

present for the actual activities. Posttests were completed four to five days after the pretests and within 2 days of the completion of the presentation and activities.

Reliability was ascertained both in the actual interviewing and in the coding of interview responses. In the interviews, all questions were read as written, and the researchers observed one another in practise to ensure that the same tone and emphasis were given to the questions.

Interrater reliability was established for the coding of interviews. This was done by independently coding a random selection of interview schedules each. Ninety-six percent agreement was established.

For analysis the questions on the questionnaire were divided into two types:

Content questions - those dealing with the actual events in the storybook and slide/tape presentation (post-test only).

Concept questions - those dealing with general issues of advertising in the storybook and slide/tape presentation.

A variation of the student's t-test for large populations was used in analysing changes in the pretest and posttest scores of the children on the concept questions alone. Children could get a total of 18 possible points for concept questions.

Analysis of the content questions could only be done once the storybook or slide/tape had been presented. The children could get a possible 6 points on story content. A descriptive analysis of the relationship between content and concept scores of the children was conducted on the story and the slide/tape presentation.

The relationship of the concept learning of the entire advertising component of the kit to the storybook used alone and to slide/tape presentations used along was done using the variation of the t-test for large populations. The posttest results of the entire advertising unit of the kit compared separately to the book and the slide/tape presentation were conducted.

RESULTS

The scores for the test of understanding of the advertising component for the children involved in all three treatments are reported in Table 3.

Storybook

Although the advertising understanding average score was higher following the reading of the story book (6.5 over 5.9), the increase was not statistically significant. One reading of the book was not sufficient to greatly increase knowledge - not a surprising result for preschoolers. The pretest also did not have a significant effect on post test scores.

TABLE 3

Results of Children Participating in the Three Treatments

	Number	Mean	Significance Levels of Differences	
			Pretest Effect	Program Effect
<u>Book</u>				
Pretest	40	6.0	N.S.	N.S.
Posttest (took pretest)	34	7.1		
Posttest Only	32	5.9		
All Posttest	66	6.5		
<u>Slide/Tape</u>				
Pretest	50	5.1	N.S.	.10
Posttest (took pretest)	40	6.4		
Posttest Only	56	6.0		
All Posttest	96	6.2		
<u>Advertising Unit</u>				
Pretest	26	5.9	.05	.05
Posttest (took pretest)	22	9.0		
Posttest Only	16	8.1		
All Posttest	38	8.6		

Analysis of the questions measuring understanding and recall of the story content compared with the concept questions indicated that as children scored higher on content, there was a corresponding increase in their scores on the concept questions. Those who understood and retained more of the story, understood and learned more about advertising. This suggests that the story format is successful in its goal, children can learn from it, and repeated readings would likely increase knowledge about advertising.

Tape/Slide Presentation

Again there was no pretest effect on posttest scores. However, there was a significant impact of the tape/slide presentation on children's understanding of advertising concepts ($\alpha < .10$). Again, those children who scored higher on content knowledge, also scored higher on concept knowledge suggesting the value of the presentation.

Comparisons were done on each of the concept questions to determine which showed the most change from pretest to posttest. The questions which showed the most improvement in the children's knowledge were:

- 1) What happens in a T.V. commercial?
- 2) How is a T.V. commercial different from a T.V. program?
- 3) Why are commercials shown on T.V.?

These areas are highly central to what has been suggested are the necessary understandings basic to perceptual self-defense against advertising messages.

There was wide variability across the day care centres in the way the slide presentation was shown. Conditions such as lighting, size of room, distractions, time of day can have an effect on

on the impact of the presentation. For example, if the room is bright, the slides cannot be seen clearly and the color is dull. If the room is too small and the projector too close to the wall or screen, the pictures are small. Such variability can occur in a study using naturalistic settings. In this study, the centres varied in their average scores from a high mean of 12 to a low of 3.6. As researchers we clearly saw the relationship between environmental conditions and test scores.

The Advertising Unit

The total advertising unit was completed by four day care centres. This involved the reading of the storybook, the tape/slide presentation, and activities chosen or developed from the Teacher's Manual relating to advertising. A total of 38 children participated in this aspect of the study.

The posttest scores of the children who took the pretest were significantly higher than those children not pretested ($\alpha < .05$). Therefore, the pretest did have some effect. The results, however, of the pretested children compared to all children posttested were still significant ($\alpha < .05$). When the pretested group is compared with those children who only had the posttest the results are staggering ($\alpha < .005$).

There was a wide variability in scores across the four centres. This again could be related to the way materials were presented to the children. The centre with the highest mean score spent much time on the project. The storybook was read, and also sent home to parents. Activities covered three days with discussion about needs and wants and product selection. A cardboard T.V. was designed and children made their own commercials.

DISCUSSION AND CONCLUSIONS

A split pretest/posttest design was used. In only one instance, that of the advertising unit test, did the pretest have a significant effect on the posttest results. Reasons for this effect could be the increased exposure to the words advertise and commercial which were key words for this program. Also, children taking the pretest had been selected by the teachers. The criteria for selection varied i.e. more talkative, more outgoing, more advanced children could have been chosen. In one case the pretested children were the oldest in the program.

The nonsignificant difference found for the single presentation of the storybook, Decide Yourself, is not surprising. A single reading of a book cannot hope to accomplish the task of having children understand key concepts as abstract as those relating to advertising. In addition, depending on the size of the group, teacher's knowledge of the content and concepts to be presented, interruptions, variations in story reading ability and teacher preparation, the children may not have the time to digest what had been read.

It can be suggested that the book be used to complement more in-depth activities on

advertising. Also, teachers should possibly prepare for the reading of the book by providing experiences and/or discussion around the topic of advertising. At the least, children should be exposed to the new vocabulary words prior to the reading of the storybook.

The tape/slide presentation had a much stronger impact on the children's understanding of the concepts presented. The medium, itself, is attractive and holds the attention of the children. The colourful slides, song, vocal variation are all appealing to the young child.

There was a wide variability in the facilities for the presentation of the tape/slide production. Some programs had dull pictures due to too much light, others had small pictures due to cramped space, and others had distractions in terms of children giggling, upset, or leaving. It can be suggested that, if possible, the production be shown in a room that can be darkened and is removed from other sources of activity. It is suggested that teachers should discuss the production with children prior to their viewing the slide/tape. Key vocabulary such as advertise, commercial, decide, could be introduced. Key points of the presentation could be identified by the teachers. In some instances the presentation could be stopped and teachers elaborate on the points raised. If time is available, children could benefit from two presentations of the tape. One could follow more of an instructional format with teachers questioning and explaining throughout and another to allow the children to review the tape uninterrupted.

There is a direct relationship between the children's ability to discuss the events of the story and their knowledge of the concepts presented in the slide/tape production. It is important, therefore, for teachers to clarify and reinforce the content presented. "What was Mamma Rabbit doing? Did the children all like the cookies? Where did the cookies come from?" Discussion around the production of the cookies, likes and dislikes of the children in the show, decisions they made about who makes the best cookies, can all be reviewed by the teacher. This type of discussion and reinforcement should also occur in the reading of the storybook.

The development of an entire unit on the advertising theme has the most impact on the children's understanding of the concepts presented. The increased exposure through the storybook, slide/tape, and related activities in itself accounts for the increase in scores. The two components alone provided more exposure to the key concepts and vocabulary that were necessary. The additional activities, while varying across sites, could only reinforce what was already presented. Scores across sites varied with the depth of the activities planned and conducted by the centres. Teachers who had clear goals, who themselves understood the concepts presented, who discussed the relevant issues and planned thoughtful activities had the best results. Again, the importance of the teacher in planning and presenting the program is seen.

As final conclusions, two points are raised:

1. Preschool children can learn relatively complex consumer concepts from creatively prepared, well-presented consumer education materials. Their concept learning is related to their extent of content learning so more exposure, using a variety of interesting materials and experiences, and involving both teachers and parents in the learning process all helps.
2. Those who prepare such materials should also be allowed, even required, to test their effectiveness. Too often limited funds are available for preparation of consumer education and absolutely none to make sure the desired results were achieved and to point out where improvements can be made in the future.
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UNDERSTANDING YOUNG CONSUMERS:
COGNITIVE ABILITIES AND TASK CONDITIONS

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ABSTRACT

Questions regarding the cognitive abilities of young children have generated considerable interest among consumer researchers, government regulators, and consumer educators. Most of the research has focused on the issue of whether or not young children possess the processing skills needed to perform a variety of consumer tasks. Current research in developmental psychology, however, suggests that we should also begin to address the question of when children may or may not exhibit these processing skills. This paper examines several classes of task factors or conditions which have the potential to influence children's abilities to perform well in consumer settings.

