

A CONTENT ANALYSIS OF TELEVISION COMMERCIALS
AIMED AT CHILDREN: A LONGITUDINAL
INVESTIGATION

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PREFACE

A longitudinal investigation into the content of children's television advertising was made. The primary objectives were to investigate the various techniques used by advertisers in selling products to children and to determine whether any changes in these techniques have occurred between Fall 1981 and Fall 1983. Television commercials aired during the children's viewing hours in Fall 1981, Fall 1982, and Fall 1983 were videotaped and content analyzed. The data was then statistically analyzed and examined for changes over the sampling time period. In the process, advertising profiles for children's television commercials emerged.

I would like to express my sincere appreciation to my major adviser, Dr. William G. Zirkund, for his guidance, concern, conceptual wisdom, and assistance throughout the years it took to complete this study. I would also like to thank the other members of my committee, Dr. Steve J. Miller, Dr. William D. Warde, and Dr. Wayne A. Meinhart for their invaluable assistance in the completion of this research and preparation of this manuscript.

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CHAPTER I

INTRODUCTION

Background

It has been estimated that in the process of growing up, the average high school graduate has spent some 22,000 hours in front of the television set and has been exposed to as many as 350,000 commercial messages (Liebert, 1976). A composite of viewing estimates from a number of studies indicates that children begin viewing television at a very early age and that there is a gradual increase from about age two to a level of two hours a day at age four. This is followed by a slight dip at age six (the age most children start school), then an increase to more than three hours a day at age nine, and then a further increase to almost four hours per day by age twelve. This rate decreases slightly during high school to about three hours per day (Roberts, 1981).

Advertisers spend millions of dollars each year to communicate the benefits and rewards of products marketed to children. Because of the constant presence of television and the ceaseless barrage of sales messages in children's lives, the effect of television advertising on children has been an issue of public debate for some time. The social value of overtly persuasive advertising messages and violence in programming predominate as the key issues. However, a broad range of possible negative effects of television on children has been hypothesized (Bandura, 1965; Barry, 1977; Melody, 1973; National

Science Foundation, 1977). In the last decade, public and governmental interest in this area increased.

Much of the controversy regarding television advertising and its effects on children may be the result of ineffective communication between advertisers, researchers and critics (Culley, Lazer and Atkin, 1976). Each of these interest groups approaches the subject with markedly different assumptions and inaccurate assumptions of how the other parties involved view the same issues. In 1976, Culley, Lazer and Atkin studied the attitudes of various expert groups toward the major issues in children's television advertising. Their findings indicate that not only is there severe polarization between critics and advertisers, but also that communication lines between the two are practically nonexistent. With few exceptions, the two groups are adversaries. Advertisers claim that television advertising aimed at children serves an educational purpose. Critics, on the other hand, claim it is economic exploitation with high powered sales techniques. Critics want to ban all television advertising aimed at children and have the television medium provide children's programming as a public service. Industry spokespersons accuse the critics of not understanding basic economic principles. Industry contends that advertising provides children with information about products children would want even if these products were not advertised because they have been designed to fulfill children's needs. Consideration of different orientations and attitudes, together with the fact that both are trying to influence public policy, makes clear the need for independent research.

Students and practitioners of marketing are well aware that consumer groups and governmental agencies are scrutinizing marketing

activities, including children's television advertising practices. Marketing practitioners and academicians believe that advertising plays an important role in the consumer education and socialization of children. Consumption behavior is an aspect of life that everyone must learn and advertising contributes to that learning process when its messages are directed at children (Barry, 1977; Ward, Wackerman, and Wartella, 1977). Because of the lack of sophistication in young children plus the potential deception of some commercials, there is general agreement that guidelines must be set. However, many marketing practitioners contend that much present and past public policy has been undertaken without the benefit of pertinent research data (Barry, 1977).

The Critics' Viewpoint

Major areas of concern in children's television advertising are content, deception, materialism, economic exploitation, and junk food. If a doll commercial merely stated, "You can buy a Barbie Doll at Wall Mart," criticism of advertising would be virtually nonexistent. Critics object to the content of television commercials because commercials not only provide information, but also try to persuade the consumer (in this case the child) to buy the product. Critics contend that television commercials should be viewed only by those capable of understanding and being aware of the purpose of advertising and also able to distinguish between reality and fantasy (Roberts, 1981). Directing commercials at children results in economic exploitation, materialism, and deception.

Critics are also concerned about the type of foods advertised on television. Most of the advertised foods are high in sugar content and presented in a manner that may encourage unlimited consumption of these

foods. A person can consume only a limited amount of food, and these highly sugared foods may be taking the place of more nutritious foods that children should be consuming.

According to the critics the size and performance of toys and premiums are often deliberately misrepresented by advertisers. When a child requests a particular toy, he or she expects it to perform in a manner similar to the way it was presented in the television commercial. Critics claim it is often impossible to duplicate (in reality) a toy's advertised performance. Hence advertisers are accused of deception.

Government's Response

Critics have been demanding legislation to totally eliminate advertising during children's viewing hours. They contend that since children are usually given special treatment under criminal and civil law, this protection should be extended to children as television viewers. In 1971, responding to a petition from the consumer group Action for Children's Television (ACT), the Federal Communications Commission (FCC) conducted a multifaceted inquiry into children's television. The major result of this inquiry was a general acceptance of the principle that children are a special audience deserving special attention and protection (FCC, 1976). Such a concept is by no means modern in origin. The premise is rooted in ancient precedents, such as the Codes of Hammurabi (eighteenth century B.C.), in which children were granted special rights in legal matters because of their youth and inexperience (Melody, 1973).

Strong differences of opinion have arisen as to how the principle is to be applied in specific issues such as advertising aimed at

children. Although it is generally agreed that children, being especially impressionable, are a unique part of the consumer population who need special protection, the degree of constraint to be placed on the industry has been the subject of disagreement among the various interested parties. Although it is generally agreed that guidelines must be set for advertising directed at children, no consensus has been reached as to the parameters of restraint and regulation to be set by such guidelines. Industry prefers self-regulation; ACT and other consumer groups want total elimination of advertising to children.

Federal regulation of television advertising falls under the aegis of two agencies: The Federal Communication Commission (FCC) and the Federal Trade Commission (FTC). The FCC has jurisdiction over the amount and scheduling of advertising, and the FTC has control of the content. And, although these two agencies have held hearings to publicize and receive feedback on certain issues, and have, on occasion, threatened governmental action to secure industry reform, they have generally tended to permit self-regulation to the industry.

Industry's Response

Ten years before the 1971 FCC investigation and inquiry, the television industry itself gave formal recognition to the principle that children constituted a special consumer audience that required special protection in television advertising. In 1961, the National Association of Broadcasters (NAB) adopted guidelines for toy advertising, which they later extended to all advertising directed toward children. These guidelines, the NAB Code, have functioned for the past twenty years as the industry's major instrument of self-regulation of commercials aimed

at children. The major networks, ABC, CBS, and NBC, and some independent stations accepted and used the guidelines as a requirement of membership in the NAB. Other trade associations (e.g., The Association of National Advertisers) formulated recommendations on television advertising which are advisory only and have no effective mechanism for enforcement (Winick, Williamson, Chuzmir, and Winick, 1973).

The utilization by the industry of the NAB Code, along with the machinery for its enforcement, played a key role in defeating FTC proposals to ban most advertising to children (Gordon, 1982). Industry also tried to appease the critics by amending the Code regularly (e.g., requiring the use of separators, that is, noncommercial messages to separate commercial announcements from program material during children's viewing hours). Industry has always maintained that parents have the option to turn the television off when they object to what the children are watching on television. Even if a child does not view television, he will still want products that he sees in a store or that are owned by other children. Parents will still have to learn how to say "no" to their children's purchase requests. Advertising not only pays for children's programming, but also provides product information and helps with consumer socialization.

In 1982 the NAB withdrew the Code after a federal judge ruled that portions of it resulted in unfair competition and were barriers to trade. Presently, broadcasters and advertisers are essentially without strictures as to acceptable standards for commercials and much confusion surrounds the whole issue. The NAB is currently in the process of appointing a committee to examine all options for creating a new system

of policies and procedures that would be safe from judicial attack. The central concern is whether it is legally possible to establish any kind of centralized commercial clearance procedure without federal legislation (Advertising Age, January 10, 1983). If broadcasters and advertisers are acting in an illegal manner when they try self-regulation, the only viable alternative may be government regulation. Yet the present administration favors the replacement of government regulatory programs with industry self-regulation (Gordon, 1983), and the most powerful motivation behind the adoption of self-regulation is usually industry's desire to avoid government regulation (LaBarbera, 1983).

Regulation of advertisements aimed at children, therefore, continue to be a matter of critical concern to society as a whole and to the television industry. It is multidimensional in that every citizen is in some way affected by television and television advertising -- business, health, education, safety, interpersonal relations, economics, new technology - in virtually every aspect of American life. And, informed decisions regarding regulation, whether being made by individuals singly or collectively through government agency or by industry management, should consider what scholars know about the content of children's advertising.

Statement of the Problem

Research on television's effects began in the 1940's "almost as soon as television began to appear in the American home" (National Institute of Mental Health, 1982). Investigations into the effects of television continued at a relatively slow pace throughout the 1950's and

accelerated in the 1960's.

Dominating the research on the effects of television has been the study of how it impacts children. Television's effect on the growing child can have a major role in the shaping of our future society. In order to determine the influence of advertising on children, scientific efforts must be made to identify the content of advertisements aimed at children in order to obtain a better understanding of the total communication process as it relates to children (Doolittle and Pepper, 1975). Couched in simple terms, before trying to establish any relationship between a stimulus and a response, the exact nature of the stimulus must be understood. A first step toward understanding the stimulus, television commercials aimed at children, is to analyze its content, and that is the research problem addressed in this study.

Purpose of the Study

Previous content analysis studies (Barcus, 1971; Barcus, 1975a; Barcus, 1975b; Winick, et al., 1973; Doolittle and Pepper, 1975; Atkin and Herald, 1977; Cattin and Jain, 1979; Moncrief and Landry, 1982) have indicated that advertisers have become more responsible during the past ten years. Apparently responding to outside criticism, they have removed certain objectionable techniques, provided more product information, used less deception and puffery, and have eliminated some objectionable products from their commercial announcements aimed at children. For example, vitamins and other nonprescription drugs which were advertised to children in the early 1970's were no longer being advertised in the early eighties.

In recent years, advertising policy and legal environment have

changed significantly in the following ways:

1. The networks have voluntarily reduced advertising time during the children's viewing hours.
2. Advertising of vitamins and other nonprescription drugs is prohibited during these hours.
3. Separators that partition commercial announcements from program material are being used during children's viewing hours.
4. The industry's major self-regulator -- the NAB Code -- was withdrawn in 1982.

Most of these changes can be directly or indirectly attributed to the outside pressure placed upon advertisers and their desire to avoid government regulation. The withdrawal of the NAB Code is the most significant change because it had been the industry's major self-regulator, and the industry is presently relying almost completely upon the advertisers' integrity in this area.

Because all of the published content analysis studies of children's television advertising were done prior to the withdrawal of the NAB Code and during the time that changes to the Code were being made, a content analysis of current television advertising aimed at children is needed to serve as the basis for further study and decision making. Current content analysis studies have been specifically included in the National Institute of Mental Health's recommendations for future research (Roberts, 1981).

This study is a content analysis of current children's television advertising whose main purpose is to determine what effect, if any, the withdrawal of the Code and freedom from regulation has had upon

television commercials aimed at children. More specifically, through the analysis of primary data gathered before and after the withdrawal of the Code, this study does the following:

1. Determines whether any changes have occurred in television advertising aimed at children between Fall 1981 and Fall 1983.
2. If changes have occurred, where specifically have they occurred?
3. Develops a current marketing profile of television advertising aimed at children.
4. Compares the results found in this study with past research findings.

The major issues (variables) that were under consideration in this content analysis study are:

1. Kinds of products advertised to children
2. Characteristics of advertisements aimed at children
 - A. Amount of product information supplied by commercials
 - (1) Price of the product mentioned
 - (2) Qualifiers used when necessary
 - (3) Appropriate age range for enjoyment of the product indicated
 - (4) Guarantees and warranties mentioned
 - B. Characteristics of food commercials
 - (1) Sweetness of the product mentioned
 - (2) Product presented as part of a balanced meal
 - (3) Product presented as a substitute for a

balanced meal

- (4) Substantiated nutritional claims made
- (5) Nutritional claims made that contradict commonly accepted standards of good nutrition

C. Techniques used in commercials

- (1) Animation
- (2) Testimonials
- (3) Spokespersons
- (4) Jingles
- (5) Exaggerated sound
- (6) Exaggerated size
- (7) Premiums and contests
- (8) Social acceptance appeals

D. Character composition in commercials

- (1) Male compared to female
- (2) White compared to minority characters
- (3) Adult compared to child

E. Whether adult characters are depicted in traditional sex roles

F. Whether commercials explicitly tell children to ask their parents to buy the product

G. Whether commercials tell the child to buy the product

A detailed explanation of why these particular variables are being singled out for analysis will be presented in Chapter III.

Contribution to Literature

This study's greatest contribution is in the area of public policy. Since the whole subject of television advertising and children is extremely emotionally charged, with advertisers and critics holding polarized viewpoints, independent research is urgently needed in order to protect public interests. Most of the research being conducted in this area is done by social scientists. Marketing studies are especially needed because broadcasters and advertisers oftentimes treat the findings of other social scientists with suspicion.

The following is a list of specific contributions that can be expected from this study:

1. Determination of the actual content of current television advertising aimed at children.
2. Determination of the effect that the withdrawal of the Code has had upon television advertising aimed at children.
3. Organization of past research studies into a framework that allows for comparisons between studies.

The results of this study are of interest to everyone working in this area, including advertisers, academicians, and government officials.

Although this study focuses on a content analysis of television commercials aimed at children and the review of the literature included in the body of the report deals only with content analysis studies, a review of the literature on the effects of television advertising on children is provided in Appendix D. Because the *raison d'être* for content analysis lies within the larger context of effects and still larger parameters of public and private decision-making about the

regulation of television programming, it seems appropriate to include the material in this report.

CHAPTER II

REVIEW OF THE LITERATURE ON CHILDREN'S TELEVISION ADVERTISING CONTENT

Purpose

This chapter reviews the literature on children's television advertising content. Its purpose is to organize the findings of past researchers into a framework that will allow for easier cross comparisons between studies and the identification of trends. As will be demonstrated in this chapter, direct comparisons between studies are difficult because of differences in methodology, variables analyzed, working definitions, data gathering techniques, etc. In this chapter, the results of past research studies are reviewed along certain dimensions.

Content Analysis: A Methodological Note

Content analysis as a scientific tool is relatively new to marketing research. A brief explanation will be beneficial. Content analysis is a scientific, objective, systematic, quantified, and generalized description of communications content (Kassarjian, 1977). In content analysis, the content variables are separated from the communicator and audience and studied independently. In other words, the variables under study are the manifest content of what is actually being said or done, rather than what the audience perceives to have been

said or what the communicator claims to have said. Contents analysis is a study of the message components or its contents as objectively recorded by a scientist observer.

The three important characteristics of content analysis are that it must be objective, systematic, and quantitative (Kassarjian, 1977). In order to be objective, the categories must be defined very precisely so that any researcher may apply them to any body of content and obtain the same results (Berelson, 1952). The requirement of objectivity gives scientific standing to content analysis and distinguishes it from critical analysis. Unfortunately, the majority of consumer behavior studies using content analysis have failed to achieve complete objectivity.

Systematization, the second characteristic of content analysis, stipulates that the inclusion and exclusion of communications content or analysis categories must be according to consistently applied rules (Holsti, 1969). The absence of systematization may result in a biased analysis where only material that supports the hypothesis under study is admitted as evidence.

The distinguishing factor of content analysis is quantification of judgement. Quantification means that the data are amenable to statistical methods not only for precise and concise summary but also for interpretation and inference. It makes little difference whether the statistical method involves parametric or nonparametric data.

Although content analysis cannot be used to determine how a child perceives a commercial or its content, it can identify and quantify the themes, appeals, claims, intents, and the like of the various commercial messages to which children are exposed. More specifically, it allows

researchers to determine whether children's television commercials actually:

1. mention price,
2. use qualifiers when necessary,
3. indicate appropriate age range for enjoyment of the product,
4. mention sweetness,
5. mention nutritional value,
6. urge children to buy the product,
7. urge children to ask their parents to buy the product,
8. use minority characters, and
9. depict adult characters in traditional sex roles.

We now review the relevant literature that utilizes content analysis of television commercials aired during children's programming hours.

Methods of Past Research

Barcus (1971) in a study funded by Action for Children's Television (ACT) monitored four Saturday mornings in June 1971 and analyzed 132 different commercials (out of a total of 311 commercials) from three network stations and one independent station in the Boston area (see Table I). In 1975, Barcus conducted two more extensive studies which were also funded by ACT. One 1975 study dealt with the content of television programming aired during weekday hours and the other with programming on weekends. Both studies included program as well as advertising content. The weekday study looked at 200 hours of television programming aired between the hours of 3:00 p.m. and 6:00 p.m. during the months of June and July in 1975. Though this study was

TABLE I
METHODS AND DATA BASES

Study	Month and Year Conducted	Time Period	Total Number of Commercials Recorded Off Air	Number of Different Commercials	% of Air-time	Mean Length of Each Commercial	Percentage of Commercials With Length		
							60 Sec	30 Sec	15 Sec
Barcus	June 1971	Saturday ¹	311	132	15.5	0.56 min.	NA	NA	NA
Barcus	April 1975	Saturday and Sunday Morning ²	403	NA	13.1	0.50 min.	NA	NA	NA
Winick, et.al.	1971	NA ³	NA ³	236 ³	NA	0.60 min.	21.2	78	0.8 ⁴
Atkin and Herald	November 1972	Saturday (8 a.m.-12 noon)	252	NA ⁵	NA	0.50 min.	3	92 ⁶	5
Verna	October 1973	Saturday (9 a.m.-12 noon)	173 ⁷	NA ⁵	NA	NA	NA	NA	NA
Atkin and Herald	November 1973	Saturday (8 a.m.-12 noon)	218	NA ⁵	NA	0.50 min.	2	96	2 ⁸
Doolittle and Pepper	February 1974	Saturday (9 a.m.-1 p.m.)	162	49 ⁹	NA	0.50 min.	2	98	0
Schuetz and Sprafkin	October 1974	Saturday (7 a.m.-1 p.m.)	414 ¹⁰	NA	NA	NA	NA	NA	NA
Welch, et.al.	Fall 1977	NA ¹¹	NA	60 ¹¹	NA	NA	NA	NA	NA
Cattin and Jain	February-April 1978	Saturday (9 a.m.-12 noon)	350	100	NA	NA	NA	NA	NA
Montcrief and Landry	April 1981	Saturday (9 a.m.-12 noon)	153	NA	NA	NA	NA	NA	NA

NA - Figures are not available.

¹Nineteen hours of Saturday morning broadcasting that was considered by Barcus to be children's programming were included in this study.

²Twenty-five and one-half hours of Saturday and Sunday programming that was considered by Barcus to be children's programming were included in this study.

³Commercials studied were supplied by the advertisers in response to researchers' request for copies of currently aired commercials.

⁴These commercials were ten seconds in length.

⁵Each presentation of a commercial message was weighted equally. A version of a commercial that was presented three times was counted three times, while a single presentation was tabulated only once.

⁶This figure included several piggyback pairs of 15-second ads by the same advertiser.

⁷A total of 182 commercials were recorded but five were discarded because they were Halloween related commercials and judged to be inconsistent with the rest of the sample. Four animated commercials were excluded because the sex of the character could not be determined.

⁸There were only four 15-second piggybacks out of all the 218 commercials.

⁹Analysis was based on a total number of exposures (146) rather than for the separate 49 commercials. These 49 commercials represented 93% of the total (162) commercial exposures broadcast by the networks during the sampling period.

¹⁰This figure includes public service announcements.

¹¹Sample consisted of sixty randomly selected commercials aired during Fall 1977 on weekday and Saturday mornings.

more extensive than Barcus's 1971 study, the results were based on limited programming from UHF stations, which rely heavily on syndicated programming and usually were not Code members, thus under no obligation to adhere to the Code Guidelines of the National Association of Broadcasters. Barcus's second study in 1975 was concerned with children's programming on weekends (Saturday and Sunday mornings) and was not limited to UHF stations. His sample size consisted of 403 commercials (including duplications) that were aired in April 1975 in the Boston area.

