of advertising. Therefore, one aspect of this research was to develop a program designed to be short term, in this case two weeks, which

could teach children about advertising. We then planned to test the results of teaching kindergarteners about advertising's persuasive intent on their understanding of advertising claims. That is, we wanted to see if understanding the purpose of advertising serves to filter the impact of advertising for kindergarten children.

The objective of the two week consumer training program was two-fold. First, we wanted to teach kindergarteners that commercials were designed to persuade people to buy products. This aspect of the training included helping kindergarteners recognize the difference between commercials and other classes of television content, such as programs, program previews and public service announcements. Secondly, the training program was designed to teach kindergarteners to look for information about products when they watched commercials. We included in the program a unit on different types of information about products that could be gotten from TV commercials and tried to teach the children to recognize four types of appeals commercials used--product information appeals, fun and entertainment appeals, premium offers and social acceptability appeals. In particular, we wanted to focus the children's attention on the product information in commercials.

To teach these concepts, we utilized a variety of activities in conjunction with showing children videotapes illustrating the concepts we were teaching. The main concern in designing the learning experiences was to develop physical activities to reinforce the concepts being taught. For example, we had children raise their hand when a break occurred between a program and a commercial. We had children color in a symbol to differentiate between different types of material (eg. commercial and PSA or product information and social acceptability appeals). We also had the children discuss some of their own experiences

with products and commercials, but lecturing and directed discussion constituted relatively small parts of the training program.

Children who participated in the training program and an experimental study to assess the effects of training on other sorts of information processing of television commercials, were all kindergarteners in a single school in the Mounds View School district in St. Paul, Minnesota. This is a suburban school district in the middle and upper middle class income range. Two kindergarten classes were randomly assigned to the experiment, that is training condition, and two classes were assigned to the control condition, no training. Two different teachers presented the training program, which consisted of 9 days of training (two of these days were within program testing days). The training program constituted about 20 to 35 minutes of the class time during each training day. Thus, the kindergarteners received about three and one-half hours of consumer trainingover the two week program.

After training, a break of a week was taken before experimental group children were tested. The break between training and testing was made to enable us to determine whether retention had occurred even after some time lapse. Also a third test of the children's learning of the program concepts occurred eight months later when we went back into the schools again.

We believe the program was successful, particularly in teaching children about different kinds of non-program content on television. At the end of the first week of training, more than three-quarters of the children scored 75 percent or higher on a visual test of the concept of commercial, and 56 percent of the children were 100 percent accurate in identifying commercials from a videotape test. Fifty-four percent of the children scored 75 percent, or higher on a test of the concept of program preview and PSA's were identified with somewhat less accuracy, 44 percent of the children scoring .75 or higher on this recognition test.

We again tested the kindergarteners who participated in the training program after an eight month delay. We used the same videotapes and the same testing procedures to examine their retention of the concepts taught during the training program. Although there was some decline in the children's abilities to identify different kinds of program content, i.e. commercials, PSA's and previews, the children who had participated in training did perform better than a control group. For example, 77 percent of the training group children scored very high (.75 or higher) on recognition of commercials during training, but after eight months, only 57 percent of the training group scored very high.

In addition to examining the children's ability to recognize commercials and other non-program content when shown videotapes of these messages, we examined the impact of the training on the children's abilities to articulate an understanding of the concept of commercials, that is an ability to identify commercial's selling intent. Table I presents the results of the tests of children's understanding of the concept of commercial selling intent when tested at three points in time: prior to training, two weeks after training and eight months after training.

The data indicate that on each measure, the children's understanding of persuasive intent had declined from the level achieved shortly after training. But in all instances, a greater percentage of children recognized persuasive intent as compared to kindergarteners' prior to training, i.e. children in the first column of the table. Further, on perhaps the most concrete question, what do commercials want you to do?, twice as many of the training group subjects showed awareness of the selling intent of commercials on the delayed postest as compared to children prior to training. We believe these data indicate that the consumer training program continued to have a reasonable impact on the children's understanding of persuasive intent after eight months.

This pilot test of consumer training for kindergarteners represents only one of several efforts to improve children's television receivership skills. We expect to continue our efforts at developing consumer training programs. It is becoming apparent that whether or not government regulatory agencies intervene to regulate programming to children, such as by banning advertising during children's hours, other sorts of intervention may still be necessary. To the extent that educational programs can be developed to help children become more efficacious processers of television messages, particularly programs which take into account how children watch television, then government regulation may take less drastic forms than banning of content.

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Table I. Understanding of Persuasive Intent

	Training and Control Pre-test	Training Group Post-test	Training Group Delayed Post-test
Do you know what a commercial is?			
Yes	47%	70%	50%
No	53	30	50
	100%	100%	100%
n	(88)	(53)	(36)
What is a commercial?*			
Persuasive aspect	7%	46%	22%
Information aspect	39	30	67
Other, lower level understanding	34	16	11
Don't know	20	8	0
	100%	100%	100%
n	(41)	(37)	(18)

*Asked only of those who answered "yes" to the question, "Do you know what a commercial is?"

Why are commercials shown on TV?			
Make you buy	29%	60%	42%
Other, lower level understanding	26	11	31
Don't know	45	29	27
	100%	100%	100%
n	(88)	(53)	(36)
What do Commercials want you to do?			
Buy it	31%	72%	61%
Try it	6	0	0
Other, lower level understanding	11	6	6
Don't know	52	22	33
	100%	100%	100%
n	(88)	(53)	(36)