INTRODUCTION

Over a decade of research has been devoted to assessing the extent to which children can understand advertising messages and product claims, evaluate and judge product alternatives, and make informed product choices. The majority of studies in this area have focused on the issue of whether or not children are able to perform consumer tasks such as evaluating advertising and judging advertised products. In doing so, evidence has accumulated which supports the view that many children, particularly young children, cannot critically evaluate advertising claims and advertised products, cannot direct their attention to important aspects of commercial messages, cannot adequately judge the value of product alternatives, and cannot use product information effectively in making product choices (for a review, see [1]). Findings such as these have contributed to our understanding of children's consumer abilities and have also provided valuable input into public policy concerns regarding children.

Despite the contributions of this line of inquiry, current research in developmental psychology suggests that we should shift our research focus from the question of whether or not children have certain abilities to the issue of when children can be expected to exhibit these abilities. This view is supported by a large body of developmental research which documents the fact that children's abilities are seldom exhibited in an all-or-none fashion--children perform well under some task conditions but not others. In consumer settings, for example, children's ability to understand advertising claims may depend on the terminology used to describe the claim and the amount of commercial time devoted to describing the claim. By failing to investigate potential factors such as these which may affect children's performance, it is quite possible that we have either underestimated or overestimated children's consumer

skills and abilities. This possibility is particularly unsettling due to the fact that past results regarding children's abilities have been the cornerstone for regulatory policies toward marketing to children. Thus, there is a need to extend our scope of investigation beyond the current focus to one which includes a consideration of conditions under which children abilities can be expected to surface.

This paper examines a number of task factors which affect processing demands and have the potential to influence children's performance in a variety of consumer tasks. In particular, this review examines quantitative factors, which affect the amount of task-related information to be processed, and qualitative factors which affect the effort required to process task-related information. Evidence pertaining to each of these factors is discussed in detail below.

Quantitative Factors

Quantitative factors can reduce processing demands by reducing the amount of task-related information that needs to be processed. This is typically achieved by reducing the total amount of information in a task (see [11]). Reducing the total amount of information increases children's abilities in a variety of situations such as problem-solving [2] and choice [10].

Processing demands can also be reduced by reducing the amount of information that must be processed at one point in time. A processing task is separated into its component parts and the information relevant to each part is presented sequentially. This approach appears to be particularly successful in problem-solving tasks [9].

Qualitative Factors

Qualitative factors can reduce processing demands by reducing the effort required to process task-related information. Encoding, organization, and retrieval operations can be facilitated in three different ways--by varying information formats, instruction sets, and response formats.

Information Format. The manner in which information is presented also influences the effort required to process information [3]. Among those format factors that might be considered, organization and mode of presentation appear to have the strongest and most consistent effects on children's processing abilities.

Mode of presentation can facilitate processing by promoting multiple associations to single items of information in memory [21]. Children remember information conveyed in a pictorial form better than written [12] or spoken words

[18]. The addition of pictures to spoken words enables children to remember more information than words presented alone [19,24]. Mode effects are also evident in narratives. The addition of pictures to written texts increases recall over that obtained with the written text alone [26].

Information organization, in contrast to presentation mode, facilitates processing by promoting associations between discrete items in memory. Children remember related pieces of information far better than unrelated pieces. In particular, children can recall more material when information is organized according to taxonomic categories [12,32] or, in the case of narratives, organized with respect to temporal order [8,13].

Instruction Set. Instruction sets can reduce processing demand by reducing the effort required to use certain mnemonic strategies. Instructions can be used to inform children when to use a strategy, how to use a strategy, or both. As such, instructions can reduce the amount of processing effort that might otherwise be needed in deciding what strategy to use or in producing the correct strategy.

Two types of instructions have proven useful in guiding the encoding and storage of incoming information: rehearsal instructions and imagery instructions. Rehearsal instructions, which typically involve telling children to practice sequentially-presented pieces of information together, enhance young children's ability to remember information [6,16,25]. Imagery instructions, which typically entail asking children to create mental pictures or to imagine how objects "go together," also have a facilitating effect on young children's memory for information [17,20,31].

Instructions can also be useful in guiding the organization of incoming information. Children are typically told to sort items into groups of items that are similar. Instructions to sort in this manner are thought to be helpful because young children may otherwise fail to use their knowledge of relationships as a means for organizing incoming information. By increasing the saliency of organizational strategies, sorting instructions do increase young children's ability to remember information [5,22,30].

Response Format. The manner in which children are required to respond to the task can also reduce the processing difficulty of the task. Some methods for measuring performance appear to place greater processing burdens on children than others.

Differences between recognition and recall formats provide the best example of this problem. In recognition formats, learning is assessed by asking children to recognize which information (pictures, words) was previously presented versus that which was not. In recall situations, learning is assessed by asking children to play back everything they remember without external

cues to aid memory. Recall formats are more difficult for children because they depend upon the retrieval of information from memory without external prompts and because they involve children's verbal abilities [7]. Children typically recognize much more commercial-related information than they are able to recall [14,15,23,28,29].

SUMMARY

A number of quantitative and qualitative factors have the potential to influence young children's processing skills. These factors need to be incorporated into our research on children's consumer abilities to understand the range of abilities which exist among young consumers. The issue of when children exhibit these abilities is just as important, or perhaps even more important, than the questions addressed in previous research.

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ABSTRACT

Much of the academic literature on children's understanding and beliefs about television advertising was written during the 1970's when the Federal Trade Commission was active in its investigation of effects. In general, the young child was described as being unable to process or defend against commercial information. This conclusion was mainly based on oral reports conducted with children. It is argued that the nature of the measurement (i.e., direct, oral interviews) may have resulted in an inaccurate view of children's abilities. New directions in measurement are suggested.

INTRODUCTION

In February, 1978, the Federal Trade Commission published its influential report, "FTC Staff Report On Television Advertising To Children." [26] This staff report outlined conclusions made about children's processing of commercials, or lack thereof, and presented alternative remedies to correct abuses. The report can be viewed as a summary of these prevailing beliefs about advertising's effects on young audiences. Based on academic studies and testimonies of experts, the report concluded the following about television advertising and children's responses to it:

1. Television advertising for children is developed from direct testing and observation of the child audience [26, p.60]. Techniques are used that implant ideas in the child's mind. Such effective techniques include magical promises, motivating scenes, use of music, super heroes, voice of authority, and peer group acceptance appeals.
2. Children are confused about television advertising [26, p.82]. Preschoolers possess cognitive and perceptual limitations as outlined by Piaget's theory. Thus, although young children can "parrot" a message, they rarely understand what the message means. School-age children are also at a disadvantage. They are unable to differentiate between programs and commercials, to understand the selling purpose, and to resist making demands on their parents.

The FTC staff writers consistently cited another influential document, the National Science Foundation Report [2], as providing convergent evidence for the Commission's position that the child is a vulnerable viewer. An examination of this latter report, along with the FTC one, indicates that the similar conclusions were based on an expansive academic literature that possessed a distinctive methodological feature. In personal interviews, children were asked to orally articulate their understanding and beliefs [2]. The limitations of this approach will now be discussed.

THE PROBLEM

The problem with the bulk of studies conducted during the 1970's on children's advertising was their overwhelming reliance on language skills. The research tasks were age inappropriate because they required young children to use advanced skills that were perhaps absent. Chestnut [12] first pointed out this methodological deficiency to advertising researchers. Children may have "failed" tasks because they did not understand instructions and/or were unable to articulate responses. Brown [9, 10, 11] effectively pointed out that young children can often recognize correct information, yet fail to freely recall their knowledge. In brief, children's abilities may have been inaccurately assessed during this era because the tasks used required advanced linguistic skills generally absent in children [20].