Charles Winick, Lorne Williamson, Stuart Chuzmir, and Mariann Winick (1973), an interdisciplinary group funded by the National Association of Broadcasters, conducted an extensive content analysis study in 1971. Instead of monitoring commercials from the air, the researchers asked advertising agencies for copies of current nontoy commercials directed at children. This resulted in a sample size of 236 different commercials.

In 1974 Doolittle and Pepper updated the findings of Barcus (1971) and Winick, et al. (1973) in order to determine what changes had taken place in the intervening years. They analyzed 49 different commercials from a total number of 162 commercial messages that were aired on February 9, 1974 (Saturday) between the hours of 9:00 a.m. and 1:00 p.m.

Charles Atkin and Gary Herald (1977) monitored Saturday morning (8:00 a.m. to 12:00 noon) advertisements on all three networks on one pair of comparable Saturdays in 1972 and 1973 (November 11, 1972 and November 10, 1973). Their analysis of the data was quite limited, being concerned primarily with noting the differences between toy and food commercials along certain dimensions.

Cattin and Jain conducted a study in 1978. Their study was a limited content analysis study and no attempt was made to related it to previous studies. They analyzed a total of 150 different commercials from the 350 commercial messages that were videotaped in February, March, and April of 1978 on six Saturday mornings from 9:00 a.m. to 12:00 noon on the three major networks for six hours each.

Moncrief and Landry videotaped 153 commercial messages aired by the three major networks on Saturday, April 4, 1981 between the hours of 9:00 a.m. and 12:00 noon. They did compare their findings with some of the previous studies reported in the literature.

The studies just reviewed are the major content analysis studies of television commercials aimed at children because their analyses covered a broad range of variables. Several content analysis studies of television commercials aimed at children that analyzed only a few variables will be reviewed next.

Verna (1975) analyzed a total of 173 commercials that were aired between the hours of 9:00 a.m. and 12:00 noon on Saturday mornings in 1973 (October 13, 20 and 27). Duplicate commercials were counted as separate entities and only those commercials having male and/or female characters were included in the analysis. Some commercials were excluded from the study because they advertised Halloween products, others because the sex of the animated character could not be determined. The major variable of interest to the researcher was the amount of exposure children get to specific types of role stereotypes.

In 1974 Media Action Research Center, Inc. (Schuetz and Sprafkin, 1978) sponsored a very limited content analysis study whose purpose was the determination of the sex and race of the characters appearing in

television programming (including commercials). In this study Schuetz and Sprafkin videotaped commercials and public service announcements aired by five television stations (three network stations, one UHF station and one VHF station) in the New York City area between the hours of 7:00 a.m. and 1:00 p.m. on one Saturday morning in October 1974. Only those commercials and public service announcements aired within a program were included in the sample. Those aired on the hour or half hour were not included in the sample. This resulted in a sample size of 414 commercials and public service announcements.

Welch, Huston-Stein, Wright, and Plehal (1979) analyzed sixty different commercials that were aired during weekday or Saturday mornings during the fall of 1977. They divided these commercials into male-oriented, female-oriented, and neutral categories. The intended audience was inferred from the sex of the child characters in the commercial. Male commercials contained all male characters, female commercials all female characters, and neutral commercials an equal number of boys and girls. The purpose of their study was to determine whether differences in form existed between commercials aimed at boys and those aimed at girls. The restrictive nature of their study in terms of purpose, sample selection and analysis makes accurate comparisons to the other studies almost impossible.

Spatial and Temporal Content of Television

Airtime

Table I summarizes various facts concerning the content of television airtime and the commercial messages that were analyzed by the previously mentioned researchers. Table II shows the kinds of products

TABLE II

KINDS OF PRODUCTS ADVERTISED

(Figures are stated as percentages of total commercials analyzed unless indicated otherwise.)

Study	Toys	Cereals (Sugared & Unsugared)	Candies and Sweets	Snacks ¹	Other Foods	Eating Places	Vitamins and Medicine	Miscel- laneous Products
Barcus (1971) ²	23	23	21	<-- 23 -->	NA ³	1	9	
Barcus (1975)	18	25 ⁴	25	4 ⁵	4	10	0	14
Winick, et.al. (1971) ²	0 ⁶	20	49	5	8	7	5	6
Atkin and Herald (1972)	50	27	<----- 21 ----->			NA	2	
Verna (1973)	NA	<----- 46 ----->				NA	NA	
Atkin and Herald (1973)	66	17	<----- 15 ----->			NA	2	
Doolittle and Pepper (1974)	7	40 ⁷	18	12	7	NA	0	8
Schuetz and Sprafkin (1974)	NA	NA	NA	NA	NA	NA	NA	NA
Welch, et.al. (1977) ²	NA	NA	NA	NA	NA	NA	NA	NA
Cattin and Jain (1978) ²	NA ⁸	NA	NA	NA	NA	NA	NA	NA
Moncrief and Landry (1981)	22 ⁹	25 ⁷	NA	NA	NA	NA	NA	NA

NA - Figures are not available.

¹Drinks were included in this category.

²Figures are based on the total number of different commercials analyzed.

³Figures were not available and were included in "Miscellaneous Products" category.

⁴Category was divided into sugared cereals (18.9%), unsugared cereals (5.7%) and cereal companies (0.2%)

⁵Peanut butter and other spreads were considered snack food.

⁶Winick's study excluded toy commercials and consisted entirely of commercials submitted by advertisers.

⁷Category was breakfast foods.

⁸Categories were food (73%) and nonfood (27%).

⁹Categories were food (66%), breakfast foods (25%) and toys (22%).

advertised. In terms of spatial and temporal content, the results of Barcus's 1971 study indicated that at the time his study was conducted:

1. Commercials comprised 15.5% of airtime.
2. Mean length of each commercial was 0.56 minutes.
3. Toy commercials represented 23% of total commercial announcements, cereals 23%, candies and sweets 21%, snacks and other foods 23%, vitamins and medicines 1%, and other products 9%.

Barcus's 1975 weekend study which was more extensive than the 1971 study resulted in the following findings:

1. Commercial messages accounted for 13.1% of total airtime.
2. Mean length of each commercial was 0.50 minutes.
3. Toys represented 18% of all commercials, sugared cereals 19%, unsugared cereals 5.7%, candies and sweets 25%, snacks 4%, other foods 4%, eating places 10%, vitamins and medicines 0%, and other products 14%.

Barcus's studies do not lend themselves to direct comparisons. However, some general differences between the results of the 1971 and 1975 studies can be identified. The amount of commercial time on all stations decreased from an average of 11.3 minutes to 9.5 minutes per hour. Although commercial time decreased, the average number of commercials decreased only slightly because the average commercial length also decreased. Commercials for various product types remained in about the same proportion with the noted exception of the absence of vitamin and medicine commercials in 1975.

The Winick study which was also conducted in 1971 was limited to nontoy commercials. Since the commercials analyzed were submitted by

advertising agencies, there was no attempt made to determine the actual amount of airtime that was devoted to commercials. Other results relating to program content are:

1. Seventy-eight percent of the commercials submitted were 30 seconds long, 21.2% were 60 seconds long, and 0.01% were 10 seconds long (mean commercial length was 0.60 minutes).
2. Cereals comprised 20% of the commercial messages, candies and sweets 49%, snacks 5%, other foods 8%, eating places 7%, vitamins and other medicines 5%, and other products 6%.

In 1974 the NAB Guidelines did not prohibit the advertising of vitamin and medicine products during children's viewing hours, consequently 5% of the commercials in this study were advertising vitamin and medicine products. Later studies will include this category only to the extent that they will note the absence of these commercials during children's viewing hours.

The average length of a commercial was 0.50 minutes in 1972 and 1973 according to the Atkin and Herald study. The results of their study indicate the following concerning program content of children's television commercials:

1. In 1972 toy commercials represented 50% of the total number of commercials aired, cereals 27%, other foods including restaurants 21%, and other products 2%.
2. In 1973 these figures were toys 66%, cereals 17%, other foods including restaurants 15%, and other products 2%.
3. No mention of vitamin or medicine commercials was made.

The Doolittle and Pepper study conducted in 1974 again found the average length of a commercial was 0.50 minutes. Regarding program content of children's television commercials, their results showed that toy commercials represented 7% of the total commercials aired, breakfast foods 40%, candies and sweets 18%, snacks 12%, other foods 7%, vitamins and medicines 0%, and other products 8%.

No mention of average commercial length was made in the other studies. The Verna study divided commercials into three categories -- food related (46%), games (12%), and independent playthings (42%). The Schuetz and Sprafkin study and the Welch, et al. study made no attempt to classify their sample by product type. Schuetz and Sprafkin made no attempt to classify their sample into any of these categories. The Cattin and Jain study divided commercials into 2 categories - food (73%) and nonfood (27%). The Moncrief and Landry study also made no mention of average commercial length and the commercials were categorized as food (66%), breakfast foods (25%) and toys (22%).

Commercial Character Content

Tables III and IV illustrate the various commercial character content variables (human characters only) that have been studied by some of the researchers. Many categories that were of interest to some researchers were not listed by others (as can be seen by the large number of unavailable figures). Direct comparisons between studies are also made more difficult because the various researchers used different working definitions. Some trends indicated by Table III are:

1. Adult female characters are rarely present.
2. Human characters are usually members of the white race.

TABLE III

COMMERCIAL CHARACTER CONTENT (HUMAN CHARACTERS ONLY)

(Figures are stated in percentages of total commercials analyzed unless indicated otherwise.)

Study	Adult Character Present	Non-white Character Present	Adult Female Present	Female Character Present	Characters Classified as White ¹	Characters Classified as Non-White ¹	Spokesperson for Product ¹			Child Characters Present	
							Adult Male	Adult Female	Child	Children Only	Children and Others
Barcus (1971) ³	NA	27	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barcus (1975)	23	NA	7	29	92	8	66	6	9	NA	NA
Winick, et.al. (1971) ³	68 ⁴	24	-- ⁵	-- ⁵	NA	NA	NA	NA	20	NA	67
Atkin and Herald ⁶ (1972 and 1973 combined)	34 ⁶	20	NA	NA	NA	NA	NA	NA	NA	62	90
Verna (1973)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Doolittle and Pepper (1974)	58	17	NA	NA	NA	NA	NA	NA	NA	NA	74 ⁷
Schuetz and Sprafkin (1974)	90 ⁴	10	NA ⁵	NA	75	25	NA	NA	NA	NA	NA
Welch, et.al. (1977) ³	NA	NA	NA	67 ⁸	NA	NA	NA	NA	NA	NA	100 ⁹
Cattin and Jain (1978) ³	NA ¹⁰	NA	5	NA ¹¹	NA	NA	<-----	NA ¹²	----->	<--- NA ¹³ --->	
Montcrief and Landry (1981)	NA ¹⁴	NA	6	NA ¹⁵	NA	NA	NA	NA	NA	NA	NA

NA - Figures are not available.

¹These figures are presented as a percentage of the total number of characters present in the analyzed commercials.

²Figures are stated as percentages of the total number of analyzed commercials using a spokesperson.

³Figures are stated as percentages of the total number of different commercials analyzed.

⁴This figure included animated or puppet human adults.

⁵Merely stated that there are more males than females.

⁶Figures had been calculated for food and toy commercials only. There were discrepancies in figures reported by Atkin.

⁷Children were present in 74% of the commercials and teenagers were present in 6% of the commercials.

⁸The sample selection procedure required two thirds of the commercials to have a female child character present.

⁹Only commercials having child characters were included in this study.

¹⁰Adult males were present in 23% of the commercials and adult females in 5%.

¹¹Girls were present in 52% of the commercials and adult females in 5%.

¹²A spokesperson was used in 41% of the commercials.

¹³Boys were present in 64% of the commercials, girls in 52%, adult males in 23%, and adult females in 5%.

¹⁴Adult males were present in 12% of the commercials and adult females in 6%.

¹⁵Adult females were present in 6% of the commercials and female children in 22%.

TABLE IV

COMMERCIAL CHARACTER CONTENT -- TOYS (HUMAN CHARACTERS ONLY)

(Figures are stated as percentages of total commercials analyzed unless indicated otherwise.)

Study	Adult Character Present	Non-white Character Present	Adult Female Present	Female Character Present	Characters Classified as White ¹	Characters Classified as Non-White ¹	Spokesperson for Product			Child Characters Present	
							Adult Male	Adult Female	Child	Children Only	Children and Others
Barcus (1971)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barcus (1975)	16	NA	3	22	92	8	95	5	0	NA	NA
Winick, et.al. (1971)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atkin and Herald (1972 and 1973 combined)	13	13	NA	NA	87	13	NA	NA	NA	87	99
Verna (1973)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Doolittle and Pepper (1974)	NA	40	NA	NA	NA	NA	NA	NA	NA	NA	NA
Schuetz and Sprafkin (1974)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Welch, et.al. (1977)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cattin and Jain (1978) ²	4 ³	NA	0	56	NA	NA	NA	NA	NA	NA ⁴	NA
Montcrief and Landry (1981) ⁵	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

NA - Figures are not available.

³Male adults were present in 4% of non-food commercials.

¹These figures are presented as a percentage of the total number of characters present in the analyzed commercials.

⁴Boys were present in 82% and girls in 56%.

²Category was non-food and the figures are based on the total number of different commercials analyzed.

⁵Did not break down into these categories.

3. Product spokespersons are rarely female adults.
4. Children are usually present in commercials.

Table IV is concerned specifically with the characters portrayed in toy commercials. Some general conclusions that can be drawn from this table are:

1. Where the percentage of commercials using children as characters was calculated, children were found to be present in almost all toy commercials.
2. Adult characters are rarely present.

Most of the studies inferred that sexual and racial stereotyping was prevalent in children's television commercials. They did this not based on their own research results, but upon the results reported by other researchers in this area. A careful review of all the content studies leads to the inevitable conclusion that such a statement was not always based upon a factual content analysis study. None of the studies specifically used role or occupational stereotyping as a variable. Several studies did list "father" and "mother" as categories, but most did not even do this. These inferences were usually based upon a headcount of the various characters appearing in the commercials and the fact that the great majority of adults appearing in the commercials were white males. Adult females and minority group members were greatly underrepresented in commercials. The conclusion that this underrepresentation results in social stereotyping was usually explained in terms of Bandura's social learning theory (see Appendix D). This is also true for the Schuetz and Sprafkin study whose purpose was to study the racial and sexual composition of the characters appearing in commercials and public service announcements.

There were, however, differences in the way children's television commercials presented males and females (Verna, 1975; Welch, et al., 1979; Moncrief and Landry, 1982). Males were usually represented as independent or internally oriented -- activities in which satisfaction is derived from self-fulfillment, not from fulfilling the needs of others. Females were usually presented in passive activities that were dependent on a role or activity involving another person or doll.

Boys and girls were shown playing with dolls, but there was a difference between the dolls played with by boys and the dolls played with by girls. Boys played with action/adventure dolls that required a moderate amount of physical activity, while girls played with baby or sexplicit teenage dolls that required little physical activity. Boys did not play with baby dolls or play daddy. There were only play mommys, no play daddys. Doll commercials were segregated by sex. The characters were either boys or girls -- not both.

There were some interesting differences in the way adult females were presented in television commercials aimed at children and those aimed at adults (Verna, 1975). In most commercials aimed at children, adult females did not compete with other females. Most commercials aimed at adult females stressed competition. The women must be the sexist, most beautiful, and the best housekeeper and cook on the block. Another difference is that while females sold food products in commercials aimed at adults they usually did not sell food products in commercials aimed at children. The commercial may have shown a female preparing food in her kitchen ensemble, but she did not sell any food products unless she was accompanied by a male. Males sold most of the food products to children.

Commercial Appeals and Practices

Tables V and VI show the various commercial practices that have been identified by the content analysis researchers. Here again, the use of different working definitions complicates comparisons between studies. Table V indicates the use of animation has decreased, however, these figures may be misleading because of the way the different researchers have defined animation or cartoon characters. Other trends that can be observed in Table V are:

1. Price information is very rare.
2. The use of premium offers has started to decline and very few commercials used them in the latest study.
3. Program host tie-ins are no longer used.
4. Commercials using product endorsements have risen from 4% in 1971 to 41% in 1978.
5. The use of disclaimers has increased somewhat.
6. More than half of the commercials in 1978 and 1981 used jingles.
7. In the early 1970's, about 1% of the commercials encouraged children to ask their parents to buy the product. In 1978 this figure was 0%.

Table VI is specifically concerned with food commercials. Barcus (1975b), Winick, et al. (1973), and Atkin and Herald (1977) found that some food commercials did specifically mention sweetness during the commercial message. Barcus (1975b) also found that 45% of all food commercials visually portrayed or suggested in audio that their product was part of a balanced meal. Winick, et al. (1973) found that 10% of the commercials visually portrayed their product as part of a balanced

TABLE V
COMMERCIAL APPEALS AND PRACTICES

(Figures are stated as percentages of total commercials analyzed unless indicated otherwise.)

Study	Animation or Cartoon Characters Present	Price Information Given	Premium Offers Used	Contests Used	Program Host Tie-ins Used	Product Endorsements Used	Audio Disclaimers Used	Visual Disclaimers Used	Both Audio and Visual Disclaimers Used	Jingles Used	Child Encouraged to Buy Product or Premium	Child Encouraged to Ask Parent to Buy Product
Barcus (1971) ¹	42	8	13	NA	5	4	16	7	3	NA	NA	NA
Barcus (1975)	42	5	17	2	-- ²	2	22	11	8	NA	NA	NA
Winick, et.al. (1971) ¹	46	NA	8.5	1	-- ²	NA	NA	NA	NA	NA	14.4	1.3
Atkin and Herald (1972 and 1973 combined)	26	0 ³	10	NA	-- ²	5	20 ³	14 ³	11 ³	40	NA	1.4
Verna (1973)	NA ⁴	NA	NA	NA	-- ²	NA	NA	NA	NA	NA	NA	NA
Doolittle and Pepper (1974)	35	NA	15	5	-- ²	NA	NA	NA	NA	NA	NA	NA
Schuetz and Sprafkin (1974)	NA	NA	NA	NA	-- ²	NA	NA	NA	NA	NA	NA	NA
Welch, et.al. (1977)	NA	NA	NA	NA	-- ²	NA	NA	NA	NA	NA	NA	NA
Cattin and Jain (1978) ¹	25 ⁵	2	13 ⁶	NA	-- ²	41	NA	NA	NA	56	NA	0
Moncrief and Landry (1981)	17 ⁷	NA	5 ⁸	NA	-- ²	NA	NA	NA	NA	56	NA	NA

NA - Figures are not available.

¹Percentages are based on the total number of different commercials analyzed.

²The use of Program Host Tie-ins was, at this time, prohibited by the NAB Code.

³This percentage was computed using only the total number of toy commercials (270) as a base.

⁴Forty-eight percent of the food commercials were classified as animated (i.e. at least half of the ad was animated).

⁵This figure represents ads using fictitious characters only.

⁶Category was special offers and includes contests.

⁷Fictitious characters were present in 17% of the commercials and animated animals in 20%.

⁸Category was special offers, not just premiums.

TABLE VI
FOOD COMMERCIALS

(Figures are in percentages)

Study	Sweetness Specifically Mentioned	Balanced Meal Portrayed Visually	Balanced Meal Suggested in Audio
Barcus (1971)	NA	NA	NA
Barcus (1975) ¹	12	<-----45----->	
Winick, et.al. (1971) ²	19	10	6
Atkin and Herald ¹ (1972 and 1973 combined)	21	<-----11----->	
Verna (1973)	NA	NA	NA
Doolittle and Pepper (1974)	NA	NA	NA
Schuetz and Sprafkin (1974)	NA	NA	NA
Welch, et.al. (1977)	NA	NA	NA
Cattin and Jain (1978)	NA	NA	NA
Montcrief and Landry (1981)	NA	NA	NA

NA - Figures are not available.

¹Figures are based on total number of food commercials aired, including duplicates.

²Figures are based on the total number of different food commercials analyzed.

meal and that 6% suggested it in audio. Atkin and Herald (1977) found that 11% of all the food commercials either visually portrayed their product or suggested in audio that their product was part of a balanced meal. Unfortunately the more recent studies did not include these variables in their analysis.

Summary

As stated at the beginning of this review of the literature, the various studies cited do not lend themselves to the formulation of comparisons of the data gathered nor of the studies themselves. Some apparently valid general conclusions that may be made concerning the content of commercials are as follows:

1. Most toy commercials

- a. do not mention price,
- b. do not mention the appropriate age range for the enjoyment of the product,
- c. do suggest that certain skills are needed for the enjoyment of the product, and
- d. do use qualifiers when necessary.