RE-EXAMINATIONS OF CHILDREN'S ABILITIES

Developmental psychologists have actively re-examined children's abilities to perform a wide variety of tasks. These re-examinations can be viewed as the "American" challenge to Piaget's traditional stage theory of development.

According to Piagetian research, a child progressed through a series of invariant stages. Piaget's prolific work dominated developmental psychology, and it had a distinguishing characteristic, its oral procedure. Both the instructions and elicited responses were highly verbal in their nature. Thus, a child who was of limited linguistic ability may have appeared incompetent, not because of an inherent inability to perform a task, but because of an inability to understand the task and/or to articulate an appropriate response. For example, Piaget [24] asked children to reproduce explanations about such physical events as the workings of water taps and syringes. Piaget reported that young children were unable to represent or to discuss physical events. Thus, they were egocentric. That is, they interpreted the world only in terms of self.

Gelman [17] argued that the literature in developmental psychology was indeed biased by descriptions of what the young child cannot do. She [17, p.31] argued that we all look egocentric when we try to explain something we do not quite understand or remember.

Empirical evidence was quickly mounting that children's communicative abilities had been underestimated. For example, Shatz and Gelman [29] had conducted three studies in which they illustrated that the child can communicate beyond his/her own perspective. They reasoned that the objects of water taps and syringes were simply too unfamiliar to children; therefore, they asked children to

talk about a toy or a topic of the child's choice. They reported that 4-year olds possessed the ability to alter their speech in response to different-aged listeners, which included adults, 2 year-olds, and peers. If children were truly egocentric, then they would have been unable to adjust their speech beyond their own peer level. However, the young subjects produced shorter utterances when talking to 2 year olds. They were also inclined to use words which attracted attention of young children. Indeed, the closer in age the younger listener was to the speaker, the less the speaker adjusted his/her speech. Children were not inherently egocentric based on these findings.

Developmental psychologists actively pursued Shatz and Gelman's [29] challenge to the Piagetian framework during the 1970's. In a review of the expanding literature on children's communicative performance, Shatz [28] concluded that the context in which the communicative skills are assessed can have an effect on children's performance.

Moreover, recent research has extended the view that children are nonegocentric communicators. Children have been found to detect ambiguity [1] and to engage in comparison processes [35]. The Piagetian perspective suggested that these skills would be absent in the young child.

This challenge to the rigidity of Piaget's stages is not to suggest, however, that the abilities of the 4 year old match those of an adult. No developmental psychologist would argue for equivalence. Indeed, in a more recent review, Shatz [28] argued that the explosion of research essentially opened Pandora's box. Although knowledge about children's abilities increased and challenges to Piaget's theory were supported, more questions were raised than answered. For example, concern for the organizational aspects of performance has increased because young children appear to be deficient in the organizational quality of their knowledge. Pratt, Scribner, and Cole [25] reported that, although preschoolers could adjust rules of a game for their listeners, they produced the information in a disorganized fashion.

Shatz [28] argued that the investigation of such apparent deficits is difficult. Of special note is the problem of assuring that the young child actually understands the task that he/she is required to perform. Attention to both task instructions and task responses is essential in discovering children's actual abilities to perform communicative tasks.

Shatz's observations [28] are of keen relevance to the proposed re-examination of children's abilities to process television advertising. Different tasks may produce different indications of children's abilities. The next section of this paper will include discussion of how the design of the task can affect our conclusions made about the child's responses to commercial information.

It is argued that advertising researchers have provided a narrow view of children's abilities in a commercial-information context because of their limited design of tasks which have reflected the Piagetian perspective. As described in the introduction to this paper, studies conducted during the 1970's employed direct, oral interviews to establish children's abilities. While the conclusions remain as our foundation of knowledge about children's skills, this research approach may have precluded accurate assessment. Children may not have understood what they were supposed to do (i.e., be responsive to a personal interview), and/or they may have lacked the ability to articulate a response satisfactory to the interviewer. Therefore, advertising researchers must attend to the nature of the tasks they design.

I will present a general discussion of four major concerns ever present as potential sources of bias. Then, I will identify two methods contained in the academic literature that are viable alternatives to the direct, oral interview. Finally, I will suggest that we examine current research practices of private firms working with children.

Four Potential Sources of Bias

Four potential sources of bias are: 1) instrument bias, 2) response sets, 3) subject characteristics, and 4) demand characteristics. First, instrument bias has already been suggested in this paper as a major hurdle in the accurate assessment of children's abilities to process television ads. Of course, we know that virtually all measures are inherently biased in their sampling of behavioral phenomenon. The researcher must carefully choose items that seem to measure a particular construct. The very wording of a question can make a difference in successfulness. An example follows.

In their most-cited work, Ward, Wackman, and Wartella [33] reported that only 10% of kindergarten children articulated the selling intent of advertising when asked, "what is a commercial?" That percentage rose to 22% when the question was phrased, "what do commercials try to do?" Wartella [34] reported a dramatic increase to approximately 50% when the question was stated in more concrete terms, "what does this commercial for (product X) want you to do?" A range of from 10% to 50% is considerable when the researcher is trying to establish the extent of understanding of the persuasive impact of advertising.

Instrumentation is a key concern, therefore. As developmental psychologists have reported, we advertising researchers will have to scrutinize our wording of instructions, try rewording key questions before drawing firm conclusions about children's responses, and use abundant common sense in designing instructions.

A second concern is for the appropriateness of response sets. Let me continue with discussion of the determination of children's understanding of the persuasive aspects of television. As discussed

in the introduction to this paper, the FTC staff [26] concluded, based on academic evidence, that children under age 8 are unable to grasp commercial purpose. Donohue, Henke, and Donohue [15] reported dramatic indications that children's knowledge had been grossly underestimated. These researchers reported that 95% of 6 year-olds could correctly indicate commercial purpose by selecting one of two pictorial alternatives. Moreover, 75% of pre-schoolers aged 2 and 3 were successful.

I [21] challenged their conclusion, however, in a recent Journal of Consumer Affairs' article. While a quasi-replication indicated similarly high success, a redesign of the response set produced findings closer to those of Ward, Wackman and Wartella [33]. When two additional nonverbal measures (photos) were included, children were more likely to select an incorrect alternative that had been prior judged as attractive. Thus, four response alternatives resulted in a negative view of children's abilities, while only two indicated high success. Which response set constituted a more appropriate test of children's abilities? That answer is difficult to determine without additional evidence supplied from multiple and diverse tests of abilities. It was argued [21] that advertising researchers must slowly accumulate empirical evidence before offering prematurely definitive answers.

Another example of concern for response alternatives is supplied from industry. One popular, nonverbal response measure is the "smiling faces scale." Cutler [14] of Kennedy Research asserted that while a five-point, funny-face scale worked well with children over age 8, a three-point one was better suited to younger children. He reported that specific faces must be selected with care, however. When a mid-point face was drawn with a straight line representing a neutral-point mouth, young children misconstrued the intended neutrality to represent anger. It was a "mad face."

Once again, the importance of the specifics of response measures are highlighted. Kennedy Research's finding indicates that the representation of just one line can alter the researcher's intended representation of a measure. While it is maintained that such nonverbal response indicators are generally more age-appropriate for young children than the oral articulation method, such measures cannot be assumed, on face, to be valid. In short, all response measures need scrutiny.

A third major concern centers on the subjects' characteristics. While the majority of studies focusing on children's advertising effects have used white, middle-class children, the issue of external validity must be considered. Such factors of children's intelligence, television exposure levels, sex, and race must be recognized before generalizing specific findings to all children. For example, when Donahue, Meyer, and Henke [16] showed McDonald's commercials to black and white children, they reported different reactions based on race. The black children perceived McDonald's food to be better than what they ate at home. The white children did not provide similar indications.

While it is recognized that every study has its own unique set of subject characteristics and that no one study can include subjects that guarantee representativeness, researchers must consider the following. They must carefully describe the subjects' characteristics and be cautious in extending the findings to the general population of children. But, before discussing the fourth methodological concern, let me acknowledge that providing descriptions beyond race and sex is not always easy. Human Subjects Committees, parents, school administrators, and so forth, often object to personal questions that do not seem directly relevant. Access to subjects presents its own problem that may limit the researcher's quest for full information about his/her subjects.