2. Most food commercials

- a. do not mention sweetness of the food in the commercial and
- b. do not mention nutritional value of the food.

3. Commercial length

- a. for studies conducted in the 1970's, indicates that the average length of commercials (modal value) is thirty seconds.

b. since 1972 indicates that ninety percent of commercials are of the thirty second variety.

4. Little research has been done since Barcus (1971, 1975a, 1975b) on the percentage of airtime devoted to commercial messages.
5. Most of the human characters are white.
6. Most of the adult human characters are male.

CHAPTER III

RESEARCH METHODOLOGY

Overview

The research design is described in this chapter. Observation techniques and a content analysis of television advertising currently directed at children were utilized. The methodology involved in this research involves videotaping a sample of television commercials off the air. Developing an instrument for making a systematic scrutiny of the content of advertising toward children was necessary in order to analyze the data. The actual sample size was determined by the total number of commercials that are aired on the days that the sample was gathered. The statistical techniques of analysis of variance (ANOVA) and chi-square were used to examine the coded data, which was also tested for reliability.

Limits of the Study

The major limitations of this study were in the sample collection procedure and the scope of empirical investigation. Restricted financial resources necessitated a sampling procedure using less than a purely random sample. The sample was taken from only one geographic area and each network's commercials taped on a different day. Because the three major networks account for the majority of television stations that have set aside children's viewing hours and their programming is

national in scope, this limitation was not a serious one. It was also assumed that television executives and advertisers would not drastically change their advertisements and advertising policies from one week to another within a four-week time period.

Data Source

In order to facilitate generalizations from the research, only commercials aired by the three major networks were analyzed. The sample used in this research consisted of commercials aired by the Oklahoma City network stations (ABC, CBS, and NBC) during the children's viewing hours of 7:00 a.m. to 12:00 noon on the following Saturdays: November 21 and 28, 1981; December 12 and 19, 1981; November 20 and 27, 1982; December 4 and 18, 1982; November 19 and 26, 1983; and December 3 and 10, 1983. The sample was actually a census of all nonprogram material aired by one station picked at random.

The 1981 data consists of television commercials aired in a regulated marketplace; the remaining data in a nonregulated marketplace. The 1982 data represents the time period shortly after the Code's abolishment, and the 1983 data a time period allowing for changes resulting from nonregulation of the advertisers to become evident.

Sampling Units

Duplicate commercial announcements were counted as separate entities only for the purpose of determining program content frequencies and percentages (i.e., listing the frequencies and percentages of toy, cereal, etc. commercials). The remainder of the analysis treated duplicate announcements as a single entity. Those researchers who do

use weighted data in their analysis do so based on the assumption that the repetition of a message will produce a greater impact upon the audience (i.e., the total set of information reaching the child viewer is a function of the total number of messages instead of the range of different messages). Since this study's purpose did not involve measuring the effects of commercials on children, but rather the compilation of a current marketing profile and the measurement of changes in advertising practices over time, unweighted data was used in the analysis.

Measuring Instrument

A measuring instrument comprised of ten categories (Commercial Identification, Commercial Characteristics, Product Information, Cast of Characters, Health/Nutrition, Setting -- Story Element, Production Techniques, Sales Pitch Delivery, Sales Persuasion Techniques, and Social Stereotyping) was constructed. The purpose of the Commercial Identification category was to identify each commercial. The next category, Commercial Characteristics, was used to classify each commercial by product type, commercial length, and presence/absence of an appropriate program separator (see Appendix A for the operational definitions). Each commercial was first assigned to one of the following categories: Cereals - Cold, Cereals - Hot, Candy, Cookies and Cakes, Crunchy Snacks, Drinks, Other Edibles, Restaurants, Nonprescription Drugs, Toys, Miscellaneous Products, or Noncommercial Announcements. Commercials for services were included in this study, but commercials judged to be either public service announcements or station/network advertisements (Noncommercial Announcements) were

excluded.

The purpose of the Product Information category was to measure the amount of objective information about the product presented in each commercial. For example, did the commercial mention the price of the product or tell where the product could be purchased? The Cast of Characters category was used to analyze various characteristics about the characters actually used in children's television commercials. Only food commercials were coded in the Health/Nutrition category. Questions such as, "Is the product portrayed as being part of a balanced meal?" or "Is the product portrayed as a substitute for a balanced meal?" were addressed here. The next category, Setting -- Story Elements, was used to analyze such variables as, "Is the setting a real life setting or a fantasy setting?" Production techniques are analyzed in the next category. Questions such as, "Is animation used in the commercial?" or "Are jingles used in the commercial?" were addressed here. The purpose of the Sales Pitch Delivery category was to determine who spoke for the product and whether testimonials were used. The Sales Persuasion Techniques category was included in the instrument in order to determine what specific sales persuasion techniques are being used by advertisers in the process of selling products to children. For example, do commercials explicitly tell children to ask their parents to buy products for them? The last category, Social Stereotyping, was used to analyze the various roles portrayed by the adult characters (male, female, and minority).

Because the instrument was designed to include a wide range of commercials, a particular commercial may have contained only a portion of the items listed in it. The instrument was based on the categories

used in previous content studies of children's advertising (Barcus, 1971; Barcus, 1975b; Winick, et al., 1973; Atkin and Herald, 1977; Doolittle and Pepper, 1975; Cattin and Jain, 1979; Moncrief and Landry, 1982) and was designed to permit direct comparisons with previous studies. The instrument had been deliberately structured in this manner so that changes in advertising practices could be measured and compared. Also, because not all data relevant in the past are relevant today and because new issues have become important, care had been taken to assure that all currently significant and relevant items were included on the instrument.

With one exception, all published content analysis studies of children's advertising merely recorded the presence or absence of a particular variable. The Winick, Williamson, Chuzmir and Winick study (1973), whose greatest contribution was the development of a detailed coding instrument predecated on a variety of considerations (including criticism of children's commercials), was the exception. These researchers' instrument used a four point scale (1 = none, 2 = some, 3 = much, 4 = very much) in measuring the various variables. Even though their results indicated a ninety percent accuracy in number of agreements during their reliability check, other researchers have not used their methodology and instrument. This is probably due to the fact that the use of such a scale makes subjectivity quite difficult to control. It is much easier to merely record the presence or absence of a variable, than to try to record to what degree this variable is present. However, a research design that can measure the degree to which a particular variable is present is more productive than one which merely measures the presence or absence of a variable. For example, a

cereal commercial that is constantly telling the viewer how sweet the cereal is should be coded differently from one which merely mentions once that the cereal is sweet tasting.

These and other types of scaling problems were taken under consideration in the design of the instrument (a copy of which is in Appendix B). A three point scale was used whenever possible. In pretesting the instrument, a three point scale was found to be inappropriate in some instances; while in several other instances its use may have led to an unacceptable amount of subjectivity in the coding process. Therefore, some items on the instrument were designed to require a write-in answer and others used a dichotomous scale.

Coding the Data

Three judges were used to analyze the content of the videotaped commercials. The researcher trained the judges until they consistently evaluated a set of sample commercials in a similar manner. Each judge was then randomly assigned to independently analyze a set of tapes and instructed to complete this task within a one-week time period. Each set of tapes consisted of four randomly selected tapes, with the following constraint: each set had to include at least one tape from each of the three different time periods (1981, 1982, and 1983). Since each individual tape contained all the commercials aired on one particular Saturday morning during the sample collection period, it was more efficient to randomly assign the tapes than to randomly assign each of the individual commercials.

The individual tapes analysed were edited versions of the original tapes which contained all the material that was aired by the individual

stations. In order to facilitate the coding process, most of the program material was not transferred to the edited tapes. During the coding process, the judges viewed the tapes as often as they deemed necessary. They were also allowed to continuously refer to the operational definitions during the coding process. Each item on the measuring instrument had been operationally defined and is listed in Appendix A.

In order to make sure that all the aired commercials were coded by the proper judges, each commercial also had its Commercial Identification and Commercial Characteristics categories (Parts 1 and 2 on the measuring instrument) coded by the researcher. Any discrepancies between coders and researcher were checked and corrected in a mutually agreeable manner. The item, Title Assigned to the Commercial, was compared in a very liberal way, merely to make sure that the commercial being analysed was the correct one. Major discrepancies were also checked and corrected.

Reliability

Berelson (1952) states that the analysis of communication content rests upon two different kinds of consistency:

1. consistency among analysts -- that is, different judges should produce the same results when they apply the same instrument to the same content; and
2. consistency through time -- that is, a single judge or group of judges should produce the same results when they apply the same instrument to the same content but at different times.

Both of these factors were taken into consideration in this study.

One week after the data was coded, each judge was given another tape to analyze. This tape was picked at random from the total set of tapes with the constraint that this tape was not one that had been previously analyzed by this same judge. Once this data had been coded it was tested for reliability using both the average percentage of agreements (across the three pairs of judges) and the average coefficient of agreement using Cohen's coefficient of agreement (see Appendix E for a more detailed explanation of Cohen's K). Coefficients of agreement were first determined between judges and then for each individual judge. Since few commercials were aired only once, individual judges had the opportunity to analyze some duplicate commercials during these two different time periods. This data was then used to determine the coefficients of agreement for each judge.

Many content analysis studies do not report any reliability statistics. Studies that do report reliability statistics usually report only the percentage of agreements between the sets of judges (Kassarjian, 1977; Scott, 1955). This method was used, but not alone, because of its major drawback: its expected value by chance alone is not a fixed number such as zero, but varies between zero and one. Of the several formulae that have been propounded to correct the problem (Bennett, Albert, and Goldstein, 1954; Scott, 1955; Cohen, 1960; Cattin and Jain, 1979), Cohen's was deemed most appropriate. The expected value of Cohen's K being zero, it did not overstate reliability. Concurrent use of these two methods minimized problems that are usually associated with reliability. A detailed explanation of Cohen's coefficient of agreement is presented in Appendix E.

The results of the reliability tests are listed in Table VII. The reliability figures for consistency among judges both in terms of the percentage of agreement method and Cohen's coefficient of agreement were quite high and can be attributed to the proper training of the judges. The percentage of agreement method resulted in percentage of agreements between the various judges of 87.3%, 89.5%, and 91.7%. Cohen's coefficient of agreement resulted in K's of 0.789, 0.801, and 0.862.

The reliability figures for consistency through time for each of the judges is also listed in Table VII. The percentage of agreement method resulted in the following figures: 88.5%, 90.2%, and 91.5%. Cohen's coefficient of agreement yielded the following K's: 0.801, 0.837, and 0.859.

Selection of Judges

All judges were adults, as was the case in all previous content analysis studies reported in the literature. It is quite plausible to expect different results from adult judges than from children judges. The goal of this study, however, was the identification of certain objective characteristics of commercials as viewed by adults, not children's perceptions of these same commercials. In order to insure impartiality, the judges were paid for their services and had no vested interest in this research.

Analytical Methods

The first stated purpose of this study is to determine whether any changes have occurred in children's television advertising between 1981 and 1983. In actuality, hundreds of individual hypotheses could be

TABLE VII
RELIABILITY

	Percentage of Agreements	Cohen's K
(Among judges)		
Judges 1 & 2	87.3%	0.789
Judges 2 & 3	91.7%	0.862
Judges 1 & 3	89.3%	0.801
(Through time)		
Judge 1	88.5%	0.801
Judge 2	91.5%	0.859
Judge 3	90.2%	0.837

stated for this project. As a practical matter, a series of general hypotheses are being stated to give the reader an understanding for the general direction of this research. These null hypotheses are:

- Ho₁: There is no difference between children's television commercials aired in 1981 and those aired in 1982.
- Ho₂: There is no difference between children's television commercials aired in 1982 and those aired in 1983.
- Ho₃: There is no difference between children's television commercials aired in 1981 and those aired in 1983.
- Ho₄: There is no difference between food commercials aired in 1981 and toy commercials aired in 1981.
- Ho₅: There is no difference between food commercials aired in 1982 and toy commercials aired in 1982.
- Ho₆: There is no difference between food commercials aired in 1983 and toy commercials aired in 1983.

Empirical results are being presented in the most detailed manner. Then general conclusions will be made regarding the generalized hypotheses. In the process of this analysis general, toy, and food advertising profiles (for 1981, 1982, and 1983) have emerged. The 1981 data represents commercials aired before the withdrawal of the Code, the 1982 data represents commercials aired shortly after the withdrawal of the Code, and the 1983 data represents commercials being aired more than a year after the Code's withdrawal. Comparisons made over these three time periods indicated whether any changes in advertising practices had taken place. Due to the rather sudden withdrawal of the Code, few changes in advertising practices were expected between 1981 and 1982. If changes occurred, it was expected that they would have started to occur by Fall 1983.

In order to test the null hypotheses, an item by item chi-square

analysis (analysis of variance was used whenever possible) was first done on all the variables on the instrument on a paired year basis -- 1981-1982, 1982-1983, 1981-1983. In those cases where the expected cell size for a particular variable was less than five in more than 20 percent of the cells, the cells were combined for statistical analysis. The null hypotheses was rejected or not rejected at the five percent level of significance.

The results of this analysis indicated whether any change had occurred during this time period, when the change occurred, and where it occurred. Two groups of variables (Health/Nutrition and Social Stereotyping) resulted in missing variables on the instrument for some sampling units. In these instances, the sampling statistic was calculated using only the appropriate sampling units. That is, Health/Nutrition statistics were calculated only for food commercials and Social Stereotyping statistics were calculated only for those commercials having the appropriate adult characters (male, female, or minority).

Whenever possible current research results should be compared to past research findings. The final step in this analysis was comparing this study's results with those found in previous studies. As pointed out in Chapter 11, this could not be done across the board over all the variables because of the many differences between the studies. Since the instrument was specifically designed to accomodate some comparisons, they were made next. Some of the more important comparisons made were:

1. Commercial time per children's television viewing hour,
2. Use of program separators,
3. Amount of product information provided,

4. Types of products advertised,
5. Character composition,
6. Amount of health and nutrition information provided by food commercials,
7. Use of animation,
8. Use of premiums,
9. Use of jingles,
10. Urging children to buy the product,
11. Urging children to ask parent to buy the product,
12. Use of social acceptance appeals, and
13. Roles portrayed by adult characters.

CHAPTER IV

RESULTS

Spatial and Temporal Content of Television

Airtime

Sample

The sample consisted of a total number of 948 commercials aired during the sampling periods (see Table VIII). Content analysis statistics concerning product category, commercial length, commercial time per hour, and program separator use were calculated using the entire data base. The remaining content analysis was performed only on the 501 nonduplicate (original) commercials. The 1981 sample consisted of 137 nonduplicate and 149 duplicate commercials; the 1982 sample of 195 nonduplicate and 148 duplicate commercials; and the 1983 sample of 169 nonduplicate and 150 duplicate commercials. Duplicate and nonduplicate commercials were categorized by year only. Since the major purpose of this study was to determine what changes have occurred over time, no attempt was made to count duplicate commercials over the entire three year time period. For example, a Crest commercial aired once in 1981, once in 1982, and once in 1983, was counted as a nonduplicate (original) commercial in each year's sample base. Tables XXXVII, XXXVIII, and XXXIX (in Appendix F) contain listings of all the nonduplicate commercials aired in 1981, 1982, and 1983.

TABLE VIII

NUMBER AND TYPES OF COMMERCIALS AIRED PER YEAR

Year	Commercial Type		Total
	Original	Duplicate	
1981	137	149	286
1982	195	148	343
1983	<u>169</u>	<u>150</u>	<u>319</u>
Total	501	447	948

Commercial Time

Table IX shows the distribution of the commercial time per broadcast hour and how it has increased during the three year period. An analysis of variance test was used to investigate this change in distribution by average commercial time per hour and no statistically significant changes were found (see Table X). For purposes of this analysis, the broadcast hour was used as the experimental unit (i.e., actual commercial time per broadcast hour was compared on an hourly basis). The overall average commercial time per hour had increased from 7.90 minutes per hour in 1981 to 9.05 minutes in 1983. Each network also increased its average commercial time over this three year time period. ABC went from a low of 7.36 minutes in 1981 to a high of 8.75 minutes in 1983 ($p = 0.728$); CBS from 8.60 to 9.00 minutes ($p = 0.638$); and NBC from 8.25 to 9.20 minutes ($p = 0.3817$). As can be seen from Table VIII, ABC still has the lowest average commercial time per broadcast hour. Several years ago, ABC broke precedent with the others and drastically lowered its average commercial time per broadcast hour during the Saturday morning children's viewing hours. Obviously, by 1983 ABC had followed suit and increased its commercial time per hour, however, it was still maintaining a lower average commercial time per hour (but not a statistically significant lower time per hour) than the other network stations. As can be seen from this data, though the network stations have increased their average commercial time per hour since 1981, these increases are not statistically significant.

TABLE IX
 AVERAGE COMMERCIAL TIME PER HOUR
 (In minutes)

Source	year		
	1981	1982	1983
ABC	7.36	8.60	8.75
CBS	8.60	8.83	9.00
NBC	8.25	8.33	9.20
OVERALL AVERAGE	7.90	8.69	9.05

TABLE X
 RESULTS OF SIGNIFICANCE TESTS FOR CHANGES
 IN COMMERCIAL TIME PER HOUR

ANALYSIS OF VARIANCE			
SOURCE	SUM OF SQUARES	F VALUES	PROB. > F
ABC	0.804	0.32	0.728
CBS	0.200	0.24	0.638
NBC	4.672	0.87	0.381
ALL SOURCES	2.619	0.64	0.531

Commercial Length

Average (mean, modal, and median) commercial length for television commercials aimed at children is 30 seconds (see Table XI). This is consistent with the results found by past researchers. The 10 and 15 second commercials were spot commercials for local advertisers and the rare 60 second commercials were limited to McDonald and Burger King commercials. In spite of the fact that past research has demonstrated that children pay maximum attention to a 60 second commercial, rather than a shorter one, advertisers prefer to use 30 second commercials.

Distribution by Program Content

Table XII shows the distribution of the total number of commercials aired by program content (product category). The instrument used in this study was designed to accommodate eleven program content categories -- Cereals-Cold, Cereals-Hot, Candy, Cookies and Cakes, Crunchy Snacks, Drinks, other Edibles, Restaurants, Nonprescription Drugs, Toys, Miscellaneous Products, and Noncommercial Announcements (see Appendix A for the operational definitions). Noncommercial messages and public service announcements were not included in this study. The commercials aired in 1981 were distributed into the following categories:

1. Toys -- 40.9%
2. Cereals-Cold -- 25.9%
3. Restaurants -- 11.5%
4. Candy -- 4.9%
5. Other Edibles -- 2.8%
6. Cereals-Hot -- 0.7%

TABLE XI
DISTRIBUTION OF COMMERCIALS BY COMMERCIAL LENGTH

COMMERCIAL LENGTH	YEAR			TOTAL FREQUENCY
	1981 FREQUENCY (COLUMN PERCENTAGE)	1982 FREQUENCY (COLUMN PERCENTAGE)	1983 FREQUENCY (COLUMN PERCENTAGE)	
10 SECONDS	0 (0.00)	8 (2.33)	0 (0.00)	8
15 SECONDS	1 (0.35)	0 (0.00)	0 (0.00)	1
30 SECONDS	284 (99.30)	333 (97.08)	313 (98.12)	930
60 SECONDS	1 (0.35)	2 (0.58)	6 (1.88)	9
TOTAL	286 (100.00)	343 (100.00)	319 (100.00)	948

TABLE XII
DISTRIBUTION OF COMMERCIALS BY PRODUCT CATEGORY

PRODUCT CATEGORY	YEAR			TOTAL FREQUENCY
	1981 FREQUENCY (COLUMN PERCENTAGE)	1982 FREQUENCY (COLUMN PERCENTAGE)	1983 FREQUENCY (COLUMN PERCENTAGE)	
CANDY	14 (4.90)	18 (5.25)	18 (5.64)	50
CEREALS- COLD	74 (25.87)	43 (12.54)	40 (12.54)	157
CEREALS- HOT	2 (0.70)	0 (0.00)	0 (0.00)	2
CRUNCHY SNACKS	0 (0.00)	1 (0.29)	7 (2.19)	8
DRINKS	0 (0.00)	2 (0.58)	14 (4.39)	16
DRUGS	0 (0.00)	1 (0.29)	1 (0.31)	2
MISCELLANEOUS PRODUCTS	38 (13.29)	78 (22.74)	60 (18.81)	175
OTHER EDIBLES	8 (2.80)	21 (6.12)	31 (9.72)	60
RESTAURANTS	33 (11.54)	19 (5.54)	16 (5.02)	68
TOYS	117 (40.91)	160 (46.65)	132 (41.38)	409
TOTAL	286 (100.00)	343 (100.00)	319 (100.00)	948

7. Miscellaneous Products -- 13.2%
8. Cookies and Cakes -- 0%
9. Crunchy Snacks -- 0%
10. Drinks -- 0%
11. Nonprescription Drugs -- 0%

The distribution by product category of the commercials aired in 1982 is the following:

1. Toys -- 46.7%
2. Cereals-Cold -- 12.5%
3. Restaurants -- 5.5%
4. Candy -- 5%
5. Other Edibles -- 6.1%
6. Cereals-Hot -- 0%
7. Miscellaneous Products -- 22.7%
8. Nonprescription Drugs -- 0.3%
9. Cookies and Cakes -- 0%
10. Crunchy Snacks, Drugs -- 0.3%
11. Drinks -- 0.6%

The distribution of the commercials aired in 1983 was the following:

1. Toys -- 41.4%
2. Cereals-Cold -- 12.5%
3. Restaurants -- 5.0%
4. Candy -- 5.6%
5. Other Edibles -- 9.7%
6. Cereals-Hot -- 0%
7. Miscellaneous Products -- 18.8%
8. Nonprescription Drugs -- 0.3%

9. Cookies and Cakes -- 0%
10. Crunchy Snacks -- 2.2%
11. Drinks - 4.4%

An analysis of variance test was used to investigate the change in the distribution of commercials by program content (product category). The exact trinomial test was used to investigate the change for those categories having small cell sizes.

There are some interesting results derived from studying these distributions, especially as they change from year to year (see Tables XII and XIII):

1. Commercials for nonprescription drugs which had been specifically prohibited by the Code have started to reappear (not a statistically significant change).
2. There was a very significant drop in the number of cold cereal commercials aired ($p = 0.0001$).
3. Commercials for hot cereal products were rare in 1981 and nonexistent in 1983 (not a statistically significant change).
4. Commercials for crunchy snacks increased from zero in 1981 to seven in 1983 (not a statistically significant change).
5. Commercials for drinks went from zero in 1981 to 14 in 1983 ($p = 0.0001$).
6. Commercials for other edibles increased significantly from 8 in 1981 to 31 in 1983 ($p = 0.002$).
7. The number of restaurant commercials decreased significantly ($p = 0.003$).

TABLE XIII

RESULTS OF SIGNIFICANCE TESTS FOR CHANGES IN THE DISTRIBUTION
OF COMMERCIALS BY PRODUCT CATEGORY

ANALYSIS OF VARIANCE		
PRODUCT CATEGORY	F VALUES	PROB. > F
CANDY	0.08	0.919
CEREALS-COLD	13.17	0.0001
DRINKS	10.94	0.0001
OTHER EDIBLES	6.17	0.0022
RESTAURANTS	5.95	0.0027
TOYS	1.35	0.2594
MISCELLANEOUS PRODUCTS	4.65	0.0098

EXACT TRINOMIAL TEST	
PRODUCT CATEGORY	OUTCOME
CEREALS-HOT	NOT SIGNIFICANT
CRUNCHY SNACKS	SIGNIFICANT
DRUGS	NOT SIGNIFICANT

8. The number of toy commercials increased in 1982 and then dropped back closer to their 1981 level in 1983 (not statistically significant changes). However, they still comprise the largest portion of television commercials aired in December.
9. The number of miscellaneous product commercials increased significantly ($p = 0.01$).
10. The number of candy commercials remained about the same (not a statistically significant change).

Upon viewing Table XIII, it becomes quite apparent that the distribution of children's television commercials by program content (product category) has changed significantly since 1981.

Use of Program Separators

Table XIV lists the types of program separators used by advertisers during the sampling period. As can be seen from the table, there is a significant difference in the type of program separators used over the sampling period.

The removal of the NAB Code seems to have had little effect upon the presence or absence of program separators. In 1981 there were only six instances of commercials being aired adjacent to program material without the use of a program separator. In 1982 this figure increased to nine and then it dropped back to two in 1983. Practically all of these omissions occurred on locally produced or syndicated programs (e.g., Ho Ho's Showplace and Gilligan's Island). The number of formal separators used increased from 160 in 1981 to 181 in 1983, while the number of informal separators increased from 50 in 1981 to 87 in 1983.

TABLE XIV
DISTRIBUTION OF COMMERCIALS BY USE OF SEPARATOR

TYPE OF SEPARATOR	YEAR			TOTAL FREQUENCY
	1981 FREQUENCY (COLUMN PERCENTAGE)	1982 FREQUENCY (COLUMN PERCENTAGE)	1983 FREQUENCY (COLUMN PERCENTAGE)	
FORMAL	160 (52.29)	172 (46.12)	181 (50.85)	513
INFORMAL	50 (16.34)	125 (33.51)	81 (22.75)	256
NONE	6 (1.96)	9 (2.41)	2 (0.56)	17
NOT APPLICABLE ¹	90 (29.41)	67 (17.96)	92 (25.84)	249
TOTAL	306 (100.00)	373 (100.00)	356 (100.00)	1035

¹COMMERCIAL NOT ADJACENT TO PROGRAM.

CHI-SQUARE = 37.716
DEGREES OF FREEDOM = 6
PROB < 0.001

As can be seen from Table XIV, this overall change in use of separators is significant ($p < 0.001$).

Some General Comments on Procedure

The remaining parts of this chapter are based on the analyses of 501 nonduplicate commercials which comprise the sample base (137 from 1981, 195 from 1982, and 169 from 1983). The results of these analyses are presented in summarized form in Tables XV to XXX. Only the more important variables and those that changed significantly over the sampling time period will be discussed in more detail.

Since a written discussion of these results could easily become very laborious and difficult to read, the following text illustrates the technical writing form being used in the remaining sections of this chapter. For example, Table XV contains the summarized results for the Cast of Characters variables. The frequency and percentage of occurrence for each variable are listed (the percentage of occurrence figures is in parentheses) in columns two through nine. The levels of significance ("p" values) that resulted from the chi-square analyses are listed in the next four columns. It should be noted that in some cases small cell sizes required the combining of the "one or two" and the "three or more" categories. The first variable listed in this table is "Human Male Child." From the figures listed in this table, it can be seen male children were used in 43% (30% one or two and 13% three or more) of the commercials aired in 1981, 49% (29% one or two and 20% three or more) in 1982, and 52% (37% one or two and 15% three or more) in 1983. The chi-square statistic calculated for 1981 versus 1982 resulted in an alpha value ("p" value) of 0.247. The remaining alpha

TABLE XV

SUMMARY OF RESULTS FOR CAST OF CHARACTERS

VARIABLE	FREQUENCY (PERCENTAGE)									LEVEL OF SIGNIFICANCE			
	1981			1982			1983			1981	1982	1981	ALL
	NONE	ONE OR TWO	THREE OR MORE	NONE	ONE OR TWO	THREE OR MORE	NONE	ONE OR TWO	THREE OR MORE	TO 1982	TO 1983	TO 1983	YEARS
ALL COMMERCIALS COMBINED													
HUMAN MALE CHILD	78(56.9)	41(29.9)	18(13.1)	99(50.8)	57(29.2)	39(20.0)	81(47.9)	63(37.3)	25(14.8)	NS ¹	NS	NS	NS
HUMAN FEMALE CHILD	73(53.3)	46(33.6)	18(13.1)	110(56.4)	56(28.7)	29(14.9)	85(50.3)	63(37.3)	21(12.4)	NS	NS	NS	NS
MINORITY GROUP MEMBER CHILD	118(86.1)	11(8.0)	8(5.8)	160(82.1)	27(13.8)	8(4.1)	143(84.6)	24(14.2)	2(1.2)	NS	NS	0.022 ²	0.097
HUMAN ADULT MALE	103(75.2)	25(18.2)	9(6.6)	135(69.2)	45(23.1)	15(7.7)	102(60.4)	53(31.4)	14(8.3)	NS	NS	0.019	0.077
HUMAN ADULT FEMALE	117(85.4)	16(11.7)	4(2.9)	148(75.9)	37(19.0)	10(5.1)	131(77.5)	28(16.6)	10(5.9)	NS	NS	NS	NS
MINORITY GROUP MEMBER ADULT	135(98.5)	1(0.7)	1(0.7)	189(96.9)	4(2.1)	2(1.0)	163(96.4)	5(3.0)	1(0.6)	NS	NS	NS	NS
ANIMAL WITH HUMAN QUALITIES	137(100.0)	0(0.0)	0(0.0)	195(100.0)	0(0.0)	0(0.0)	169(100.0)	0(0.0)	0(0.0)	NC ³	NC	NC	NC
ACTING INANIMATE OBJECT	136(99.3)	1(0.7)	0(0.0)	189(96.9)	6(3.1)	0(0.0)	165(97.6)	2(1.2)	2(1.2)	NS	NS	NS	NS
CARTOON OR FANTASY CHARACTER	92(67.2)	16(11.7)	29(21.2)	154(79.0)	17(8.7)	24(12.3)	109(64.5)	22(13.0)	38(22.5)	0.045	0.007	NS	0.029
CHARACTER FROM A PROGRAM SERIES	133(97.1)	1(0.7)	3(2.2)	192(98.5)	2(1.0)	1(0.5)	160(94.7)	4(2.4)	5(3.0)	NS	0.043	NS	NS
CHARACTER SYNONYMOUS WITH PRODUCT	103(75.2)	28(20.4)	6(4.4)	159(81.5)	28(14.4)	8(4.1)	124(73.4)	27(16.0)	18(10.7)	NS	0.041	0.097	0.040
TOY COMMERCIALS ONLY													
HUMAN MALE CHILD	30(44.1)	30(44.1)	8(11.8)	37(38.9)	38(40.0)	20(21.1)	28(40.0)	29(41.4)	13(18.6)	NS	NS	NS	NS
HUMAN FEMALE CHILD	26(38.2)	36(52.9)	6(8.8)	41(43.2)	41(43.2)	13(13.7)	26(37.1)	33(47.1)	11(15.7)	NS	NS	NS	NS
MINORITY GROUP MEMBER CHILD	59(86.8)	9(13.2)	0(0.0)	79(83.2)	15(15.8)	1(1.1)	61(87.1)	9(12.9)	0(0.0)	NS	NS	NS	NS
HUMAN ADULT MALE	51(75.0)	15(22.1)	2(2.9)	77(81.1)	16(16.8)	2(2.1)	46(65.7)	23(32.9)	1(1.4)	NS	0.025	NS	0.081
HUMAN ADULT FEMALE	55(80.9)	13(19.1)	0(0.0)	79(83.2)	15(15.8)	1(1.1)	62(88.6)	8(11.4)	0(0.0)	NS	NS	NS	NS
MINORITY GROUP MEMBER ADULT	68(100.0)	0(0.0)	0(0.0)	94(98.9)	1(1.1)	0(0.0)	70(100.0)	0(0.0)	0(0.0)	NS	NS	NC	NS
ANIMAL WITH HUMAN QUALITIES	68(100.0)	0(0.0)	0(0.0)	95(100.0)	0(0.0)	0(0.0)	70(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
ACTING INANIMATE OBJECT	68(100.0)	0(0.0)	0(0.0)	90(94.7)	5(5.3)	0(0.0)	69(98.6)	1(1.4)	0(0.0)	0.054	NS	NS	0.086
CARTOON OR FANTASY CHARACTER	66(97.1)	2(2.9)	0(0.0)	93(97.9)	0(0.0)	2(2.1)	62(88.6)	2(2.9)	6(8.6)	NS	0.013	0.054	0.017
CHARACTER FROM A PROGRAM SERIES	68(100.0)	0(0.0)	0(0.0)	95(100.0)	0(0.0)	0(0.0)	65(92.9)	2(2.9)	3(4.3)	NC	0.008	0.024	0.002
CHARACTER SYNONYMOUS WITH PRODUCT	67(98.5)	1(1.5)	0(0.0)	89(93.7)	5(5.3)	1(1.1)	64(91.4)	3(4.3)	3(4.3)	NS	NS	0.057	NS
FOOD COMMERCIALS ONLY													
HUMAN MALE CHILD	19(59.4)	9(28.1)	4(12.5)	27(58.7)	13(28.3)	6(13.0)	23(47.9)	20(41.7)	5(10.4)	NS	NS	NS	NS
HUMAN FEMALE CHILD	19(59.4)	7(21.9)	6(18.8)	33(71.7)	8(17.4)	5(10.9)	25(52.1)	19(39.6)	4(8.3)	NS	0.050	NS	0.090
MINORITY GROUP MEMBER CHILD	26(81.3)	2(6.3)	4(12.5)	39(84.8)	4(8.7)	3(6.5)	40(83.3)	6(12.5)	2(4.2)	NS	NS	NS	NS
HUMAN ADULT MALE	24(75.0)	4(12.5)	4(12.5)	28(60.9)	12(26.1)	6(13.0)	32(66.7)	12(25.0)	4(8.3)	NS	NS	NS	NS
HUMAN ADULT FEMALE	29(90.6)	1(3.1)	2(6.3)	33(71.7)	9(19.6)	4(8.7)	36(75.0)	10(20.8)	2(4.2)	0.042	NS	0.079	NS
MINORITY GROUP MEMBER ADULT	30(93.8)	1(3.1)	1(3.1)	44(95.7)	1(2.2)	1(2.2)	46(95.8)	2(4.2)	0(0.0)	NS	NS	NS	NS
ANIMAL WITH HUMAN QUALITIES	32(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
ACTING INANIMATE OBJECT	32(100.0)	0(0.0)	0(0.0)	45(97.8)	1(2.2)	0(0.0)	47(97.9)	0(0.0)	1(2.1)	NS	NS	NS	NS
CARTOON OR FANTASY CHARACTER	10(31.3)	9(28.1)	13(40.6)	23(50.0)	12(26.1)	11(23.9)	18(37.5)	12(25.0)	18(37.5)	NS	NS	NS	NS
CHARACTER FROM A PROGRAM SERIES	31(96.9)	1(3.1)	0(0.0)	43(93.5)	2(4.3)	1(2.2)	45(93.8)	2(4.2)	1(2.1)	NS	NS	NS	NS
CHARACTER SYNONYMOUS WITH PRODUCT	15(46.9)	16(50.0)	1(3.1)	27(58.7)	15(32.6)	4(8.7)	24(50.0)	17(35.4)	7(14.6)	NS	NS	NS	NS

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT

²READ AS P = 0.022

³NC -- NO CHANGE WAS OBSERVED

values were 0.189 for 1982 versus 1983, 0.282 for 1981 versus 1983, and 0.196 for all years combined. In the text this information will usually be presented in one of the following ways: "Human male children were presented in 43% (30 and 13) of the commercials aired in 1981, 49% (29 and 20) in 1982, and 52% (37 and 15) in 1983 ($p = 0.247, 0.189, 0.289,$ and 0.169);" or "Human male children were presented in 43% (30 and 13) of commercials aired in 1981, 49% (29 and 20) in 1982, and 52% (37 and 15) in 1983 (changes not statistically significant)." In the tables, "p" values over 0.100 are listed as "NS." It should also be noted that that a "p" value listed as 0.000 indicates that p is less than 0.001.

Commercial Character Content

Cast of Characters

Tables XV and XVI list the various commercial characters that were studied. Except where there was an off camera voice sound of a character in a key role within a story, the character had to make an on-camera appearance in order to be included in the study. The total number of different characters (not the total number of appearances) were counted.

All Commercials Combined

Children were present in about half of all the commercials aired. Male children were used in 43% (30 and 13) of the commercials aired in 1981, 49% (29 and 20) in 1982, and 52% (37 and 15) in 1983 ($p = 0.247, 0.189, 0.282,$ and 0.196). Female children were used as characters in 47% (34 and 13) of the commercials aired in 1981, 44% (29 and 15) in 1982, and 50% (37 and 13) in 1983 ($p = 0.627, 0.217, 0.797,$ and 0.541).

TABLE XVI

COMPARISON OF CAST OF CHARACTERS RESULTS IN TOY COMMERCIALS VERSUS FOOD COMMERCIALS

VARIABLE	FREQUENCY (PERCENTAGE)						LEVEL OF SIGNIFICANCE		ALL YEARS	
	TOY			FOOD			SINGLE YEAR	VARIABLE		
	NONE	ONE OR TWO	THREE OR MORE	NONE	ONE OR TWO	THREE OR MORE				
1981 SAMPLE										
HUMAN MALE CHILD	30(44 1)	30(44 1)	8(11 8)	19(59.4)	9(28.1)	4(12 5)	NS ¹	ALL YEARS	HUMAN MALE CHILD	0 035
HUMAN FEMALE CHILD	26(38 2)	36(52.9)	6(8.8)	19(59.4)	7(21.9)	6(18 8)	0.012 ²	HUMAN FEMALE CHILD	0 000	
MINORITY GROUP MEMBER CHILD	59(86.8)	9(13 2)	0(0 0)	26(81.3)	2(6.3)	4(12 5)	NS	MINORITY GROUP MEMBER HUMAN CHILD	0.000	
HUMAN ADULT MALE	51(75 0)	15(22.1)	2(2 9)	24(75 0)	4(12 5)	4(12 5)	NC ³	HUMAN ADULT MALE	0.001	
HUMAN ADULT FEMALE	55(80.9)	13(19 1)	0(0.0)	29(90 6)	1(3.1)	2(6.3)	NS	HUMAN ADULT FEMALE	0.002	
MINORITY GROUP MEMBER ADULT	68(100.0)	0(0.0)	0(0.0)	30(93.8)	1(3 1)	1(3 1)	0 037	MINORITY GROUP ADULT	0 004	
ANIMAL WITH HUMAN QUALITIES	68(100 0)	0(0 0)	0(0 0)	32(100.0)	0(0.0)	0(0.0)	NC	ANIMAL WITH HUMAN QUALITIES	NC	
ACTING INANIMATE OBJECT	68(100.0)	0(0 0)	0(0.0)	32(100.0)	0(0.0)	0(0.0)	NC	ACTING INANIMATE OBJECT	NS	
CARTOON OR FANTASY CHARACTER	66(97 1)	2(2 9)	0(0.0)	10(31 3)	9(28 1)	13(40.6)	0.000 ⁴	CARTOON OR FANTASY CHARACTER	0.000	
CHARACTER FROM A PROGRAM SERIES	68(100 0)	0(0 0)	0(0.0)	31(96 9)	1(3.1)	0(0.0)	NS	CHARACTER FROM A PROGRAM SERIES	0.086	
CHARACTER SYNONYMOUS WITH PRODUCT	67(98.5)	1(1 5)	0(0.0)	15(46.9)	16(50.0)	1(3.1)	0.000	CHARACTER SYNONYMOUS WITH PRODUCT	0.000	
1982 SAMPLE										
HUMAN MALE CHILD	37(38 9)	38(40 0)	20(21.1)	27(58.7)	13(28.3)	6(13 0)	0.085			
HUMAN FEMALE CHILD	41(43 2)	41(43.2)	13(13.7)	33(71.7)	8(17 4)	5(10.9)	0 004			
MINORITY GROUP MEMBER CHILD	79(83 2)	15(15 8)	1(1.1)	39(84.8)	4(8 7)	3(6.5)	NS			
HUMAN ADULT MALE	77(81 1)	16(16 8)	2(2.1)	28(60.9)	12(26 1)	6(13.0)	0.008			
HUMAN ADULT FEMALE	79(83 2)	15(15 8)	1(1.1)	33(71.7)	9(19 6)	4(8.7)	NS			
MINORITY GROUP MEMBER ADULT	94(98 9)	1(1 1)	0(0.0)	44(95 7)	1(2.2)	1(2.2)	NS			
ANIMAL WITH HUMAN QUALITIES	95(100.0)	0(0.0)	0(0.0)	46(100 0)	0(0.0)	0(0.0)	NC			
ACTING INANIMATE OBJECT	90(94 7)	5(5 3)	0(0.0)	45(97.8)	1(2.2)	0(0.0)	NS			
CARTOON OR FANTASY CHARACTER	93(97 9)	0(0.0)	2(2.1)	23(50.0)	12(26.1)	11(23.9)	0.000			
CHARACTER FROM A PROGRAM SERIES	95(100 0)	0(0 0)	0(0.0)	43(93.5)	2(4 3)	1(2.2)	0 011			
CHARACTER SYNONYMOUS WITH PRODUCT	89(93 7)	5(5 3)	1(1.1)	27(58.7)	15(32.6)	4(8.7)	0.000			
1983 SAMPLE										
HUMAN MALE CHILD	28(40 0)	29(41 4)	13(18.6)	23(47.9)	20(41 7)	5(10.4)	NS			
HUMAN FEMALE CHILD	26(37 1)	33(47.1)	11(15 7)	25(52 1)	19(39.6)	4(8.3)	NS			
MINORITY GROUP MEMBER CHILD	61(87.1)	9(12.9)	0(0.0)	40(83.3)	6(12.5)	2(4 2)	NS			
HUMAN ADULT MALE	46(65 7)	23(32.9)	1(1 4)	32(66 7)	12(25 0)	4(8.3)	NS			
HUMAN ADULT FEMALE	62(88.6)	8(11 4)	0(0.0)	36(75.0)	10(20 8)	2(4 2)	0.053			
MINORITY GROUP MEMBER ADULT	70(100 0)	0(0 0)	0(0.0)	46(95.8)	2(4.2)	0(0.0)	0.085			
ANIMAL WITH HUMAN QUALITIES	70(100 0)	0(0.0)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NC			
ACTING INANIMATE OBJECT	69(98 6)	1(1 4)	0(0.0)	47(97.9)	0(0 0)	1(2.1)	NS			
CARTOON OR FANTASY CHARACTER	62(88 6)	2(2 9)	6(8 6)	18(37.5)	12(25 0)	18(37.5)	0.000			
CHARACTER FROM A PROGRAM SERIES	65(92 9)	2(2 9)	3(4 3)	45(93.8)	2(4 2)	1(2 1)	NS			
CHARACTER SYNONYMOUS WITH PRODUCT	64(91 4)	3(4.3)	3(4 3)	24(50.0)	17(35.4)	7(14.6)	0.000			

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT
²READ AS P = 0.012
³NC -- NO CHANGE WAS OBSERVED
⁴0 000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0 001

Minority children were used in 14% (8 and 6) of the commercials in aired 1981, 18% (14 and 4) in 1982, and 15% (14 and 1) in 1983 ($p = 0.218, 0.236, 0.022, \text{ and } 0.097$).