The fourth methodological issue is the problem of demand characteristics. As we know, if subjects are aware of being studied, then they may develop their own hypothesis about expectations and alter their own behavior. Young children may be particularly prone to yeasaying. Yarrow [37, pp. 659-60] presented the following example of a 5 year-old's responses in a play interview:

The child built an enclosure out of large blocks. The examiner asked, "Would you like to be in this all by yourself?" "Yes," replied the child. "Would you like your daddy with you?" "Yes." "Would you like your mommy in there with you?" "Yes." "Would you like to be in this all alone?" "Yes," this time with emphatic agreement.

A supporting illustration is again provided by industry. Novick [23] of Impulse Research Corporation reported that General Foods found a biased response in research about its new product "Pebbles" cereal. Children under the age of 9 tended to choose the broadly smiling faces of a six-point "faces" scale, regardless of what concept was shown or which product was tasted. Such insensitivity to differences may have resulted from a yeasaying tendency. The young children may have wanted to provide what they perceived to be desirable responses to the experimenter.

While the four issues of instrument bias, response sets, subject characteristics, and demand characteristics are not restricted to studies involving children as subjects, they have been neglected by researchers of children's advertising. The real question is not whether all biases can be eliminated, but whether additional explanations can be offered for findings. One step is to attempt to replicate original findings in a new context with new measures. As reported, recent work [21] with additional nonverbal response measures challenged Donohue, Henke, and Donohue's [15] assertion that young preschoolers understand commercial intent.

A second corrective step is to provide situations where the predictions of one theory are directly pitted against outcomes of another. If a researcher can support his/her predictions against a rival theory, then the theory appears more valid. When testing a theory from a variety of angles, trian-

gulation, and reinforcing findings through replication, then the researcher is providing evidence that the theory is surviving a variety of different biases. Confidence can be better placed in the theory, therefore. As previously discussed, traditional Piagetian theory has not survived such tests. Predictions about children's communicative abilities were not borne out. A re-examination of conclusions about children's understanding and beliefs about television advertising may also shake prevailing views as represented in the FTC Staff Report [26].

Alternative Methods

Two alternative methods to the direct, oral interview can be identified in the children's literature on television advertising and programming. The first one, nonverbal response methods, was discussed in the preceding section on response sets. Donohue, Henke, and Donohue [15] and Macklin [21] used nonverbal alternatives (sketches and photos) to examine young children's understanding of commercial intent. As described, conflicting evidence was indicated.

An additional nonverbal response technique is represented by the work of Anderson and his colleagues [3, 4, 5, 6] who have doggedly examined the cognitive processing of television programs by preschoolers. Their work indicates that young children learn to watch TV in an active and strategic manner [c.f. 3]. This conclusion counters assumptions commonly made about the young child.

Anderson's research on attention has led him to re-examine the common assumption that the preschooler's comprehension of television is at best fragmentary and incomplete. Anderson and Smith [5 p. 137] pinpointed the paradox that while children are assumed to be incompetent or incomplete processors, then why do such cinematic techniques as cuts, dissolves, fades, and so forth, guide children's visual attention? Therefore, the researchers have examined the comprehension of cinematic montage (succession of images in a motion picture). By manipulating scripts with various production techniques, children were tested on reconstructing the order of events (e.g., a doll "Susie" and a bed to show her taking a nap) so that the children could indicate their understanding of sequencing of events.

Anderson and Smith [5] reported the 4 year olds as performing much more successfully than the prior literature would have suggested. It is argued that their selection of an age-appropriate task was key to finding more successful cognitive processing.

A second alternative method is represented by two very different research efforts which incorporate play as a dependent variable. First, Bjorklund and Bjorklund [7] presented a novel experiment in which their toddler subjects did not have to provide any direct responses to questions. The researchers manipulated a toy experiment and measured toddlers' 1) time per toy contact and 2) acts per toy contact.

Two raters coded the toddlers' behaviors, and the results indicated that differences in satisfaction existed under different toy quantity levels. However, the results from the two types of measures were not consistent; thus, definite conclusions were wanting. However, different toy categories produced consistent results. Toys that required organization (e.g., stack rings) were associated with longer contact times and greater numbers of acts as compared to responsive toys (e.g., squeak toy) and symbolic toys (e.g., toy telephone). Their findings indicated that observation of play may provide a viable means to test children's responses. It should be noted that their work represents more of the naturalistic perspective which is gaining interest in developmental psychology [36].

Play can also be used as a dependent measure in a more structured context. Goldberg and Gorn [18] provided an example when they measured persistence at play (solving a puzzle that was advertised). They found that boys who viewed a commercial for the toy worked longer at solving the insoluble task. While Goldberg and Gorn's measure is very different from Bjorklund and Bjorklund's [7] in terms of degree of structure, both studies incorporated a highly familiar dependent measure, play. Task familiarity can assist children's performance.

A commonality between the two approaches, the nonverbal response technique and task familiarity, becomes apparent. Task design is critical in accurately assessing young children's abilities; thus, the task must be age-appropriate. First, nonverbal measures such as sketches, photos, and props can assist children in answering. Second, researchers can take advantage of naturalistic or structured observations of such familiar activities as play. Both of these approaches increase the age-appropriateness of a research design focusing on preschooler subjects.

Sources of Bias and Alternative Research Methods

While the four sources of bias, 1) instrument bias, 2) response set, 3) subject characteristics, and 4) demand characteristics, were primarily discussed in terms of direct, oral interviewing, the same problems can contaminate the findings from studies incorporating these other approaches. For example, the wording of instructions must always be considered in terms of age-appropriateness. Also, such demand characteristics as children's responding in a self-perceived, desirable direction must always be considered.

Overall, it has argued that task designs be constructed so as to be age-appropriate for the preschooler. Moreover, these tasks should be constructed so as to minimize sources of bias. Or, stated more precisely, the potential sources of bias must be consciously considered and openly acknowledged by the researcher. Once again, replication and triangulation are urged.

Learning from Industry

As a final note, it is suggested that we academic researchers learn from industry practitioners. For

example, Child Research Service, a division of McCollum Spielman Research, has interviewed over one million children, teenagers, and parents. Hyatt [22] observed that while direct interviewing may pose problems, other techniques can be used. Indeed, "play" is considered a linchpin in extracting marketing information from children [13] .

For example, Child Research Service (CRS) suggests the use of play-acting as a focus group technique. In an overview, CRS suggests the following:

Children act out the things they can't write or say. They might "show" what they thought of a new idea by acting out their response. In a further extension of this technique, the other children try to guess what one child is acting out [13] .

An excellent example is provided by a national paper product manufacturer seeking a new concept, a quasi bib-napkin, for children aged 3 to 6. Children were placed into "pretend family meal" scenarios and were asked to play "parents" with dolls and stuffed animals serving as their children [22] . Children were reported as enacting their roles well with lectures offered to the dolls on the importance of keeping clean at mealtime. The preschoolers rejected fancy bibs tied around the neck on the grounds that they were babyish. Yet, the pretend parents wanted their dolls' clothes protected. They wanted something grown-up to be placed on their laps. CRS assisted the manufacturer in designing a prototype that was within the young children's level of acceptance.

This example illustrates the two alternative methods discussed in the preceding section of this paper. First, the dolls served as props and provided instruments that were nonverbal in their nature. Second, the task, play-acting, was familiar to children. While the CRS study focused on a practical problem, it is argued that its method illustrates techniques than can help answer more "academic" questions as well.

SUMMARY

It has been argued that the bulk of existing literature on children's responses to television advertising may misrepresent the true abilities of young children. This assertion is based on the inappropriateness of the predominant research methodology, direct, oral assessment. Children under age 8 were portrayed as being incomplete, if not incompetent, processors based on direct questioning [26] .

As reviewed, developmental psychologists have found that young children's skills had been underestimated when their abilities were tested differently. For example, children were found not to be consistently egocentric in their communications [17, 29].

The changing view in developmental psychology of the preschooler's abilities challenged the rigid-

ity of Piagetian theoretical perspective that had long-dominated the thinking of the field.

In accord, work on advertising effects on children revealed a reliance on the same Piagetian perspective. Advertising researchers may similarly find that children's abilities in a consumer context have been underestimated.

Four sources of bias, 1) instrument bias, 2) response set, 3) subject characteristics, and 4) demand characteristics were reviewed in terms of the established oral interview methodology. In addition two alternate approaches were suggested. First, the use of nonverbal measures (such as photos, props, etc.) was urged. Second, incorporating either structured or unstructured observations of familiar activities into designs was suggested. For example, play provides a familiar task whether it is structured or unstructured. It was noted that these alternative methods for extracting information are not free from sources of bias, which pose a threat to any and all designs. Finally, advertising researchers may want to learn from industry.

By adapting multiple approaches, replicating their use, and pitting theoretical implications against one another, we may better learn about children's abilities to process television advertising. As our learning accumulates, we advertising researchers may find that we also have opened Pandora's box [28]. That is, the more we learn about young children's abilities in a consumer context, the more we may realize what we do not know.

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GUIDELINES FOR CONSUMER EDUCATION: A CONCEPTUAL BASE FOR THE
ILLINOIS CONSUMER EDUCATION PROFICIENCY EXAM

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ABSTRACT

This paper describes the way in which the Guidelines (Consumer Education in Illinois Schools 1986) are being used in the development of the Illinois Consumer Education Proficiency Exam.

THE PROFICIENCY MANDATE

In 1985, the Illinois Legislature passed SB 730 containing a provision requiring the State Board of Education to develop and provide to local districts a Consumer Education Proficiency Exam. The exam is to be ready by the beginning of the 1986-87 school year. Students in grades 9-12 are eligible to take the exam and students who pass the test are not required to take a course in Consumer Education. The test will be given once a year on a date selected by the State Board.

THE DEVELOPMENT PROCESS

Organization

Responsibility for test development was given to the Program Evaluation and Assessment division of the Illinois State Board of Education. It was decided that one of the steps necessary to the development of the Request for Proposal (RFP) for the Illinois Consumer Education Proficiency Test was the development of a set of objectives for consumer education. The content outlined in the Guidelines was determined to provide a basis for identifying proficient consumer knowledge and skills. A committee was formed to develop consumer education objectives from the Guidelines.

Consumer Education Committee

The Consumer Education Committee is comprised of 27 members representing teachers of consumer education from various disciplines, school district superintendents, higher education, school boards, and the State Board. The Committee's responsibilities include: development of a set of proposed objectives in consumer education, reviewing of test items prior to pilot testing, reviewing the results of the pilot test, and reviewing the final test instrument.

Development of the Objectives

The Committee first met for two days in November at which time members were informed of the

process which was to be followed for test development and implementation. The majority of the time at that meeting was devoted to the development of objectives to be used in testing on topics from the Guidelines. The fifteen topics included in the Guidelines were divided into four functional areas (overview of consumer roles, personal finance, purchasing goods, and purchasing services) and the Committee was broken into subcommittees assigned to specific topics. Subcommittees wrote objectives for the areas they were assigned, being concerned with the objectives' adequacy in covering the material included in the Guidelines and the depth of understanding reflected by the objectives. Subcommittees then presented their work to the entire Committee for review and revision. The total set of preliminary objectives developed in the initial meeting were then revised for consistency of writing style. At the first meeting, the Committee also established a rank order for the fifteen topics included in the Guidelines from most important to least important. At the committee's second meeting (December 2), the objectives were further revised and they were keyed to link specific objectives with the content outline from the Guidelines. In addition, Objectives within the various topic areas were priority ranked.

The Contract

In January the RFP, including copies of the Guidelines and the revised objectives for consumer education, was disseminated. In February, the contract was awarded to the successful bidder (a testing company), and work was begun on the test. A series of meetings has been scheduled with the testing company, the Committee, and the State Board to continue work on the test.

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HISTORY OF THE ILLINOIS CONSUMER GUIDELINES

Ann Pictor, Illinois State Board of Education

On August 11, 1967, the bill requiring Consumer Education in Illinois schools became law. According to the Law, "Pupils in the public schools in grades 8 through 12 shall be taught and be required to study courses which include instruction in consumer education, including but not necessarily limited to installment purchasing, budgeting and comparison of prices." The Superintendent of Public Instruction was identified to devise or approve the consumer education curriculum for grades 10 through 12 and to specify the minimum amount of instruction. The sum of \$35,000 was appropriated to the Superintendent to carry out the provisions of the Act.

"The Guidelines for Consumer Education" were published in 1968. Consumer Education was defined in this first publication as "the development of the individual in the skills, concepts, and understandings required for everyday living to achieve, within the framework of his or her own values maximum utilization of and satisfaction from his or her resources." The following twelve consumer education topics were identified:

- General Principles of Consumer Purchasing
- Budgeting or Managing Money
- Using Consumer Credit Wisely
- Buying Goods
- Buying Services
- Purchasing and Maintaining Automotive Products and Services
- Using Leisure Time, Money and Energy
- Renting or Owning a Home
- Making Use of Insurance
- Savings and Investments
- Consumer Taxes
- Consumer Rights and Responsibilities

Three methods for implementation were indicated.

First, schools could identify several courses which would meet the consumer education requirement and require all students take one of the courses. Some of the possible course titles were listed as "General Business (Introduction to Business, Basic Business), Consumer Problems (Consumer Economics), Home and Family Living (Home Management) Economics."

Second, schools could develop a specific course devoted to consumer education and require that all students take the course.

Third, schools could integrate consumer education into all (or selected) subject areas. The Superintendent of Public Instruction specified that a minimum of three weeks or fifteen class periods be devoted to each of the following topics: installment purchasing, budgeting and comparisons of prices.

The Guidelines were revised and updated in 1972, 1978, and 1986. The law was amended in 1975, 1978, 1979, and 1985. The present law follows:

Sec. 27-12.1. Consumer education. (a) Subject to the provisions of subsection (b) of this Section, pupils in the public schools in grades 9 through 12 shall be taught and be required to study courses which include instruction in the area of consumer education, including but not necessarily limited to installment purchasing, budgeting, comparison of prices and an understanding of the roles of consumers interacting with agriculture, business, labor unions and government in formulating and achieving the goals of the mixed free enterprise system. The State Board of Education shall devise or approve the consumer education curriculum for grades 9 through 12 and specify the minimum amount of instruction to be devoted thereto.

(b) Prior to the commencement of the 1986-1987 school year and prior to the commencement of each school year thereafter, the State Board of Education shall devise, develop and furnish to each school district within the State a uniform Annual Consumer Education Proficiency Test to be administered by each school district to those pupils of the district in grades 9 through 12 who elect to take the same, provided that no pupil shall be permitted to take the test more than once in any school year. Each year the State Board of Education shall administer the test devised and developed for that school year, together with the uniform standards which all districts shall apply in scoring that test. The test shall be devised and developed by the State Board of Education each year in a standardized manner to allow any pupil who takes the same and who achieves a score thereon which is not less than the minimum score established by the State Board of Education for the test so taken to thereby demonstrate sufficient proficiency in the area of consumer education as shall excuse such pupil from the necessity of receiving, as a prerequisite to graduation from high school and receipt of a high school diploma, the minimum amount of instruction in a consumer education curriculum otherwise required by subsection (a) and the rules or regulations promulgated thereunder.

The 1986 publication is entitled "Consumer Education in Illinois Schools 1986." The topics remain basically the same as in the original 1968 Guidelines but with four main headings: The Consumer in The Market Place, The Consumer in Our Economy, Financial Planning, and Goods and Services.

PKU/5851k

PROCEDURES FOR REVISION OF
"CONSUMER EDUCATION IN ILLINOIS SCHOOLS 1986"

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In February, 1985, Ann Pictor, Educational Consultant with the Illinois State Board of Education, asked the Executive Board of the Illinois Consumer Education Association about the advisability of revising the Illinois consumer education guidelines. The 1978 version entitled, "Consumer Education in Illinois Schools: Grades 8-12," was out of print and needed to be updated. The ICEA Board supported the need for the revision and suggested names of individuals to help with the project.