Adult characters were used less frequently than child characters in commercials aired on Saturday mornings. The use of adult males increased during the sampling period. Adult males appeared in 25% (18 and 7) of the commercials aired in 1981, 31% (23 and 8) in 1982, and 39% (31 and 8) in 1983 ($p = 0.489, 0.178, 0.019, \text{ and } 0.077$). Adult female characters appeared in 15% (12 and 3) of the commercials aired in 1981, 24% (19 and 5) in 1982, and 23% (17 and 6) in 1983 ($p = 0.104, 0.807, 0.189, \text{ and } 0.270$). These changes were not statistically significant. Adult minority characters were rarely used in children's television commercials -- 1% (0.7 and 0.7) of the commercials aired in 1981, 3% (2 and 1) in 1982, and 4% (3 and 1) in 1983. Although the use of adult minority characters increased during the sampling period, it was not a statistically significant increase.

Cartoon or fantasy characters were used in 33% (12 and 21) of the commercials aired in 1981, 21% (9 and 12) in 1982, and 35% (13 and 23) in 1983 ($p = 0.045, 0.007, 0.882, 0.029$). Characters synonymous with the product were used in 25% (20.4 and 4.4) of the commercials aired in 1981, 18% (14 and 4) in 1982, and 27% (16 and 11) in 1983 ($p = 0.334, 0.041, 0.097, \text{ and } 0.040$). The use of characters from a program series as characters in children's television commercials ranged from 3% (1 and 2) in 1981, to 2% (1 and 1) in 1982, and 5% (2 and 3) in 1983 ($p = 0.388, 0.043, 0.299, \text{ and } 0.119$).

Toy Commercials

As can be seen from Table XV, separate statistics were calculated for toy commercials only. As was the case for all commercials combined, children were the main characters appearing in toy commercials. Male children appeared in 66% (44 and 12) of the toy commercials aired in 1981, 61% (40 and 21) in 1982, and 60% (41 and 19) in 1983 ($p = 0.299, 0.925, 0.535, \text{ and } 0.656$). Female children were also used extensively in toy commercials -- 62% (53 and 9) of the toy commercials aired in 1981, 57% (43 and 14) in 1982, and 63% (47 and 16) in 1983 ($p = 0.398, 0.734, 0.455, \text{ and } 0.628$). Minority group children were used less extensively than white children in toy commercials. Minority group children were present in 13% (13 and 0) of the toy commercials aired in 1981, 17% (16 and 1) in 1982, and 13% (13 and 0) in 1983 ($p = 0.528, 0.480, 0.947, \text{ and } 0.720$).

Adult characters were used less frequently than child characters in toy commercials. Male adults were present in 25% (22 and 3) of the toy commercials aired in 1981, 19% (17 and 2) in 1982, and 34% (33 and 1) in 1983 ($p = 0.353, 0.025, 0.232, \text{ and } 0.081$). Adult females were used less frequently than adult males: 19% (19 and 0) in 1981, 17% (16 and 1) in 1982, and 11% (11 and 0) in 1983 ($p = 0.708, 0.329, 0.208, \text{ and } 0.440$). Only one minority group member adult was observed in the entire sample of toy commercials. The commercial using this character was aired in 1982. Cartoon and fantasy characters were rarely featured in toy commercials in 1981, but their use increased significantly by 1983. These characters were used in 3% (3 and 0) of the toy commercials aired in 1981, 2% (0 and 2) in 1982, and 12 (3 and 9) in 1983 ($p = 0.733, 0.013, 0.054, \text{ and } 0.017$). Characters from a program series were not

used in the 1981 or 1982 toy commercials, but appeared in 7% (3 and 4) of the 1983 toy commercials (most changes not statistically significant). The use of characters synonymous with the product was also not a very common occurrence in toy commercials: 2% (2 and 0) in 1981, 6% (5 and 1) in 1982, and 8% (4 and 4) in 1983 (changes not statistically significant).

Food Commercials

Table XV also provides detailed information on food commercials. The only statistically significant change that occurred in food commercials during the sampling period was in the use of female characters. Female children appeared in 40% (21 and 19) of the food commercials aired in 1981, 28% (17 and 11) in 1982, and 48% (40 and 8) in 1983 ($p = 0.481, 0.050, 0.156, \text{ and } 0.090$). Male children were used more extensively than female children in food commercials: 41% (28 and 13) in 1981, 41% (28 and 13) in 1982, and 52% (42 and 10) in 1983. Minority group children were used less frequently than white children: 19% (6 and 13) in 1981, 15% (8.7 and 6.5) in 1982, and 17% (13 and 4) in 1983 (changes not statistically significant).

Adult characters were used less frequently than child characters in food commercials. Male adults were used more frequently than female adults. Male adults appeared in 25% (12.5 and 12.5) of the food commercials aired in 1981, 39% (26 and 13) in 1982, and 33% (25 and 8) in 1983. Adult females appeared in 9% (3 and 6) of the food commercials aired in 1981, 28% (19.6 and 8.7) in 1982, and 25% (21 and 4) in 1983. Minority group member adults were not used very often in food commercials. Minority adults were observed in 6% (3 and 3) of the food

commercials aired in 1981), 4% (2 and 2) in 1982, and 4% (4 and 0) in 1983. Acting inanimate objects were rarely used as characters: 0% in 1981, 2% (2 and 0) in 1982, and 2% (0 and 2) in 1983. Cartoon or fantasy characters were used quite frequently in food commercials. These characters were observed in 69% (28 and 41) of the food commercials aired in 1981, 50% (26 and 24) in 1982, and 63% (25 and 38) in 1983. Characters synonymous with the product were also used extensively in food commercials: 53% (50 and 3) of the food commercials aired in 1981, 41% (32 and 9) in 1982, and 50% (35 and 15) in 1983.

Toy Versus Food Commercials

Toy and food commercials were compared on a yearly basis in order to determine if there were any significant differences in the way these two products were advertised to children. Table XVI lists the detailed statistical information resulting from these comparisons. As before, it should be noted that a level of significance of "0.000" results from rounding to the third decimal place and therefore should be read as "highly significant." Toy and food commercials were quite different in terms of characters used. Since the detailed results for both types of commercials have already been discussed, only the overall difference between the two are discussed here. The following variables were found to be significantly different:

1. Children (male, female, and minority) were used more frequently in toy commercials than food commercials.
 - a. For male children, the overall p equals 0.035 .
 - b. For female children, the overall p is less than 0.001 .

- c. For minority children, the overall p is less than 0.001 .
2. Male adults were used more frequently in toy commercials (overall p = 0.001).
3. Female adults were used more frequently in food than toy commercials (overall p = 0.002).
4. Minority adults were used in some food commercials, but no toy commercials.
5. Cartoon or fantasy characters were used more frequently in food commercials than toy commercials (overall p < 0.001).
6. Characters from a program series were used more frequently in food commercials than toy commercials (overall p = 0.086).
7. Characters synonymous with the product were more frequently used in food commercials than toy commercials (overall p < 0.001).

Social Stereotyping

Tables XVII and XVIII list the detailed results concerning social stereotyping. The purpose of this section was to determine whether the adult characters appearing in the commercials were portrayed in stereotyped occupations or situations. Each adult character portrayed in the sample commercial was coded on a dichotomous scale: a "yes" answer indicated that the character was portrayed in a stereotyped role and a "no" answer indicated that the character was portrayed in a nonstereotyped role.

TABLE XVII

SUMMARY OF RESULTS FOR SOCIAL STEREOTYPING VARIABLES

VARIABLE	FREQUENCY (PERCENTAGE)									LEVEL OF SIGNIFICANCE			
	1981			1982			1983			1981	1982	1981	ALL
	NOT APPLICABLE ¹	YES	NO	NOT APPLICABLE ¹	YES	NO	NOT APPLICABLE ¹	YES	NO	TO 1982	TO 1983	TO 1983	YEARS
ALL COMMERCIALS COMBINED													
MALE WHITE STEREOTYPING	103(75.2)	34(24.8)	0(0.0)	135(69.2)	60(30.8)	0(0.0)	102(60.4)	66(39.1)	1(0.6)	NC ²	NS ³	NS	NS
FEMALE WHITE STEREOTYPING	117(85.4)	20(14.6)	0(0.0)	151(77.4)	44(22.6)	0(0.0)	131(77.5)	37(21.9)	1(0.6)	NC	NS	NS	NS
MALE MINORITY STEREOTYPING	135(98.5)	2(1.5)	0(0.0)	190(97.4)	5(2.6)	0(0.0)	163(96.4)	5(3.0)	1(0.6)	NC	NS	NS	NS
FEMALE MINORITY STEREOTYPING	135(98.5)	2(1.5)	0(0.0)	190(97.4)	5(2.6)	0(0.0)	166(98.2)	1(0.6)	2(1.2)	NC	0.035 ⁴	NS	0.054
TOY COMMERCIALS ONLY													
MALE WHITE STEREOTYPING	51(75.0)	17(25.0)	0(0.0)	76(80.0)	19(20.0)	0(0.0)	46(65.7)	24(34.3)	0(0.0)	NC	NC	NC	NC
FEMALE WHITE STEREOTYPING	55(80.9)	13(19.1)	0(0.0)	81(85.3)	14(14.7)	0(0.0)	62(88.6)	8(11.4)	0(0.0)	NC	NC	NC	NC
MALE MINORITY STEREOTYPING	68(100.0)	0(0.0)	0(0.0)	95(100.0)	0(0.0)	0(0.0)	70(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
FEMALE MINORITY STEREOTYPING	68(100.0)	0(0.0)	0(0.0)	94(98.9)	1(1.1)	0(0.0)	70(100.0)	0(0.0)	0(0.0)	NS	NS	NC	NC
FOOD COMMERCIALS ONLY:													
MALE WHITE STEREOTYPING	24(75.0)	8(25.0)	0(0.0)	28(60.9)	18(39.1)	0(0.0)	32(66.7)	15(31.3)	1(2.1)	NC	NS	NS	NS
FEMALE WHITE STEREOTYPING	29(90.6)	3(9.4)	0(0.0)	33(71.7)	13(28.3)	0(0.0)	36(75.0)	12(25.0)	0(0.0)	NC	NC	NC	NC
MALE MINORITY STEREOTYPING	30(93.8)	2(6.3)	0(0.0)	44(95.7)	2(4.3)	0(0.0)	46(95.8)	2(4.2)	0(0.0)	NC	NC	NC	NC
FEMALE MINORITY STEREOTYPING	30(93.8)	2(6.3)	0(0.0)	44(95.7)	2(4.3)	0(0.0)	47(97.9)	0(0.0)	1(2.1)	NC	0.083	0.083	0.082

¹COMMERCIALS NOT USING THESE CHARACTERS

²NC -- NO CHANGE WAS OBSERVED

³NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT

⁴READ AS P = 0.035

TABLE XVIII

COMPARISON OF SOCIAL STEREOTYPING RESULTS IN TOY COMMERCIALS VERSUS FOOD COMMERCIALS

VARIABLE	FREQUENCY (PERCENTAGE)						SINGLE YEAR	LEVEL OF SIGNIFICANCE	ALL YEARS
	TOY			FOOD					
	NOT APPLICABLE ¹	YES	NO	NOT APPLICABLE ¹	YES	NO			
<u>1981 SAMPLE</u>									
MALE WHITE STEREOTYPING	51(75.0)	17(25.0)	0(0.0)	24(75.0)	8(25.0)	0(0.0)	NC ²	<u>ALL YEARS</u>	NS
FEMALE WHITE STEREOTYPING	55(80.9)	13(19.1)	0(0.0)	29(90.6)	3(9.4)	0(0.0)	NC	MALE WHITE STEREOTYPING	NC
MALE MINORITY STEREOTYPING	68(100.0)	0(0.0)	0(0.0)	30(93.8)	2(6.3)	0(0.0)	NS ³	FEMALE WHITE STEREOTYPING	NC
FEMALE MINORITY STEREOTYPING	68(100.0)	0(0.0)	0(0.0)	30(93.8)	2(6.3)	0(0.0)	NS	MALE MINORITY STEREOTYPING	NC
								FEMALE MINORITY STEREOTYPING	NS
<u>1982 SAMPLE</u>									
MALE WHITE STEREOTYPING	76(80.0)	19(20.0)	0(0.0)	28(60.9)	18(39.1)	0(0.0)	NC		
FEMALE WHITE STEREOTYPING	81(85.3)	14(14.7)	0(0.0)	33(71.7)	13(28.3)	0(0.0)	NC		
MALE MINORITY STEREOTYPING	95(100.0)	0(0.0)	0(0.0)	44(95.7)	2(4.3)	0(0.0)	NS		
FEMALE MINORITY STEREOTYPING	94(98.9)	1(1.1)	0(0.0)	44(95.7)	2(4.3)	0(0.0)	NS		
<u>1983 SAMPLE</u>									
MALE WHITE STEREOTYPING	46(65.7)	24(34.3)	0(0.0)	32(66.7)	15(31.3)	1(2.1)	NS		
FEMALE WHITE STEREOTYPING	62(88.6)	8(11.4)	0(0.0)	36(75.0)	12(25.0)	0(0.0)	NC		
MALE MINORITY STEREOTYPING	70(100.0)	0(0.0)	0(0.0)	46(95.8)	2(4.2)	0(0.0)	NS		
FEMALE MINORITY STEREOTYPING	70(100.0)	0(0.0)	0(0.0)	47(97.9)	0(0.0)	1(2.1)	NS		

¹COMMERCIALS NOT USING THESE CHARACTERS.

²NC -- NO CHANGE WAS OBSERVED

³NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT.

All Commercials Combined

As can be seen from the data in Table XVII, all the adult human characters used in television commercials aired in 1981 and 1982 were depicted in stereotyped roles. In 1983, some commercials started portraying adults in nonstereotyped roles. Adult males, adult females, minority group member adult males, and minority group member adult females were each portrayed in nonstereotyped roles in only one percent of the 1983 commercials.

Toy Commercials

All the adult characters presented in toy commercials were portrayed in stereotyped roles.

Food Commercials

Practically all of the adult characters used in food commercials were portrayed in stereotyped roles. Only two exceptions were observed in the entire three year sample. In 1983, one commercial did portray a white male adult in a nonstereotyped role. Again in 1983, another food commercial portrayed one adult female minority group member in a nonstereotyped role.

Toy Versus Food Commercials

Toy and food commercials tended to portray their adult characters in a similar manner -- i.e., most adults were portrayed in stereotyped roles. The detailed results of this analysis are listed on Table XVIII.

Commercial Appeals and Practices

Product Information

Tables XIX and XX list the detailed results for product information. The purpose of this section was to determine the amount of product information presented in children's television commercials. The term "product" refers to the branded product or service advertised, not the premium which refers to a subsidiary product or other item offered as a means of promoting the product.

All Commercials Combined

As can be seen from a careful study of Table XIX, most of the commercials in the sample provided very little product information. Audio/visual disclaimers were the most frequent type of product information provided. They were used in 43% (25 and 18) of the commercials aired in 1981, 37% (16 and 21) in 1982, and 33% (15 and 18) in 1983. Though the use of disclaimers has increased over the years, this change was not statistically significant. Information about product availability was the next most common type of product information provided. It was provided in 18% (11 and 7) of the 1981 commercials, 11% (6 and 5) of the 1982 commercials, and 11% (6 and 5) of the 1983 commercials. Though this variable has declined in use over the years, the decline was not statistically significant in any of the comparisons. "Flavor Other Than Sweetness" was also one of the more commonly used variables. Its use fluctuated, but not significantly, over the years. A specific flavor was mentioned in 14% (7 and 7) of the commercials aired in 1981, 17% (4 and 13) in 1982, and 13% (6.5 and 6.5) in 1983.