The publication revision committee included high school and university consumer educators from the three disciplines responsible for consumer education courses in Illinois: Business, Home Economics, and Social Studies. Secondary teachers represented both large and small school districts.

The full publication revision committee met twice. The first meeting provided an opportunity for the committee to establish the procedures and agree upon format and terminology. The publication would be divided into three sections: introduction, subject chapters, and consumer education resources. The general introduction would include a discussion of the Illinois Consumer Education mandate, a rationale for consumer education, and consumer education curriculum objectives. The introduction would be followed by chapters for major consumer education subject areas. The 1978 version of the publication had included an extensive list of general resources and addresses. The list had become outdated over the years and was costly to reproduce. It was decided to replace this section with an abridged list of consumer education resources deemed by committee members to be of particular assistance to the beginning teacher of consumer education.

The committee decided that each chapter would be examined and revised and that the general format for each chapter would be similar to the format used in the 1978 document. Each subject chapter would contain the following sections: Introductory Statement, Objectives, Outline of Content, Suggested Activities, and Resources.

Many of the introductory statements had proven timeless, however others required revision. The objectives were examined and a uniform format was determined. All objectives would have the stem: "After studying this unit, students should be able to:" followed by an appropriate verb.

The committee agreed that the Objectives and the Outline of Content would be as comprehensive as possible and identify potential objectives and topics from which teachers could choose. The

committee did not intend for any teacher to use the chapters in their entirety, but rather as a sourcebook for developing curricula.

The Outline of Content was presented in an outline format similar to that of the 1978 version. The subject areas were organized in a logical sequence and in a format for easy reference. The final version was typeset, which allowed for two columns on a page and a more compact and easy-to-read document. The sequence of objectives and content were synchronized for ease of use.

Each chapter also included an extensive list of suggested classroom activities. The activities were modified from the 1978 version or developed by the author of each section.

The Resource section of each chapter received the most extensive revision. Almost all of the resources included in the last version were obsolete. The committee felt that an accurate resource section was critical to the credibility of the document. Each committee member wrote to publishers to confirm the current name and address and the availability of resource materials. Resources were annotated and included print materials, audiovisual materials, computer programs, and simulations, each identified by appropriate symbols. Another major decision was to exclude high school textbooks from the list. College textbooks of particular relevance were included.

Each committee member accepted responsibility for one or more chapters and agreed to prepare a revised version for the next meeting. The committee reconvened and each member presented the revised chapters which were discussed, analyzed, revised, and accepted by the committee.

"Consumer Education in Illinois 1986" was released at the annual conference of the Illinois Consumer Education Association in February, 1986, one year from the beginning of the revision process. The committee hoped that teachers would become familiar with the contents of the document rather than take it home and "file" it to gather dust. To accomplish this end, members of the revision committee led sessions at the ICEA conference. Attendance at the sessions was excellent and many teachers attended several of the sessions to receive information from different authors.

"Consumer Education in Illinois Schools 1986" is a reality and is available to Illinois teachers through the Illinois State Board of Education. The publication has also been submitted to the ERIC system to make it available for use in other states.

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ABSTRACT

Cable television is a rapidly growing industry soon to be the focal point of consumer controversy. Deregulation of the local franchised cable companies creates the untenable circumstance of unregulated monopoly. Price increases and reductions in quality and service appear inevitable following federally mandated removal of local government rate regulation in 1987. Consumer organizations have failed to deal with the issues to date, but cable's competitive successes over other media delivery systems promise increased attention from them in issues of process and substance. Vulnerable groups who can no longer afford cable may lose access to valuable information sources.

INTRODUCTION TO CABLE TV

Cable television's unique characteristics and rapidly growing popularity promise to make television a subject of serious attention from consumer advocates. Broadcasting has not been a consumer economic issue simply because the waves are free and no direct user fees are assessed.

The number of options now available for viewing television is enormous. Innovations in the profitable use of the electromagnetic waves have led to significant changes in the way that it affects our daily lives.

The A.C. Nielsen Company, best known for its television ratings services, has noted that cable television households now watch an average of almost 58 hours of television per week, as compared to non-cable tv households viewing an average of 45 hours and 22 minutes. Cable households thus show an increase of about 30 percent for overall television viewing but the three networks and the independent stations worry as they are losing share of market to specialized cable programmers.

The additional effects of cable on already complex television viewing habits is an emerging area of behavioral study. Many cable channels are experimenting with new formats in programming and advertising that promise to change audience behaviors and speed up innovation in broadcasting as well.

A notable behavior called "channel-hopping," has been enhanced in recent years by the use of hand-held infrared remote control channel changers. Viewers, especially children, tend to move between channels quickly, absorbing only parts of programs. This tends to shorten attention spans, which is particularly of concern to educators. The numbers of cable channels tends to encourage more of this type of scanning in cable homes.⁴

Advertisers are getting nervous because of "ad-zapping," which has also increased with the use of the quick change remote controllers, and by the deletion of their advertisements when viewers use videocassette recorders to copy programs for viewing at more convenient times, called "time-shifting."⁵

Cable's beginnings were humble by comparison to the size and scope of today's industry. Mahony City, Pennsylvania's nearby mountainous terrain blocked reception from Philadelphia. There was no ABC, no NBC, no CBS. There were no sales of television sets, either, until an enterprising appliance dealer named John Watson put up an antenna on a nearby mountain and ran a cable down to the town. Once reception was available, tv sets sold, Watson made some money and cable television was born. The technology was very simple.

By the early 1950's, there were 70 such tiny systems with a total of 14,000 subscribers. These early cable systems, usually called community antenna television systems (CATV), were built where the mountains, valleys, or the distance prevented adequate reception.

Most of these early systems were capable of up to 12 channels, which could be neatly converted into channel numbers 2-13 available on VHF tuners.

In the early 1960's even urban areas such as Manhattan began to install cable systems to exorcise the video ghosts and shadows caused by signals bouncing back and forth between skyscrapers. By then, technology had made possible systems of 20 channels.

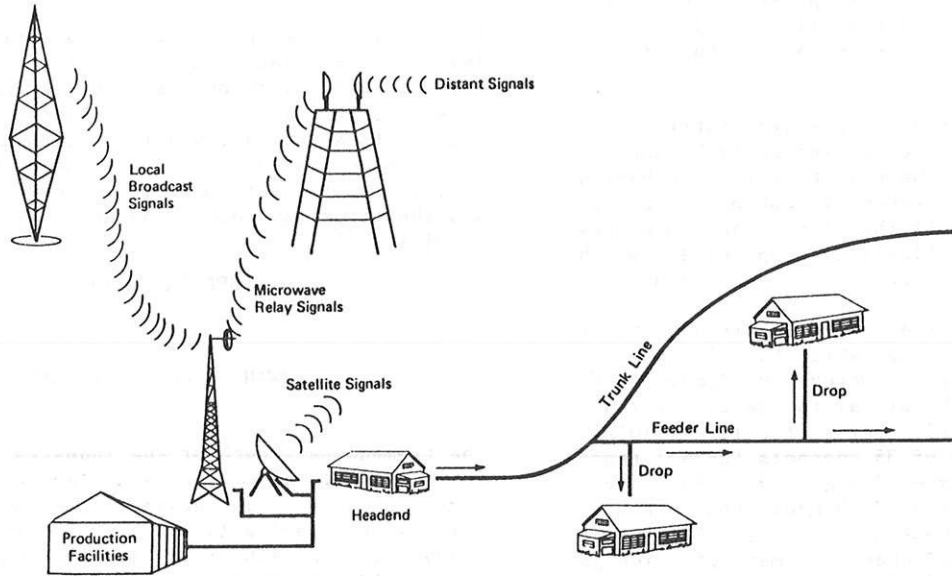
CABLE TECHNOLOGY

Although the number of channels and programming services has continued to increase, the basic design of the cable systems have remained about the same since the 1950's.

(SEE EXHIBIT I)

* Respectively, Professor and Assistant Professor, Department of Marketing, Robert G. Merrick School of Business.

A TYPICAL CABLE COMMUNICATIONS SYSTEM



Source:

Marvin Smith, Radio, TV & Cable: A Telecommunications Approach. New York: Holt, Rinehart and Winston, 1985, p. 131.

Most programming for cable systems consists of rebroadcast local station material; programs from distant television stations such as WTBS or WOR or WGN, (the so-called "superstations"); programs provided by cable programming services such as HBO, the Weather Channel, ESPN, and Cable News Network; and locally produced material from colleges, city and county governments, and from the cable system operator.

The signals of local stations are received by antennas, the distant stations and cable programming services are generally received by microwave towers or satellite dishes, and the locally produced material is generally delivered by cable. All signals are amplified and typically converted to different channels in a building called the "headend."

From the "headend" the signals are distributed to viewers via one or more coaxial cable "trunk" lines, strung along the utility poles, or buried underground, (a more expensive option); "feeder" lines which branch off the trunk lines to groups of subscribers; and finally, "drop" cables which bring the signal into the subscriber's house.

The cable coming to the subscriber is attached to a "converter" box through which the viewer chooses which channel to watch. The "converter" box then delivers the signal to the television set. Most systems built before the late 1970's have the capability of 35 channels (2-36); those built between the late 70's and early 80's have the ability to receive 60 channels (but might only program 35); those built since 1982 have the ability to choose 120 channels, many of which go unprogrammed. Individual cable systems may vary significantly in their choices of technology and capacity depending on local conditions and their own preferences.

GROWTH OF CABLE PROGRAMMING

In the beginning, the relationships between the regular television station owners and the cable systems owners was quite cordial. The broadcasters were pleased because cable increased the number of viewers and the market size, which usually meant more advertising dollars to the broadcasters.

The cable system operators were happy because they were snapping programming signals off-the-air free of charge, which provided them a very low programming cost and a nice profit.

The relationship began to deteriorate when the cable operators started to "import" television signals from other cities and markets, utilizing microwave relays or satellite dishes.

The local broadcasters nearly panicked, fearing economic ruin caused by a tremendous drop in ratings, and complained to the Federal Communications Commission. The FCC, which had originally allocated the broadcast spectrum to encourage the development of local television, set in motion constraints that tightly regulated the cable industry from 1962 to about 1977.

In 1972, TIME, Inc., launched Home Box Office (HBO), the first pay-television network, whose steady diet of movies, sports, specials and continued high revenues have contributed to the tremendous growth of cable.

But the real growth of cable programming began in 1975, when RCA launched the first satellite for domestic communications use. The sky has become crowded with similar satellites whose increased capabilities have allowed for programming channels dedicated to children, news, weather, sports, health, sex, movies, and evangelists. HBO was the first pay-television network on satellite.

(SEE TABLE I)

GROWTH OF CABLE SYSTEMS

The tremendous growth of the industry, usually measured in terms of the percentage of penetration of cable service into homes with televisions (variously called HUT, or Homes Using Television, and TVHH for Television Households) shows a 47 percent penetration in 1985.

(SEE TABLE II)

Another growth indicator is the amount of advertising dollars earned by the systems each year.

(SEE TABLE III)

PUBLIC POLICY AND THE CABLE SYSTEM OWNERS

In the early 1980's, the rapidly growing industry experienced a number of problems. Among them were:

1. Frenetic and costly competition among cable systems for local franchises. Local governments usually sought one company by competitive bidding.
2. Regulation by local government which retained authority over companies' rates for basic packages of services and channels.
3. Continuing federal rules which forced cable systems to carry local broadcasters ("Must carry" rules) and to pay royalties on certain distant broadcast signals.

TABLE 1.

TOP 30 CABLE PROGRAMMERS RANKED BY NUMBER OF SUBSCRIBERS (millions)

Service	Program	Systems	Subs (mm)	Cat.*
1. WTBS	Independent	5,300	25.8	Ads
2. ESPN	Sports	5,730	25.0	Ads
3. CBN	Religion/family	3,560	20.3	Ads
4. CNN	News/features	3,440	19.2	Ads
5. USA	Sports, entnmnt	3,300	17.5	Ads
6. C-SPAN	Hse of Rep/Politics	1,200	13.5	Ads
7. MTV	Music Video	1,500	12.0	Ads
8. HBO	Movies/Specials	4,500	11.5	Pay
9. Nickelodeon	Young People	2,450	11.4	Basic
10. Cable Health Net	Health	1,055	10.7	Ads
11. WGN	Independent	4,170	10.1	Basic
12. ARTS	Cultural	1,625	9.5	Ads
13. Daytime	Women's Progrmg	670	9.5	Ads
14. Modern Sat Net	Variety	470	8.5	Ads
15. Weather Channel	Weather	870	8.3	Ads
16. PTL	Religious prgm.	750	7.5	Free
17. Nashville	Country Music	750	7.4	Ads
18. FNN	Financial	450	6.5	Ads
19. Satellite News	News/Specials	700	6.0	Ads
20. Satellite Pgm	Variety	375	5.7	Ads
21. WOR	Independent	800	4.7	Basic
22. SHOWTIME	Movies/Specials	2,400	4.2	Pay
23. BET	Black entertainment	190	3.8	Ads
24. CNN-2	News Headlines/lcl	510	3.8	Ads
25. ACSN	Education/Community	370	3.2	Basic
26. Trinity	Religious programs	250	2.9	Free
27. Natl Jewish TV	Jewish programs	130	2.5	Ads
28. TMC	All movies	2,350	2.4	Pay
29. CINEMAX	All movies	1,600	2.0	Pay
30. NCN	Religious programs	100	1.4	Free

Data from National Cable Television Association, Satellite Services Report, June 1983.

* Categories:

Basic: small fee to cable operator, usually none to subscriber

Free: no charge to operator or subscriber

Ads: basic or free service which accepts national cable ads

Pay: fee to operator, subscriber pays additional fee

TABLE II.

BASIC/PAY CABLE SUBSCRIBER GROWTH

Year	Basic Subs.	Percent of TVHHs	Pay Subs.	Percent of TVHHs
1976	12,094,000	17	565,000	1
1977	13,194,000	18	1,466,000	2
1978	14,155,000	19	2,980,000	4
1979	16,023,000	21	5,341,000	7
1980	18,672,000	24	7,780,000	10
1981	22,596,000	28	11,804,000	14
1982	26,016,000	32	14,634,000	18
1983	30,636,000	37	18,216,000	22
1984	35,448,000	42	21,944,000	26
1985	40,467,000	47	25,830,000	30
1986	45,656,000	52	29,852,000	34
1987	49,280,000	55	33,152,000	37
1988	52,098,000	57	36,560,000	40
1989	54,988,000	59	40,076,000	43
1990	58,900,000	62	43,700,000	46

TVHHs = Television households

Pay subscribers = Basic subscribers also subscribing to one or more pay cable services.

Source: Cable Information Service

TABLE III.

CABLE ADVERTISING REVENUE GROWTH ESTIMATES
(Millions of Dollars)

Year	Cable Network	National/ Local Spot	Total
1980	50.0	8.0	58.0
1981	104.9	16.7	121.7
1982	195.0	31.8	226.8
1983	303.0	50.4	353.4
1984	434.0	80.0	514.0
1985	597.0	128.0	725.0
1986	790.0	205.0	995.0
1987	1,045.0	308.0	1,363.0
1988	1,347.0	431.0	1,778.0
1989	1,678.0	560.0	2,238.0
1990	2,093.0	672.0	2,765.0
1991	2,543.0	806.0	3,349.0
1992	3,078.0	967.0	4,045.0
1993	3,712.0	1,160.0	4,872.0
1994	4,380.0	1,334.0	5,714.0

Source: Cable TV Advertising (newsletter), March 22, 1984.
Copyright Paul Kagan Associates, Inc.

4. A slowdown in sales of lucrative pay television channels locally. Pay cable (or pay-television) revenues are divided between local systems which collect it from their customers and the satellite pay cable programmer by contracted arrangements.

5. Failure of cable advertising to increase rapidly enough.¹¹

6. The rise of satellite dishes as competitors to both programmers and local cable systems. So-called backyard dishes receive signals from satellites without usually paying for them at all.

The issues facing the industry have determined the public policy issues addressed so far in the 1980's. Both federal legislation and regulation have been promulgated to ease the industry's difficulties. While the financial and competitive problems should have been acknowledged, new public policy changes have not addressed consumer interests directly.