TABLE XIX

SUMMARY OF RESULTS FOR PRODUCT INFORMATION VARIABLES

VARIABLE	FREQUENCY (PERCENTAGE)									LEVEL OF SIGNIFICANCE			
	1981			1982			1983			1981	1982	1983	ALL YEARS
	NONE	ONCE	MORE	NONE	ONCE	MORE	NONE	ONCE	MORE	TO 1982	TO 1983	TO 1983	ALL YEARS
ALL COMMERCIALS COMBINED													
PRICE	125(91 2)	2(1 5)	10(7 3)	179(91.8)	4(2 1)	12(6.2)	160(94 7)	2(1 2)	7(4 1)	NS ¹	NS	NS	NS
DURABILITY	131(95 6)	4(2 9)	2(1 5)	179(91 8)	6(3 1)	10(5 1)	158(93.5)	5(3 0)	6(3.6)	NS	NS	NS	NS
AVAILABILITY	113(82 5)	15(10 9)	9(6 6)	174(89 2)	12(6.2)	9(4.6)	150(88 8)	10(5.9)	9(5 3)	NS	NS	NS	NS
SWEETNESS	134(97 8)	2(1 5)	1(0 7)	192(98 5)	3(1.5)	0(0 0)	168(99 4)	1(0 6)	0(0 0)	NS	NS	NS	NS
FLAVOR OTHER THAN SWEETNESS	118(86.1)	9(6 6)	10(7 3)	163(83 6)	7(3 6)	25(12.8)	147(87.0)	11(6.5)	11(6 5)	NS	0 069 ²	NS	NS
GUARANTEES OR WARRANTIES	136(99 3)	1(0 7)	0(0 0)	194(99.5)	1(0.5)	0(0 0)	164(97.0)	4(2.4)	1(0 6)	NS	0 067	NS	NS
COMPARISON WITH OTHER PRODUCTS	132(96 4)	2(1.5)	3(2.2)	195(100 0)	0(0 0)	0(0 0)	166(98.2)	3(1.8)	0(0 0)	0 007	0 061	NS	0 032
COMPARISONS WITH OTHER BRANDS	135(98 5)	1(0 7)	1(0 7)	193(99.0)	1(0 5)	1(0 5)	160(94.7)	3(1.8)	6(3 6)	NS	0 016	0 070	0 022
AGE FOR USAGE MENTIONED	137(100 0)	0(0 0)	0(0 0)	194(99 5)	1(0 5)	0(0 0)	168(99.4)	1(0 6)	0(0 0)	NS	NS	NS	NS
PRODUCT DISTINCTIVENESS	132(96 4)	4(2 9)	1(0 7)	195(100 0)	0(0 0)	0(0 0)	150(88.8)	7(4.1)	12(7 1)	0.007	0.000	0 018	0.000
AUDIO/VISUAL DISCLAIMER USED	79(57 7)	34(24 8)	24(17 5)	123(63 1)	32(16.4)	40(20 5)	113(66.9)	26(15 4)	30(17 8)	NS	NS	NS	NS
TOY COMMERCIALS ONLY													
PRICE	67(98 5)	0(0 0)	1(1 5)	90(94 7)	2(2.1)	3(3 2)	67(95 7)	1(1.4)	2(2 9)	NS	NS	NS	NS
DURABILITY	63(92 6)	3(4 4)	2(2 9)	81(85 3)	5(5 3)	9(9.5)	64(91 4)	3(4.3)	3(4 3)	NS	NS	NS	NS
AVAILABILITY	65(95 6)	2(2 9)	1(1.5)	93(97 9)	0(0 0)	2(2.1)	68(97.1)	1(1.4)	1(1.4)	NS	NS	NS	NS
SWEETNESS	68(100 0)	0(0 0)	0(0 0)	95(100.0)	0(0 0)	0(0 0)	70(100.0)	0(0 0)	0(0 0)	NC ⁴	NC	NC	NC
FLAVOR OTHER THAN SWEETNESS	66(97 1)	0(0 0)	2(2 9)	94(98 9)	0(0 0)	1(1.1)	70(100.0)	0(0 0)	0(0 0)	NS	NS	NS	NS
GUARANTEES OR WARRANTIES	68(100 0)	0(0 0)	0(0 0)	94(98 9)	1(1.1)	0(0 0)	70(100.0)	0(0 0)	0(0 0)	NS	NS	NS	NS
COMPARISON WITH OTHER PRODUCTS	67(98.5)	1(1 5)	0(0 0)	95(100 0)	0(0 0)	0(0 0)	70(100.0)	0(0 0)	0(0 0)	NS	NC	NS	NS
COMPARISONS WITH OTHER BRANDS	68(100.0)	0(0 0)	0(0 0)	95(100 0)	0(0 0)	0(0 0)	70(100.0)	0(0 0)	0(0 0)	NC	NC	NC	NC
AGE FOR USAGE MENTIONED	68(100 0)	0(0 0)	0(0 0)	94(98 9)	1(1 1)	0(0 0)	69(98.6)	1(1 4)	0(0 0)	NS	NS	NS	NS
PRODUCT DISTINCTIVENESS	68(100 0)	0(0 0)	0(0 0)	95(100.0)	0(0 0)	0(0 0)	64(91.4)	5(7 1)	1(1.4)	NC	0 003	0 013	0 000
AUDIO/VISUAL DISCLAIMER USED	16(23 5)	28(41 2)	24(35 3)	25(26 3)	30(31 6)	40(42.1)	20(28.6)	20(28.6)	30(42.9)	NS	NS	NS	NS
FOOD COMMERCIALS ONLY													
PRICE	32(100 0)	0(0 0)	0(0 0)	45(97 8)	1(2 2)	0(0 0)	48(100.0)	0(0 0)	0(0 0)	NS	NS	NC	NS
DURABILITY	32(100 0)	0(0 0)	0(0 0)	46(100.0)	0(0 0)	0(0 0)	47(97.9)	0(0 0)	1(2 1)	NC	NS	NS	NS
AVAILABILITY	31(96 9)	1(3 1)	0(0 0)	46(100.0)	0(0 0)	0(0 0)	46(95 8)	2(4.2)	0(0 0)	NS	NS	NS	NS
SWEETNESS	29(90 6)	2(6 3)	1(3 1)	43(93 5)	3(6 5)	0(0 0)	47(97.9)	1(2.1)	0(0 0)	NS	NS	NS	NS
FLAVOR OTHER THAN SWEETNESS	15(46 9)	9(28 1)	8(25 0)	17(37 0)	6(13.0)	23(50.0)	28(58 3)	10(20.8)	10(20 8)	0 059	0 012	NS	0.022
GUARANTEES OR WARRANTIES	32(100.0)	0(0 0)	0(0 0)	46(100.0)	0(0 0)	0(0 0)	46(95.8)	1(2 1)	1(2 1)	NC	NS	NS	NS
COMPARISON WITH OTHER PRODUCTS	30(93.8)	0(0 0)	2(6.3)	46(100 0)	0(0 0)	0(0 0)	46(95 8)	2(4 2)	0(0 0)	0.085	NS	NS	NS
COMPARISONS WITH OTHER BRANDS	32(100 0)	0(0 0)	0(0 0)	45(97 8)	0(0 0)	1(2 2)	46(95 8)	0(0 0)	2(4 2)	NS	NS	NS	NS
AGE FOR USAGE MENTIONED	32(100.0)	0(0 0)	0(0 0)	46(100.0)	0(0 0)	0(0 0)	48(100.0)	0(0 0)	0(0 0)	NC	NC	NC	NC
PRODUCT DISTINCTIVENESS	31(96 9)	0(0 0)	1(3.1)	46(100 0)	0(0 0)	0(0 0)	43(89 6)	1(2 1)	4(8 3)	NS	0.024	NS	0.053
AUDIO/VISUAL DISCLAIMER USED	27(84 4)	5(15 6)	0(0 0)	46(100 0)	0(0 0)	0(0 0)	46(95.8)	2(4.2)	0(0 0)	0.005	NS	0.075	0.010

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT
²READ AS P = 0 069
³0 000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0.001
⁴NC -- NO CHANGE WAS OBSERVED

TABLE XX

COMPARISON OF PRODUCT INFORMATION RESULTS IN TOY COMMERCIALS VERSUS FOOD COMMERCIALS

VARIABLE	FREQUENCY (PERCENTAGE)						SINGLE YEAR	LEVEL OF SIGNIFICANCE	ALL YEARS	
	TOY			FOOD						
	NONE	ONCE	MORE	NONE	ONCE	MORE		VARIABLE		
1981 SAMPLE										
PRICE	67(98.5)	0(0.0)	1(1.5)	32(100.0)	0(0.0)	0(0.0)	NS ¹	ALL YEARS	PRICE	0.091
DURABILITY	63(92.6)	3(4.4)	2(2.9)	32(100.0)	0(0.0)	0(0.0)	NS	DURABILITY	0.002	
AVAILABILITY	65(95.6)	2(2.9)	1(1.5)	31(96.9)	1(3.1)	0(0.0)	NS	AVAILABILITY	NS	
SWEETNESS	68(100.0)	0(0.0)	0(0.0)	29(90.6)	2(6.3)	1(3.1)	0.010 ²	SWEETNESS	0.000	
FLAVOR OTHER THAN SWEETNESS	66(97.1)	0(0.0)	2(2.9)	15(46.9)	9(28.1)	8(25.0)	0.000 ³	FLAVOR OTHER THAN SWEETNESS	0.000	
GUARANTEES OR WARRANTIES	68(100.0)	0(0.0)	0(0.0)	32(100.0)	0(0.0)	0(0.0)	NC ⁴	GUARANTEES OR WARRANTIES	NS	
COMPARISON WITH OTHER PRODUCTS	67(98.5)	1(1.5)	0(0.0)	30(93.8)	0(0.0)	2(6.3)	NS	COMPARISONS WITH DIFFERENT PRODUCTS	0.034	
COMPARISONS WITH OTHER BRANDS	68(100.0)	0(0.0)	0(0.0)	32(100.0)	0(0.0)	0(0.0)	NC	COMPARISONS WITH OTHER BRANDS	0.018	
AGE FOR USAGE MENTIONED	68(100.0)	0(0.0)	0(0.0)	32(100.0)	0(0.0)	0(0.0)	NC	AGE FOR USAGE MENTIONED	NS	
PRODUCT DISTINCTIVENESS	68(100.0)	0(0.0)	0(0.0)	31(96.9)	0(0.0)	1(3.1)	NS	PRODUCT DISTINCTIVENESS	NS	
AUDIO/VISUAL DISCLAIMER USED	16(23.5)	28(41.2)	24(35.3)	27(84.4)	5(15.6)	0(0.0)	0.000	DISCLAIMER USED	0.000	
1982 SAMPLE										
PRICE	90(94.7)	2(2.1)	3(3.2)	45(97.8)	1(2.2)	0(0.0)	NS			
DURABILITY	81(85.3)	5(5.3)	9(9.5)	46(100.0)	0(0.0)	0(0.0)	0.006			
AVAILABILITY	93(97.9)	0(0.0)	2(2.1)	46(100.0)	0(0.0)	0(0.0)	NS			
SWEETNESS	95(100.0)	0(0.0)	0(0.0)	43(93.5)	3(6.5)	0(0.0)	0.011			
FLAVOR OTHER THAN SWEETNESS	94(98.9)	0(0.0)	1(1.1)	17(37.0)	6(13.0)	23(50.0)	0.000			
GUARANTEES OR WARRANTIES	94(98.9)	1(1.1)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	NS			
COMPARISON WITH OTHER PRODUCTS	95(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	NC			
COMPARISONS WITH OTHER BRANDS	95(100.0)	0(0.0)	0(0.0)	45(97.8)	0(0.0)	1(2.2)	NS			
AGE FOR USAGE MENTIONED	94(98.9)	1(1.1)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	NS			
PRODUCT DISTINCTIVENESS	95(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	NC			
AUDIO/VISUAL DISCLAIMER USED	25(26.3)	30(31.6)	40(42.1)	46(100.0)	0(0.0)	0(0.0)	0.000			
1983 SAMPLE										
PRICE	67(95.7)	1(1.4)	2(2.9)	48(100.0)	0(0.0)	0(0.0)	NS			
DURABILITY	64(91.4)	3(4.3)	3(4.3)	47(97.9)	0(0.0)	1(2.1)	NS			
AVAILABILITY	68(97.1)	1(1.4)	1(1.4)	46(95.8)	2(4.2)	0(0.0)	NS			
SWEETNESS	70(100.0)	0(0.0)	0(0.0)	47(97.9)	1(2.1)	0(0.0)	NS			
FLAVOR OTHER THAN SWEETNESS	70(100.0)	0(0.0)	0(0.0)	28(58.3)	10(20.8)	10(20.8)	0.000			
GUARANTEES OR WARRANTIES	70(100.0)	0(0.0)	0(0.0)	46(95.8)	1(2.1)	1(2.1)	0.085			
COMPARISON WITH OTHER PRODUCTS	70(100.0)	0(0.0)	0(0.0)	46(95.8)	2(4.2)	0(0.0)	0.085			
COMPARISONS WITH OTHER BRANDS	70(100.0)	0(0.0)	0(0.0)	46(95.8)	0(0.0)	2(4.2)	0.085			
AGE FOR USAGE MENTIONED	69(98.6)	1(1.4)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NS			
PRODUCT DISTINCTIVENESS	64(91.4)	5(7.1)	1(1.4)	43(89.6)	1(2.1)	4(8.3)	NS			
AUDIO/VISUAL DISCLAIMER USED	20(28.6)	20(28.6)	30(42.9)	46(95.8)	2(4.2)	0(0.0)	0.000			

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT.
²READ AS P = 0.010
³0.000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0.001
⁴NC -- NO CHANGE WAS OBSERVED.

Though price was usually not mentioned, a reference to price was made in 9% (2 and 7) of the commercials aired in 1981, 8% (2 and 6) in 1982, and 5% (1 and 4) in 1983. Both the amount of price information presented in children's television commercials and the number of commercials presenting any price information has decreased steadily over the years, but not enough to be statistically significant.

Product sweetness was also rarely mentioned. It was specifically mentioned in 3% (2 and 1) of the commercials aired in 1981, 2% (2 and 0) in 1982, and 1% (1 and 0) in 1983. This slight, but steady, decline was also not statistically significant.

Guarantees or warranties, almost nonexistent in 1981 and 1982, were used in 3% (2 and 1) of the 1983 sample (not statistically significant changes). Product comparisons with different products were made in 4% (2 and 2) in the 1981 commercials 0% in 1982, and 2% (2 and 0) in 1983. Comparisons with other brands have also become more frequent over the years. They were made in 1% (0.7 and 0.7) of the commercials aired in 1981, 1% (0.5 and 0.5) in 1982, and 6% (2 and 4) in 1983. No change was recorded between 1981 and 1982. The changes that have occurred since 1982 were significant. Mention of appropriate age for product usage increased from 0% in 1981 to 1% (1 and 0) in both 1982 and 1983.

The use of the product distinctiveness variable resulted in some significant changes. Product distinctiveness was mentioned in 4% (3 and 1) of the commercials aired in 1981, 0% in 1982, and 11% (4 and 7) in 1983.

Toys

Audio/visual disclaimers were the most frequent type of product

information found in toy commercials. They were used in 76% (41 and 35) of the commercials aired in 1981, 74% (32 and 42) in 1982, and 71% (28 and 43) in 1983. Though the use of disclaimers has increased slightly over the years, this increase was found to be statistically not significant.

The percentage of toy commercials providing price information increased in 1982 and then decreased in 1983. In 1981, 2% (0 and 2) of the commercials aired provided some product information, 5% (2 and 3) in 1982, and 4% (1 and 3) in 1983. None of these changes were statistically significant.

The percentage of toy commercials mentioning product durability has fluctuated over the years. Durability was mentioned in 7% (4 and 3) of the commercials aired in 1981, 15% (5 and 10) in 1982, and 8% (4 and 4) in 1983 (not statistically significant). The mention of product availability has declined over the years -- 5% (3 and 2) in 1981, 2% (0 and 2) in 1982, and 2% (1 and 1) in 1983. (not statistically significant).

Some children's toys are scented in food flavors and this scent is used as a selling point in the commercial. The use of this variable in toy commercials has declined over the years -- 3% (0 and 3) in 1981, 1% (0 and 1) in 1982, and 0% in 1983. Toy commercials very rarely compared their product to other (different) products. In 1981, 2% (2 and 0) did compare their product to other products, 0% in 1982, and 0% in 1983. Toy commercials never compared their product to other brands, and seldom mentioned appropriated age for product usage (both 1982 and 1983 had an occurrence rate of 1%).

The only significant change in terms of product information was for

product distinctiveness. Product distinctiveness was not mentioned in 1981, yet in 1983 it was used by 8% (7 and 1) of the toy commercials.

Food

Most food commercials do not mention sweetness. It was mentioned in only 9% (6 and 3) of the commercials aired in 1981, 7% (7 and 0) in 1982, and 2% (2 and 0) in 1983 (changes not statistically significant). The use of this variable has declined over the years, but not enough to be statistically significant. "Flavor Other Than Sweetness" was the most frequent kind of product information provided in food commercials. It was provided in 53% (28 and 25) of the commercials aired in 1981, 63% (13 and 50) in 1982, and 42% (21 and 21) in 1983 ($p = 0.059, 0.012, 0.592, \text{ and } 0.022$).

Some food commercials used audio/visual disclaimers -- 16% (16 and 0) in 1981, 0% in 1982, and 4% (4 and 0) in 1983. This decrease in 1982 and subsequent increase in 1983 was significant ($p = 0.01$).

Toy Versus Food Commercials

Toy and food commercials provide different kinds of product information to their viewers (see Table XX). Since the toy and food commercials were each discussed in detail in the two preceding sections, this discussion will be limited to the overall differences between the two kinds of commercials. These differences and their alpha values are listed below:

1. Toy commercials provided more price information than food commercials ($p = 0.091$).
2. Durability was mentioned more often in toy commercials

- than food commercials ($p = 0.002$).
3. Availability was used about equally by toy and food commercials ($p = 0.731$).
 4. Sweetness was used only by food commercials.
 5. Flavor other than sweetness was used mainly by food commercials ($p < 0.001$).
 6. Guaranties or warranties were rarely used by toy or food commercials ($p = 0.249$).
 7. Comparisons with different products were made more often by food commercials than toy commercials ($p = 0.034$).
 8. Comparisons with other brands were made more often by food commercials ($p = 0.018$).
 9. Age for product usage was rarely mentioned by either toy or food commercials.
 10. Product Distinctiveness was used slightly more often by food commercials than toy commercials ($p = 0.271$).
 11. Disclaimers were used primarily by toy commercials ($p < 0.001$).

Setting

Tables XXI and XXII list the results for the setting variables. As can be seen from these tables, these variables were coded according to the presence ("yes") or absence ("no") of the variable. Commercial settings can be either fantasy settings or real world settings. Some real world settings can also involve a human family interaction.

TABLE XXI

SUMMARY OF RESULTS FOR SETTING -- STORY ELEMENTS

VARIABLE	FREQUENCY (PERCENTAGE)						LEVEL OF SIGNIFICANCE			
	1981		1982		1983		1981 TO 1982	1982 TO 1983	1981 TO 1983	ALL YEARS
	YES	NO	YES	NO	YES	NO				
<u>ALL COMMERCIALS COMBINED</u>										
REAL SETTING	123(89.8)	14(10.2)	173(88.7)	22(11.3)	151(89.3)	18(10.7)	NS ¹	NS	NS	NS
FANTASY	45(32.8)	92(67.2)	44(22.6)	151(77.4)	68(40.2)	101(59.8)	0.037 ²	0.000 ³	NS	0.001
HUMAN FAMILY INTERACTION	9(6.6)	128(93.4)	2(1.0)	193(99.0)	21(12.4)	148(87.6)	0.005	0.000	0.086	0.000
<u>TOY COMMERCIALS ONLY</u>										
REAL SETTING	68(100.0)	0(0.0)	95(100.0)	0(0.0)	69(98.6)	1(1.4)	NC ⁴	NS	NS	NS
FANTASY	1(1.5)	67(98.5)	7(7.4)	88(92.6)	11(15.7)	59(84.3)	0.085	0.089	0.003	0.008
HUMAN FAMILY INTERACTION	8(11.8)	60(88.2)	2(2.1)	93(97.9)	12(17.1)	58(82.9)	0.011	0.000	NS	0.003
<u>FOOD COMMERCIALS ONLY</u>										
REAL SETTING	26(81.3)	6(18.8)	33(71.7)	13(28.3)	39(81.3)	9(18.8)	NS	NS	NC	NS
FANTASY	23(71.9)	9(28.1)	22(47.8)	24(52.2)	32(66.7)	16(33.3)	0.034	0.064	NS	0.060
HUMAN FAMILY INTERACTION	1(3.1)	31(96.9)	0(0.0)	46(100.0)	3(6.3)	45(93.8)	NS	0.084	NS	NS

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT

²READ AS P = 0.037

³0.000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0.001

⁴NC -- NO CHANGE WAS OBSERVED

TABLE XXII

COMPARISON OF SETTING -- STORY ELEMENTS RESULTS IN TOY COMMERCIALS VERSUS FOOD COMMERCIALS

VARIABLE	FREQUENCY (PERCENTAGE)				SINGLE YEAR	LEVEL OF SIGNIFICANCE	ALL YEARS
	TOY		FOOD				
	YES	NO	YES	NO		VARIABLE	
<u>1981 SAMPLE</u>							
REAL SETTING	68(100.0)	0(0.0)	26(81.3)	6(18.8)	0.000 ¹	<u>ALL YEARS</u>	
FANTASY	1(1.5)	67(98.5)	23(71.9)	9(28.1)	0.000	REAL SETTING	0.000
HUMAN FAMILY INTERACTION	8(11.8)	60(88.2)	1(3.1)	31(96.9)	NS ²	FANTASY	0.000
						HUMAN FAMILY INTERACTION	0.028
<u>1982 SAMPLE</u>							
REAL SETTING	95(100.0)	0(0.0)	33(71.7)	13(28.3)	0.000		
FANTASY	7(7.4)	88(92.6)	22(47.8)	24(52.2)	0.000		
HUMAN FAMILY INTERACTION	2(2.1)	93(97.9)	0(0.0)	46(100.0)	NS		
<u>1983 SAMPLE</u>							
REAL SETTING	69(98.6)	1(1.4)	39(81.3)	9(18.8)	0.000		
FANTASY	11(15.7)	59(84.3)	32(66.7)	16(33.3)	0.000		
HUMAN FAMILY INTERACTION	12(17.1)	58(82.9)	3(6.3)	45(93.8)	0.081 ³		

¹0.000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0.001

²NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT

³READ AS P = 0.081

All Commercials Combined

Most commercials used a real setting -- 90% in 1981, 89% in 1982, and 89% in 1983 (no significant changes observed). Though real life settings were used in most of the commercials, some fantasy situations were presented in 33% of the commercials in 1981, 23% in 1982, and 40% in 1983 ($p = 0.037, 0.000, 0.182, \text{ and } 0.001$). Family settings were used in 7% of the commercials aired in 1981, 1% in 1982, and 13% in 1983.

Toys

Practically all of the toy commercials used a real life setting. Only one toy commercial aired in 1983 did not use a real life setting. Some commercials combined a real life setting with a fantasy setting. Fantasy settings were used by 2% of the commercials aired in 1981, 4% in 1982, and 16% in 1983 ($p = 0.085, 0.089, 0.003, 0.008$).

Toy commercials showed more family interaction than the average commercial. In 1981, 12% of the toy commercials showed a human family interaction. In 1982 this figure decreased significantly to 2% ($p = 0.011$) and then increased significantly again to 17% in 1983 ($p < 0.001$). The change from 1981 to 1983 was not statistically significant ($p = 0.369$). However, the overall change over the three years was significant ($p = 0.003$).

Food Commercials

Most food commercials used a real life setting -- 81% in 1981; 72% in 1982; and 81% in 1983. As can be seen from Table XXI, this variable decreased in 1982 and then returned back to its 1981 level in 1983.

None of these changes were significant.

The use of fantasy in food commercials' settings also changed significantly during the sampling period. In 1981, 72% of the food commercials used a fantasy setting. This figure decreased to 48% in 1982 and then increased to 67% in 1983 ($p = 0.034$, 0.064 , 1.000 and 0.465). Most food commercials did not portray a human family interaction (3% in 1981, 0% in 1982, and 6% in 1983). However, most did use a real life setting (sometimes in combination with a fantasy setting): 82% in 1981, 19% in 1982, and 81% in 1983. A family interaction was portrayed in only 2% of the commercials aired in 1981, 0% in 1982, and 6% in 1983 (changes not statistically significant).

Toy Versus Food

Toy and food commercials used quite different settings. In terms of overall differences between these two types of commercials, the following changes were observed and all were statistically significant.

1. Toy commercials used a real life setting to a greater extent than food commercials ($p < 0.001$).
2. Fantasy settings were more prevalent in food commercials than toy commercials ($p < 0.001$).
3. Human family interaction was used more frequently in toy commercials than food commercials ($p = 0.28$).

Production Techniques

Tables XXIII and XXIV list the detailed results for the production technique variables. The purpose of this section was to determine what production techniques were used by television commercials in selling to

TABLE XXIII
SUMMARY OF RESULTS FOR PRODUCTION TECHNIQUES

VARIABLE	FREQUENCY (PERCENTAGE)						LEVEL OF SIGNIFICANCE			
	1981		1982		1983		1981	1982	1981	ALL
	YES	NO	YES	NO	YES	NO	TO 1982	TO 1983	TO 1983	YEARS
ALL COMMERCIALS COMBINED										
ANIMATION	33(24.1)	104(75.9)	45(23.1)	150(76.9)	49(29.0)	120(71.0)	NS ¹	NS	NS	NS
JINGLES	72(52.6)	65(47.4)	63(32.3)	132(67.7)	88(52.1)	81(47.9)	0.000 ²	0.000	NS	0.000
EXAGGERATION OF SOUND	3(2.2)	134(97.8)	2(1.0)	193(99.0)	6(3.6)	163(96.4)	NS	NS	NS	NS
EXAGGERATION OF APPEARANCE	9(6.6)	128(93.4)	7(3.6)	188(96.4)	10(5.9)	159(94.1)	NS	NS	NS	NS
EXAGGERATION OF CHILD'S REACTION	24(17.5)	113(82.5)	11(5.6)	184(94.4)	52(30.8)	117(69.2)	0.000	0.000	0.007 ³	0.000
MAGNIFICATION OF PRODUCT BENEFITS	14(10.2)	123(89.8)	18(9.2)	177(90.8)	26(15.4)	143(84.6)	NS	0.072	NS	NS
TOY COMMERCIALS ONLY										
ANIMATION	1(1.5)	67(98.5)	9(9.5)	86(90.5)	8(11.4)	62(88.6)	0.035	NS	0.017	0.064
JINGLES	42(61.8)	26(38.2)	30(31.6)	65(68.4)	37(52.9)	33(47.1)	0.000	0.005	NS	0.000
EXAGGERATION OF SOUND	3(4.4)	65(95.6)	2(2.1)	93(97.9)	1(1.4)	69(98.6)	NS	NS	NS	NS
EXAGGERATION OF APPEARANCE	5(7.4)	63(92.6)	5(5.3)	90(94.7)	6(8.6)	64(91.4)	NS	NS	NS	NS
EXAGGERATION OF CHILD'S REACTION	17(25.0)	51(75.0)	4(4.2)	91(95.8)	26(37.1)	44(62.9)	0.000	0.000	NS	0.000
MAGNIFICATION OF PRODUCT BENEFITS	6(8.8)	62(91.2)	12(12.6)	83(87.4)	5(7.1)	65(92.9)	NS	NS	NS	NS
FOOD COMMERCIALS ONLY:										
ANIMATION	21(65.6)	11(34.4)	23(50.0)	23(50.0)	25(52.1)	23(47.9)	NS	NS	NS	NS
JINGLES	15(46.9)	17(53.1)	18(39.1)	28(60.9)	31(64.6)	17(35.4)	NS	0.013	NS	0.041
EXAGGERATION OF SOUND	0(0.0)	32(100.0)	0(0.0)	46(100.0)	5(10.4)	43(89.6)	NC ⁴	0.024	0.059	0.014
EXAGGERATION OF APPEARANCE	3(9.4)	29(90.6)	1(2.2)	45(97.8)	2(4.2)	46(95.8)	NS	NS	NS	NS
EXAGGERATION OF CHILD'S REACTION	3(9.4)	29(90.6)	4(8.7)	42(91.3)	19(39.6)	29(60.4)	NS	0.000	0.003	0.000
MAGNIFICATION OF PRODUCT BENEFITS	6(18.8)	26(81.3)	4(8.7)	42(91.3)	11(22.9)	37(77.1)	NS	0.059	NS	NS

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT
²0.000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0.001
³READ AS P = 0.007
⁴NC -- NO CHANGE WAS OBSERVED

TABLE XXIV

COMPARISON OF PRODUCTION TECHNIQUES RESULTS IN TOY COMMERCIALS VERSUS FOOD COMMERCIALS

VARIABLE	FREQUENCY (PERCENTAGE)				SINGLE YEAR	LEVEL OF SIGNIFICANCE	ALL YEARS
	TOY		FOOD				
	YES	NO	YES	NO		VARIABLE	
1981 SAMPLE						ALL YEARS	
ANIMATION	1(1.5)	67(98.5)	21(65.6)	11(34.4)	0.000 ¹	ANIMATION	0.000
JINGLES	42(61.8)	26(38.2)	15(46.9)	17(53.1)	NS ²	JINGLES	NS
EXAGGERATION OF SOUND	3(4.4)	65(95.6)	0(0.0)	32(100.0)	NS	EXAGGERATION OF SOUND	NS
EXAGGERATION OF APPEARANCE	5(7.4)	63(92.6)	3(9.4)	29(90.6)	NS	EXAGGERATION OF APPEARANCE	NS
EXAGGERATION OF CHILD'S REACTION	17(25.0)	51(75.0)	3(9.4)	29(90.6)	0.068 ³	EXAGGERATION OF CHILDS REACTION	NS
MAGNIFICATION OF PRODUCT BENEFITS	6(8.8)	62(91.2)	6(18.8)	26(81.3)	NS	MAGNIFICATION OF PRODUCT BENEFITS	0.060
1982 SAMPLE							
ANIMATION	9(9.5)	86(90.5)	23(50.0)	23(50.0)	0.000		
JINGLES	30(31.6)	65(68.4)	18(39.1)	28(60.9)	NS		
EXAGGERATION OF SOUND	2(2.1)	93(97.9)	0(0.0)	46(100.0)	NS		
EXAGGERATION OF APPEARANCE	5(5.3)	90(94.7)	1(2.2)	45(97.8)	NS		
EXAGGERATION OF CHILD'S REACTION	4(4.2)	91(95.8)	4(8.7)	42(91.3)	NS		
MAGNIFICATION OF PRODUCT BENEFITS	12(12.6)	83(87.4)	4(8.7)	42(91.3)	NS		
1983 SAMPLE							
ANIMATION	8(11.4)	62(88.6)	25(52.1)	23(47.9)	0.000		
JINGLES	37(52.9)	33(47.1)	31(64.6)	17(35.4)	NS		
EXAGGERATION OF SOUND	1(1.4)	69(98.6)	5(10.4)	43(89.6)	0.029		
EXAGGERATION OF APPEARANCE	6(8.6)	64(91.4)	2(4.2)	46(95.8)	NS		
EXAGGERATION OF CHILD'S REACTION	26(37.1)	44(62.9)	19(39.6)	29(60.4)	NS		
MAGNIFICATION OF PRODUCT BENEFITS	5(7.1)	65(92.9)	11(22.9)	37(77.1)	0.013		

¹0.000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0.001 .

²NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT.

³READ AS P = 0.068

children and to determine what changes in these techniques have occurred during the sampling time period. Only the presence ("yes") or absence ("no") of each variable was coded on the instrument.

All Commercials Combined

The use of animation fluctuated from 24% in 1981 to 23% in 1982 to 29% in 1983 (not statistically significant changes). The use of jingles was at 53% in 1981, dropped to 32% in 1982, and then rose to 52% in 1983 ($p = 0.000, 0.000, 0.932, \text{ and } 0.000$). The use of exaggerated sound effects was 2% in 1981, 1% in 1982, and 4% in 1983 ($p = 0.391, 0.101, 0.483, \text{ and } 0.260$). Seven percent of the 1981 commercials exaggerated the product's appearance in 1981, 4% did in 1982, and 6% did in 1983 (not statistically significant changes). The percentage of commercials exaggerating a child's reaction to the product also fluctuated greatly -- 18% in 1981, 6% in 1982, and 31% in 1983 ($p = 0.000, 0.000, 0.007, \text{ and } 0.000$). The percentage of commercials magnifying the products benefits was 10% in 1981, 9% in 1982, and 15% in 1983 (not statistically significant changes).

Toy Commercials

The use of animation in food commercials increased significantly from 2% in 1981, to 10% in 1982, and then to 11% in 1983 ($p = 0.035, 0.683, 0.017, \text{ and } 0.064$). The use of jingles also increased significantly from 62% in 1981, to 32% in 1982, and then to 53% in 1983 ($p = 0.000, 0.005, 0.290, \text{ and } 0.000$). Although the percentage of toy commercials using sound to exaggerate the product's attributes has decreased steadily over the years -- 4% in 1981, 2% in 1982, and 1% in

1983 ($p = 0.399, 0.747, 0.296, \text{ and } 0.505$), this decrease was not statistically significant. Seven percent of the 1981 toy commercials exaggerated the product's appearance, 5% in 1982, and 9% in 1983 ($p = 0.583, 0.399, 0.791, \text{ and } 0.695$). The percentage of toy commercials exaggerating a child's reaction to the product fluctuated greatly -- 25% in 1981, 4% in 1982, and 37% in 1983 ($p = 0.000, 0.000, 0.123, \text{ and } 0.000$). Nine percent of the 1981 commercials magnified the products benefits, 13% in 1982, and 8% in 1983 (changes not statistically significant).

Food Commercials

Animation was the most frequently used production technique in food commercials. Sixty-six percent of the 1981 food commercials used animation, 50% in 1982, and 52% in 1983 (changes not statistically significant). The use of jingles fluctuated over the three year period -- 47% in 1981, 39% in 1982, and 65% in 1983 ($p = 0.495, 0.013, 0.116, \text{ and } 0.041$). In 1981 and 1982, no food commercials were observed exaggerating a product's benefits through the use of sound. However, in 1983, 10% of the food commercials were observed using this technique. Only a few food commercials were observed exaggerating the product's visual appearance -- 10% in 1981, 2% in 1982, and 4% in 1983 (not statistically significant changes). The percentage of food commercials exaggerating a child's reaction to the product was 9% in 1981, 9% in 1982, and 40% in 1983 ($p = 0.917, 0.000, 0.003, \text{ and } 0.000$). The percentage of food commercials magnifying the product benefits decreased from 19% in 1981, to 8% in 1982, and then increased to 23% in 1983 ($p = 0.191, 0.059, 0.055, \text{ and } 0.169$).

Toy Versus Food

Some differences in production techniques were observed between toy and food commercials (see Table XXIV). Since toy and food commercials have already been discussed in detail, this discussion has been limited to the overall differences that were observed.

1. Animation was used at least five times more often in food commercials than toy commercials ($p < 0.001$).
2. Jingles are used extensively by both toy and food commercials ($p = 0.467$).
3. Exaggeration of sound did not result in any statistically significant differences between toy and food commercials ($p = 0.464$).
4. Exaggeration of appearance occurred more often in toy commercials than food commercials, but this difference was not statistically significant ($p = 0.427$).
5. Exaggeration of child's reaction to the product usually occurred somewhat more often in toy commercials than in food commercials ($p = 0.917$).
6. Food commercials tended to magnify a product's benefits much more often than toy commercials ($p = 0.06$).

Sales Pitch Delivery

The purpose of this section was to determine who presents the sales pitch in children's television commercials. These variables were coded with a "yes" (present) or "no" (absent) answer and the detailed results are listed in Tables XXV and XXVI.

All Commercials Combined

The use of direct testimonials was rare and did not change significantly during this time period. In 1981 and 1982 about 1% of the commercials used direct testimonials. This figure rose to 4% in 1983. Indirect testimonials were not found in any of the commercials regardless of year.

Most product spokespersons were cartoon or fantasy characters. Seventeen percent of the 1981 commercials used cartoon or fantasy spokespersons, 13% in 1982, and 18% in 1983 (changes not statistically significant). Minority characters were never used as product spokespersons. Adult males were used as spokespersons in 6% of the 1981 commercials, 2% of the 1982 commercials, and 4% of the 1983 commercials (changes not statistically significant). Adult females were used as spokespersons in 4% of the 1981 commercials, 1% of the 1982 commercials, and 2% of the 1983 commercials (changes not statistically significant). Male children were used as product spokespersons in 2% of the 1981 commercials, 1% of the 1982 commercials, and 2% of the 1983 commercials (changes not statistically significant). Female children were used as spokespersons in only 1% of the 1981 commercials, 1% of the 1982 commercials, 2% of the 1983 commercials (changes not statistically significant).

An unidentified male voice was the most frequently used sales pitch technique in selling products to children. In 1981, 55% of the commercials used an unidentified male voice to sell the product. This figure increased to 67% in 1982 and then dropped slightly to 66% in 1983 ($p = 0.021, 0.762, 0.051, 0.050$). The use of an unidentified female voice to sell products to children was observed in 14% of the 1981

TABLE XXV

SUMMARY OF RESULTS FOR SALES PITCH DELIVERY VARIABLES

VARIABLE	FREQUENCY (PERCENTAGE)						LEVEL OF SIGNIFICANCE			
	1981		1982		1983		1981	1982	1983	ALL
	YES	NO	YES	NO	YES	NO	TO 1982	TO 1983	TO 1983	YEARS
ALL COMMERCIALS COMBINED										
DIRECT TESTIMONIAL	1(0.7)	136(99.3)	2(1.0)	193(99.0)	6(3.6)	163(96.4)	NS ¹	NS	0 100 ²	NS
INDIRECT TESTIMONIAL	0(0.0)	137(100.0)	0(0.0)	195(100.0)	0(0.0)	169(100.0)	NC ³	NC	NC	NC
ADULT SPOKESPERSON -- MALE	8(5.8)	129(94.2)	4(2.1)	191(97.9)	6(3.6)	163(96.4)	0.068	NS	NS	NS
ADULT SPOKESPERSON -- FEMALE	5(3.6)	132(96.4)	2(1.0)	193(99.0)	3(1.8)	166(98.2)	NS	NS	NS	NS
ADULT SPOKESPERSON -- MINORITY	0(0.0)	137(100.0)	0(0.0)	195(100.0)	0(0.0)	169(100.0)	NC	NC	NC	NC
CHILD SPOKESPERSON -- MALE	3(2.2)	134(97.8)	1(0.5)	194(99.5)	2(1.2)	167(98.8)	NS	NS	NS	NS
CHILD SPOKESPERSON -- FEMALE	1(0.7)	136(99.3)	1(0.5)	194(99.5)	3(1.8)	166(98.2)	NS	NS	NS	NS
CHILD SPOKESPERSON -- MINORITY	0(0.0)	137(100.0)	0(0.0)	195(100.0)	0(0.0)	169(100.0)	NC	NC	NC	NC
CARTOON/FANTASY SPOKESPERSON	23(16.8)	114(83.2)	26(13.3)	169(86.7)	31(18.3)	138(81.7)	NS	NS	NS	NS
MALE VOICE	75(54.7)	62(45.3)	131(67.2)	64(32.8)	111(65.7)	58(34.3)	0 021	NS	0 051	0 050
FEMALE VOICE	19(13.9)	118(86.1)	25(12.8)	170(87.2)	29(17.2)	140(82.8)	NS	NS	NS	NS
TOY COMMERCIALS ONLY										
DIRECT TESTIMONIAL	1(1.5)	67(98.5)	0(0.0)	95(100.0)	0(0.0)	70(100.0)	NS	NC	NS	NS
INDIRECT TESTIMONIAL	0(0.0)	68(100.0)	0(0.0)	95(100.0)	0(0.0)	70(100.0)	NC	NC	NC	NC
ADULT SPOKESPERSON -- MALE	3(4.4)	65(95.6)	0(0.0)	95(100.0)	2(2.9)	68(97.1)	0.038	0 097	NS	NS
ADULT SPOKESPERSON -- FEMALE	4(5.9)	64(94.1)	0(0.0)	95(100.0)	0(0.0)	70(100.0)	0.016	NC	0 039	0 007
ADULT SPOKESPERSON -- MINORITY	0(0.0)	68(100.0)	0(0.0)	95(100.0)	0(0.0)	70(100.0)	NC	NC	NC	NC
CHILD SPOKESPERSON -- MALE	1(1.5)	67(98.5)	0(0.0)	95(100.0)	1(1.4)	69(98.6)	NS	NS	NS	0 499
CHILD SPOKESPERSON -- FEMALE	0(0.0)	68(100.0)	1(1.1)	94(98.9)	0(0.0)	70(100.0)	NS	NS	NC	0 482
CHILD SPOKESPERSON -- MINORITY	0(0.0)	68(100.0)	0(0.0)	95(100.0)	0(0.0)	70(100.0)	NC	NC	NC	NC
CARTOON/FANTASY SPOKESPERSON	1(1.5)	67(98.5)	1(1.1)	94(98.9)	0(0.0)	70(100.0)	NS	NS	NS	NS
MALE VOICE	44(64.7)	24(35.3)	71(74.7)	24(25.3)	42(60.0)	28(40.0)	NS	0 044	NS	NS
FEMALE VOICE	17(25.0)	51(75.0)	21(22.1)	74(77.9)	26(37.1)	44(62.9)	NS	0.034	NS	0 087
FOOD COMMERCIALS ONLY										
DIRECT TESTIMONIAL	0(0.0)	32(100.0)	1(2.2)	45(97.8)	4(8.3)	44(91.7)	NS	NS	0.093	NS
INDIRECT TESTIMONIAL	0(0.0)	32(100.0)	0(0.0)	46(100.0)	0(0.0)	48(100.0)	NC	NC	NC	NC
ADULT SPOKESPERSON -- MALE	0(0.0)	32(100.0)	0(0.0)	46(100.0)	1(2.1)	47(97.9)	NC	NS	NC	NS
ADULT SPOKESPERSON -- FEMALE	0(0.0)	32(100.0)	0(0.0)	46(100.0)	0(0.0)	48(100.0)	NC	NC	NC	NC
ADULT SPOKESPERSON -- MINORITY	0(0.0)	32(100.0)	0(0.0)	46(100.0)	0(0.0)	48(100.0)	NC	NC	NC	NC
CHILD SPOKESPERSON -- MALE	1(3.1)	31(96.9)	0(0.0)	46(100.0)	1(2.1)	47(97.9)	NS	NS	NS	NS
CHILD SPOKESPERSON -- FEMALE	0(0.0)	32(100.0)	0(0.0)	46(100.0)	2(4.2)	46(95.8)	NC	NS	NS	NS
CHILD SPOKESPERSON -- MINORITY	0(0.0)	32(100.0)	0(0.0)	46(100.0)	0(0.0)	48(100.0)	NC	NC	NC	NC
CARTOON/FANTASY SPOKESPERSON	12(37.5)	20(62.5)	20(43.5)	26(56.5)	18(37.5)	30(62.5)	NS	NS	NC	NS
MALE VOICE	17(53.1)	15(46.9)	23(50.0)	23(50.0)	33(68.8)	15(31.3)	NS	0.064	NS	NS
FEMALE VOICE	0(0.0)	32(100.0)	0(0.0)	46(100.0)	0(0.0)	48(100.0)	NC	NC	NC	NC