COMPETITION AND THE CONSUMER INTEREST

The assumption to date largely has been that the cable TV consumer can influence the industry through the market place. If pay TV is not worthwhile, consumers will not pay. At an average of approximately \$25 per month revenue (for basic service and one pay channel such as HBO or the Disney Channel) per customer, price increases or a deterioration in variety and quality will probably meet resistance and affect subscriber decisions.¹²

One underlying assumption in the market-as-regulator theory is that video is available in sufficiently varied forms to offer reasonably competitive alternatives. A second assumption is that cable TV is a non-essential service -- a form of entertainment. The third assumption is that economies of scale do not exist to the extent that only one competitor will serve as a natural monopoly.

The desire to "prove" these three free market conditions is understandable, but doomed to frustration. Competition that can match the variety and quality of services at comparable prices to local cable does not exist except within the cable industry itself.

The cable industry has developed so far in defiance of the hope of some that competition from within the industry will even be permitted -- the local franchising process continues to exclude competition de facto even though some argue that the law permits or requires it.¹³

The assumption that cable TV is a non-essential is a social judgement beyond the reach of any single analyst. The vast extent of television audiences argues at a minimum that video is a major institution in the society. Much like

telephone, one can exist and function without physical discomfort or severe personal risk in the absence of television, but then telephone is generally regarded as an essential service. The extent to which society relies upon television to inform the public through news programs and other information may be enhanced by cable.

Cable may also become a means of communicating on a two-way basis, or of providing the facilities for essential services such as fire and burglar alarms. The argument over the essential nature of cable will shift as cable itself changes its content and form.

The economies of scale in cable are not well documented. Their existence appears based on the apparent wasteful nature of duplicate cable distribution systems laid throughout a community. Indeed, duplication would decrease the ratio of customers to investments in facilities for head-to-head competitors to some degree.

This in turn would be offset by increases in the total market size over that of a single non-competitive monopolist. Competition would presumably increase the efficiency of a possibly lethargic monopolist and increase overall consumer satisfaction. There are not sufficient tests of competition in the marketplace to draw convincing conclusions about these issues.¹⁴

Other authorities stress that regardless of the possible benefits of competition in some cases, that natural monopolies will occur where economies of scale are significantly attractive for competitors to try to eliminate each other. Such unstable competition was in fact first observed by John Stuart Mill.¹⁵

The need for careful evaluation of the natural monopoly facts in local cable systems is evident to help ascertain whether a change in the de facto exclusive local franchise system is worthwhile. The recent passage of cable reform legislation which did not accomplish the elimination of de facto monopoly makes it necessary to address problems in the industry for the next decade or more in terms of the need to develop public policies for locally franchised monopolies rather than for competitors.

Unfortunately, Congress chose to deregulate many important aspects of cable television including pricing -- as well as the quality, variety, and content of basic cable service. Local government's role is to be drastically diminished by federal mandate.¹⁶

The full extent of price deregulation under the law is effective in 1987. That year may prove to be non-eventful as the industry tests new pricing ideas carefully and avoids political backlash. At some point, and if pessimists are correct in assessing the market as a deregulated monopoly situation, textbook monopoly pricing may occur in many communities by 1990.¹⁷

In any event the law is an unreasonable public policy that unleashes monopoly pricing. Politically astute or robber baron in their implementation, such price increases are not defensible given the existing franchise system, the lack of competition, and the restraints on regulation embodied in the 1984 Cable Franchise Policy and Communications Act.

OTHER CONSUMER ISSUES

Last minute intervention in the passage of the 1984 law mandated citizen participation in the franchise renewal process. The law itself curtails much of the leverage that local governments would have had in the renewal process, but the Consumer Federation of America (CFA), for example, considers public participation to be a key consumer provision in the diminished regulatory environment.

CFA, the nation's largest consumer organization, as well as other consumer groups, also influenced minor provisions concerning privacy and equal employment opportunity. Consumer groups essentially conceded the most serious consumer related provision - price deregulation - by ignoring it.

Routine consumer protection laws, regulations and processes that apply to consumer products and service industries have not been altered in significant ways by legislation and regulation specific to the cable industry. Thus advertising, sales practices, and customer dealings with cable companies are essentially within the jurisdiction of local and state consumer protection agencies. Cable system problems with individual customers, such as home installation, utility right-of-way across individual properties, and customer theft-of-service do not appear to be especially difficult policy issues.

SUMMARY AND RECOMMENDATIONS

A review of the structure and evolution of the cable industry identifies a number of issues and trends of relevance to consumers. Within the past two years, federal deregulation has created difficult market conditions for enhancement of the consumer interest. While a franchised monopoly in practice, the industry is due for price deregulation by 1987. Notwithstanding certain provisions addressing consumer problems with the industry, these appear insignificant compared to the fully deregulated monopoly conditions of 1987 and beyond.

Footnotes:

¹Taxpayers in many nations subsidize television, i.e., television set owners are assessed in order to fund the British broadcasting system. The U.S. relies heavily upon advertiser support primarily for both commercial radio and television, and public broadcasting receives partial taxpayer support.

²Sally Bedell Smith, "New TV Technologies Alter Viewing Habits," New York Times, October 9, 1985.

³MTV (Music Television) pioneered the music video now found also in broadcast programming and which has been given general credit for significant boosts in sales of music records and cassettes from 1982 to 1984. The 24 hour Weather Channel encourages very brief viewing patterns for persons seeking some particular weather forecast or information. The 24 hour Cable News Network has challenged abbreviated network news formats. C-SPAN broadcasts the U.S. House of Representatives live when it is in session.

⁴Smith, Ibid.

⁵Gary Levin, "Ads Can Survive 'Zapping'", Advertising Age, September 16, 1985.

⁶G. Kent Webb, The Economics of Cable Television. Lexington, MA: D.C. Heath & Co., 1983, p. 1.

⁷70 Marvin Smith, Radio, TV & Cable: A Telecommunications Approach. New York: Holt, Rinehart and Winston, 1985, p. 131.

⁸Webb, op. cit., p. 4.

⁹Webb, op. cit.

¹⁰Webb, op. cit., p. 5.

¹¹"A Marketing Lesson for Cable," Electronic Media, May 23, 1985, p. 12.

¹²Both authors are subscribers of Howard Cable, a subsidiary of Storer Cable.

¹³Clint Bolick, "Cable Television: An unnatural Monopoly," CATO Policy Analysis #34, CATO Institute, Washington, D. C., March 13, 1984. Bolick concedes that the battle for competition in cable has been a losing one so far, but that it is a case of government intervention through the cable franchising process rather than market conditions which have created monopolies. The authors hold that federal law and court decisions have not altered the basic franchise process to date.

¹⁴Tom Hazlett, "The Viewer is the Loser," Reason, July, 1982, asserts that Phoenix, Arizona, is an example of 25 such cities with "head-to-head competition," but offers no data concerning economic efficiency or economics of scale.

¹⁵ John Stuart Mill, Principles of Political Economy. Quoted from George T. Brown, The Gas Light Company of Baltimore. (Baltimore: The Johns Hopkins Press, 1936), pp. 63-64.

¹⁶ "Cable now comes as close as you can get to being an unregulated monopoly," quotation of an unidentified security analyst in the Wall Street Journal, November 28, 1984, in a letter to the editor of the New York Times from David Westfall dated December 4, 1984. Similarly, Eric Smuckler and Sidney W. Dean, Jr., "The Cable TV Law Hurts the Public," New York Times, November 14, 1984, argue that "this deregulatory law is a disaster" and "Because they are monopolies, cable systems should be treated as public utilities..."

¹⁷ Such practice may include outright price increases, reductions in service, quality and variety, and using such power to avoid contracted franchise obligations.

¹⁸ One of the authors is an office of CFA and participated in some of the activities cited.

¹⁹ Theft-of-service is defined in a broad sense by the industry to include more than illegal wiring into the cable company's distribution system. Much of the theft rhetoric is designed to convince innovative consumers to buy services from the cable companies. For example, electronic devices readily available and legally sold permit consumers to wire their homes themselves with a variety of signal converters, switches, and complementary equipment such as videocassette recorders without paying additional service fees to their local cable company.