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT

²READ AS P = 0 100

³NC -- NO CHANGE WAS OBSERVED

TABLE XXVI

COMPARISON OF SALES PITCH DELIVERY RESULTS IN TOY COMMERCIALS VERSUS FOOD COMMERCIALS

VARIABLE	FREQUENCY (PERCENTAGE)				SINGLE YEAR	LEVEL OF SIGNIFICANCE	ALL YEARS
	TOY		FOOD				
	YES	NO	YES	NO		VARIABLE	
1981 SAMPLE							
DIRECT TESTIMONIAL	1(1.5)	67(98.5)	0(0.0)	32(100.0)	NS ¹	<u>ALL YEARS</u> DIRECT TESTIMONIAL	O 012
INDIRECT TESTIMONIAL	0(0.0)	68(100.0)	0(0.0)	32(100.0)	NC ²	INDIRECT TESTIMONIAL	NC
ADULT SPOKESPERSON -- MALE	3(4.4)	65(95.6)	0(0.0)	32(100.0)	NS	ADULT SPOKESPERSON -- MALE	NS
ADULT SPOKESPERSON -- FEMALE	4(5.9)	64(94.1)	0(0.0)	32(100.0)	NS	ADULT SPOKESPERSON -- FEMALE	NS
ADULT SPOKESPERSON -- MINORITY	0(0.0)	68(100.0)	0(0.0)	32(100.0)	NC	ADULT SPOKESPERSON -- MINORITY	NC
CHILD SPOKESPERSON -- MALE	1(1.5)	67(98.5)	1(3.1)	31(96.9)	NS	CHILD SPOKESPERSON -- MALE	NS
CHILD SPOKESPERSON -- FEMALE	0(0.0)	68(100.0)	0(0.0)	32(100.0)	NC	CHILD SPOKESPERSON -- FEMALE	NS
CHILD SPOKESPERSON -- MINORITY	0(0.0)	68(100.0)	0(0.0)	32(100.0)	NC	CHILD SPOKESPERSON -- MINORITY	NC
CARTOON/FANTASY SPOKESPERSON	1(1.5)	67(98.5)	12(37.5)	20(62.5)	0.000 ³	CARTOON/FANTASY SPOKESPERSON	O.000
MALE VOICE	44(64.7)	24(35.3)	17(53.1)	15(46.9)	NS	MALE VOICE	O 075
FEMALE VOICE	17(25.0)	51(75.0)	0(0.0)	32(100.0)	0.001 ⁴	FEMALE VOICE	O 000
1982 SAMPLE							
DIRECT TESTIMONIAL	0(0.0)	95(100.0)	1(2.2)	45(97.8)	NS		
INDIRECT TESTIMONIAL	0(0.0)	95(100.0)	0(0.0)	46(100.0)	NC		
ADULT SPOKESPERSON -- MALE	0(0.0)	95(100.0)	0(0.0)	46(100.0)	NC		
ADULT SPOKESPERSON -- FEMALE	0(0.0)	95(100.0)	0(0.0)	46(100.0)	NC		
ADULT SPOKESPERSON -- MINORITY	0(0.0)	95(100.0)	0(0.0)	46(100.0)	NC		
CHILD SPOKESPERSON -- MALE	0(0.0)	95(100.0)	0(0.0)	46(100.0)	NC		
CHILD SPOKESPERSON -- FEMALE	1(1.1)	94(98.9)	0(0.0)	46(100.0)	NS		
CHILD SPOKESPERSON -- MINORITY	0(0.0)	95(100.0)	0(0.0)	46(100.0)	NC		
CARTOON/FANTASY SPOKESPERSON	1(1.1)	94(98.9)	20(43.5)	26(56.5)	0.000		
MALE VOICE	71(74.7)	24(25.3)	23(50.0)	23(50.0)	0.003		
FEMALE VOICE	21(22.1)	74(77.9)	0(0.0)	46(100.0)	0.000		
1983 SAMPLE							
DIRECT TESTIMONIAL	0(0.0)	70(100.0)	4(8.3)	44(91.7)	O 014		
INDIRECT TESTIMONIAL	0(0.0)	70(100.0)	0(0.0)	48(100.0)	NC		
ADULT SPOKESPERSON -- MALE	2(2.9)	68(97.1)	1(2.1)	47(97.9)	NS		
ADULT SPOKESPERSON -- FEMALE	0(0.0)	70(100.0)	0(0.0)	48(100.0)	NC		
ADULT SPOKESPERSON -- MINORITY	0(0.0)	70(100.0)	0(0.0)	48(100.0)	NC		
CHILD SPOKESPERSON -- MALE	1(1.4)	69(98.6)	1(2.1)	47(97.9)	NS		
CHILD SPOKESPERSON -- FEMALE	0(0.0)	70(100.0)	2(4.2)	46(95.8)	O 085		
CHILD SPOKESPERSON -- MINORITY	0(0.0)	70(100.0)	0(0.0)	48(100.0)	NC		
CARTOON/FANTASY SPOKESPERSON	0(0.0)	70(100.0)	18(37.5)	30(62.5)	0.000		
MALE VOICE	42(60.0)	28(40.0)	33(68.8)	15(31.3)	NS		
FEMALE VOICE	26(37.1)	44(62.9)	0(0.0)	48(100.0)	0.000		

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT.

²NC -- NO CHANGE WAS OBSERVED.

³0.000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0.001.

⁴READ AS P = 0.001.

commercials, 13% of the 1982 commercials, and 17% of the 1983 commercials ($p = 0.781, 0.245, 0.431, \text{ and } 0.485$).

Toy Commercials

Most toy commercials used an unidentified male voice to sell the product -- 65% in 1981, 75% in 1982, and 60% in 1983 ($p = 0.165, 0.044, 0.568, \text{ and } 0.110$). An unidentified female voice was the second most frequent production technique used to sell toys to children. Twenty-five percent of 1981 commercials used an unidentified female voice, 22% of the 1982 commercials, and 37% in 1983 ($p = 0.666, 0.034, 0.123, 0.087$).

Only one toy commercial in the whole sample used testimonials (one direct testimonial was observed in 1981). Adult male spokespersons were used in 4% of the 1981 commercials, 0% in 1982, and 3% in 1983. No minority spokespersons (adult or child) were found in the entire sample of toy commercials. Adult females were used as spokespersons in 6% of the 1981 commercials and not observed in the subsequent years. A child spokesperson was used once in the entire sample -- one male child spokesperson was observed in 1982.

Food Commercials

No statistically significant changes in production techniques were found. There were, however, several interesting changes and relationships that should be mentioned. An unidentified male voice was used most frequently in selling food products to children. Fifty-three percent of the 1981 food commercials used an unidentified male voice, 50% in 1982, and 69% in 1983. Cartoon or fantasy spokespersons were

also used extensively in food commercials. Thirty-eight percent of 1981 commercials used a cartoon or fantasy character, 44% in 1982, and 38% in 1983. A few white male children were also observed as product spokespersons -- 3% in 1981, 0% in 1982, and 2% in 1983. No female adults were used as product spokespersons in the entire sample. Female child spokespersons were nonexistent until 1983 when 4% of the food commercials were observed using female child spokespersons. No minorities (adults or children) were ever used as product spokespersons.

Toy Versus Food

Some differences in sales pitch variables were observed between toy and food commercials (see Table XXVI). Again, these differences are being discussed only in overall terms and are listed below:

1. Direct testimonials though more prevalent in food commercials were rarely used in either toy or food commercials.
2. Indirect testimonials were not used.
3. Adult male spokespersons were more prevalent in toy commercials than food commercials ($p = 0.340$).
4. Adult females were rarely used.
5. No minority spokespersons (adult or child) were used.
6. Male child spokespersons were used about equally in both toy and food commercials.
7. Female child spokespersons were rare in both types of commercials.
8. Cartoon/fantasy spokespersons were used extensively in food commercials and occasionally in toy commercials ($p <$

0.001).

9. The unidentified male voice was used extensively in both food and toy commercials ($p = 0.075$).

10. The unidentified female voice was common in toy commercials but nonexistent in food commercials ($p < 0.001$).

Sales Persuasion Techniques

Tables XXVII and XXVIII list the results for sales persuasion techniques. The purpose of this section was to determine exactly what sales persuasion techniques are used by advertisers selling products to children. The variables in this section were coded on a three point scale -- none, once, and more than once. As before, it must be noted that in some cases small cells required the combining of the "once" and "more than once" categories.

All Commercials Combined

Not a single commercial aired during the children's viewing hours specifically urged a child to ask his parents to buy the product for him. Neither did any commercial urge the child to buy the product himself. The use of premium offers decreased during the sampling period. They were used by 7% (7 and 0) of the commercials aired in 1981, 3% (2 and 1) in 1982, and 3% (1 and 2) in 1983 ($p = 0.131, 0.585, 0.342, \text{ and } 0.006$). Few commercials used special offers other than premiums (e.g., sweepstakes or contests). Only 1%(0 and 1) did in 1981, 0% in 1982, and 2%(0.6 and 1.8) in 1983.

A portion of commercials were observed appealing to social

TABLE XXVII

SUMMARY OF RESULTS FOR SALES PERSUASION TECHNIQUES

VARIABLE	FREQUENCY (PERCENTAGE)									LEVEL OF SIGNIFICANCE			
	1981			1982			1983			1981	1982	1981	ALL
	NONE	ONCE	MORE	NONE	ONCE	MORE	NONE	ONCE	MORE	TO 1982	TO 1983	TO 1983	YEARS
ALL COMMERCIALS COMBINED.													
CHILD URGED TO ASK PARENT TO BUY	137(100.0)	0(0.0)	0(0.0)	195(100.0)	0(0.0)	0(0.0)	169(100.0)	0(0.0)	0(0.0)	NC ¹	NC	NC	NC
CHILD EXHORTED TO BUY PRODUCT	137(100.0)	0(0.0)	0(0.0)	195(100.0)	0(0.0)	0(0.0)	169(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
CHILD EXHORTED TO BUY PREMIUM	128(93.4)	9(6.6)	0(0.0)	189(96.9)	5(2.6)	1(0.5)	162(95.9)	2(1.2)	5(3.0)	NS ²	NS	NS	0 006 ³
SPECIAL OFFER OTHER THAN PREMIUM	136(99.3)	0(0.0)	1(0.7)	195(100.0)	0(0.0)	0(0.0)	165(97.6)	1(0.6)	3(1.8)	NS	0 030	NS	0 071
APPEALS TO SOCIAL ACCEPTANCE	135(98.5)	1(0.7)	1(0.7)	192(98.5)	0(0.0)	3(1.5)	162(95.9)	3(1.8)	4(2.4)	NS	NS	NS	NS
PRODUCT USE EQUALS FUN	67(48.9)	21(15.3)	49(35.8)	137(70.3)	13(6.7)	45(23.1)	68(40.2)	37(21.9)	64(37.9)	0 000 ⁴	0 000	NS	0 000
DEMONSTRATION	25(18.2)	27(19.7)	85(62.0)	18(9.2)	36(18.5)	141(72.3)	40(23.7)	31(18.3)	98(58.0)	0 041	0.000	NS	0 005
TOY COMMERCIALS ONLY													
CHILD URGED TO ASK PARENT TO BUY	68(100.0)	0(0.0)	0(0.0)	95(100.0)	0(0.0)	0(0.0)	70(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
CHILD EXHORTED TO BUY PRODUCT	68(100.0)	0(0.0)	0(0.0)	95(100.0)	0(0.0)	0(0.0)	70(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
CHILD EXHORTED TO BUY PREMIUM	67(98.5)	1(1.5)	0(0.0)	93(97.9)	2(2.1)	0(0.0)	69(98.6)	0(0.0)	1(1.4)	NS	NS	NS	NS
SPECIAL OFFER OTHER THAN PREMIUM	68(100.0)	0(0.0)	0(0.0)	95(100.0)	0(0.0)	0(0.0)	70(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
APPEALS TO SOCIAL ACCEPTANCE	68(100.0)	0(0.0)	0(0.0)	95(100.0)	0(0.0)	0(0.0)	70(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
PRODUCT USE EQUALS FUN	19(27.9)	9(13.2)	40(58.8)	54(56.8)	8(8.4)	33(34.7)	14(20.0)	14(20.0)	42(60.0)	0.001	0 000	NS	0 000
DEMONSTRATION	0(0.0)	3(4.4)	65(95.6)	2(2.1)	1(1.1)	92(96.8)	3(4.3)	4(5.7)	63(90.0)	NS	NS	0.084	NS
FOOD COMMERCIALS ONLY:													
CHILD URGED TO ASK PARENT TO BUY	32(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
CHILD EXHORTED TO BUY PRODUCT	32(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
CHILD EXHORTED TO BUY PREMIUM	27(84.4)	5(15.6)	0(0.0)	45(97.8)	0(0.0)	1(2.2)	45(93.8)	1(2.1)	2(4.2)	0.028	NS	NS	0 013
SPECIAL OFFER OTHER THAN PREMIUM	31(96.9)	0(0.0)	1(3.1)	46(100.0)	0(0.0)	0(0.0)	47(97.9)	0(0.0)	1(2.1)	NS	NS	NS	NS
APPEALS TO SOCIAL ACCEPTANCE	32(100.0)	0(0.0)	0(0.0)	45(97.8)	0(0.0)	1(2.2)	46(95.8)	1(2.1)	1(2.1)	NS	NS	NS	NS
PRODUCT USE EQUALS FUN	19(59.4)	8(25.0)	5(15.6)	34(73.9)	4(8.7)	8(17.4)	22(45.8)	11(22.9)	15(31.3)	NS	0 019	NS	0 046
DEMONSTRATION	7(21.9)	14(43.8)	11(34.4)	4(8.7)	18(39.1)	24(52.2)	11(22.9)	17(35.4)	20(41.7)	NS	NS	NS	NS

¹NC -- NO CHANGE WAS OBSERVED

²NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT.

³READ AS P = 0 006

⁴0 000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0 001 .

TABLE XXVIII

COMPARISON OF SALES PERSUASION TECHNIQUES RESULTS IN TOY COMMERCIALS VERSUS FOOD COMMERCIALS

VARIABLE	FREQUENCY (PERCENTAGE)						SINGLE YEAR	LEVEL OF SIGNIFICANCE	
	NONE	TOY ONCE	MORE	NONE	FOOD ONCE	MORE		VARIABLE	ALL YEARS
1981 SAMPLE								ALL YEARS	
CHILD URGED TO ASK PARENT TO BUY	68(100.0)	0(0.0)	0(0.0)	32(100.0)	0(0.0)	0(0.0)	NC ¹	CHILD URGED TO ASK PARENT TO BUY	NC
CHILD EXHORTED TO BUY PRODUCT	68(100.0)	0(0.0)	0(0.0)	32(100.0)	0(0.0)	0(0.0)	NC	CHILD EXHORTED TO BUY PRODUCT	NC
CHILD EXHORTED TO BUY PREMIUM	67(98.5)	1(1.5)	0(0.0)	27(84.4)	5(15.6)	0(0.0)	0.005 ²	CHILD EXHORTED TO BUY PREMIUM	0.008
SPECIAL OFFER OTHER THAN PREMIUM	68(100.0)	0(0.0)	0(0.0)	31(96.9)	0(0.0)	1(3.1)	NS	SPECIAL OFFER OTHER THAN PREMIUM	0.053
APPEALS TO SOCIAL ACCEPTANCE	68(100.0)	0(0.0)	0(0.0)	32(100.0)	0(0.0)	0(0.0)	NC	APPEALS TO SOCIAL ACCEPTANCE	0.018
PRODUCT USE EQUALS FUN DEMONSTRATION	19(27.9)	9(13.2)	40(58.8)	19(59.4)	8(25.0)	5(15.6)	0.000 ³	PRODUCT USE EQUALS FUN DEMONSTRATION	0.000
	0(0.0)	3(4.4)	65(95.6)	7(21.9)	14(43.8)	11(34.4)	0.000		0.000
1982 SAMPLE									
CHILD URGED TO ASK PARENT TO BUY	95(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	NC		
CHILD EXHORTED TO BUY PRODUCT	95(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	NC		
CHILD EXHORTED TO BUY PREMIUM	93(97.9)	2(2.1)	0(0.0)	45(97.8)	0(0.0)	1(2.2)	NS		
SPECIAL OFFER OTHER THAN PREMIUM	95(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	NC		
APPEALS TO SOCIAL ACCEPTANCE	95(100.0)	0(0.0)	0(0.0)	45(97.8)	0(0.0)	1(2.2)	NS ⁴		
PRODUCT USE EQUALS FUN DEMONSTRATION	54(56.8)	8(8.4)	33(34.7)	34(73.9)	4(8.7)	8(17.4)	0.097		
	2(2.1)	1(1.1)	92(96.8)	4(8.7)	18(39.1)	24(52.2)	0.000		
1983 SAMPLE									
CHILD URGED TO ASK PARENT TO BUY	70(100.0)	0(0.0)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NC		
CHILD EXHORTED TO BUY PRODUCT	70(100.0)	0(0.0)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NC		
CHILD EXHORTED TO BUY PREMIUM	69(98.6)	0(0.0)	1(1.4)	45(93.8)	1(2.1)	2(4.2)	NS		
SPECIAL OFFER OTHER THAN PREMIUM	70(100.0)	0(0.0)	0(0.0)	47(97.9)	0(0.0)	1(2.1)	NS		
APPEALS TO SOCIAL ACCEPTANCE	70(100.0)	0(0.0)	0(0.0)	46(95.8)	1(2.1)	1(2.1)	0.085		
PRODUCT USE EQUALS FUN DEMONSTRATION	14(20.0)	14(20.0)	42(60.0)	22(45.8)	11(22.9)	15(31.3)	0.003		
	3(4.3)	4(5.7)	63(90.0)	11(22.9)	17(35.4)	20(41.7)	0.000		

¹NC -- NO CHANGE WAS OBSERVED.

²READ AS P = 0.005 .

³0.000 -- LEVEL OF SIGNIFICANCE IS LESS THAN 0.001

⁴NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT.

acceptance in selling the product -- 1% (0.7 and 0.7) in 1981, 2% (0 and 2) in 1982, and 4% (2 and 2) in 1983 (changes not statistically significant). Quite a few commercials equated product use to fun -- 51% (15 and 36) in 1981, 30% (7 and 23) in 1982, and 60% (22 and 38) in 1983 ($p = 0.000, 0.000, 0.212, \text{ and } 0.000$). The use of demonstrations has fluctuated. They were used in 82% (20 and 62) of the commercials aired in 1981, 91% (19 and 72) in 1982, and 76% (18 and 58) in 1983 ($p = 0.041, 0.000, 0.514, \text{ and } 0.005$).

Toy Commercials

"Demonstrations" and "Product Use Equals Fun" were the only two variables used extensively by toy commercials. In 1981, demonstrations were used in 100% (4 and 96) of the toy commercials aired in 1981 98% (1 and 97) in 1982, and 96% (6 and 90) in 1983 (changes not statistically significant). Product use was equated to fun in 72% (13 and 59) of the toy commercials aired in 1981, 43% (8 and 35) in 1982, and 80% (20 and 60) in 1983 ($p = 0.001, 0.000, 0.393, 0.000$). Premium offers were rarely used in toy commercials. One commercial aired in 1981, two aired in 1982, and one aired in 1983 were the only toy commercials observed using premium offers.

Food Commercials

Demonstrations were also the most frequently used sales persuasion technique in food commercials. They were used in 78% (44 and 34) of the food commercials aired in 1981, 91% (39 and 52) in 1982, and 77% (35 and 42) in 1983 (changes not statistically significant). Product use was commonly equated to fun in food commercials. This was done in 41% (25

and 16) of the food commercials aired in 1981, 26% (9 and 16) in 1982, and 54% (23 and 31) in 1983 ($p = 0.143, 0.019, 0.272, \text{ and } 0.046$).

Some food commercials did encourage the child to buy the premium -- 16% (16 and 0) in 1981, 2% (0 and 2) in 1982, and 6% (2 and 4) in 1983 ($p = 0.028, 0.327, 0.170, \text{ and } 0.013$). Some food commercials appealed to social acceptance (a practice formerly forbidden by the NAB Code): 0% in 1981; 2% (0 and 2) in 1982, and 4% (2 and 2) in 1983 (changes not statistically significant).

Toy Versus Food

Differences in sales persuasion techniques were observed between the toy and food commercials in the sample. Some of the more important overall differences are listed below:

1. Toy commercials used demonstrations more often than food commercials ($p < 0.001$).
2. Toy commercials equated product use to fun more often than food commercials ($p < 0.001$).

Health and Nutrition

Food Commercials

Health and nutrition variables were compiled using food commercials only (see Tables XXIX and XXX). Few food commercials mentioned the existence of a positive relationship between good eating habits and health: 12% (6 and 6) did in 1981, 0% in 1982, and 10% (8 and 2) in 1983. A balanced meal was visually portrayed in the majority of the food commercials. This was done in 69% (60 and 9) of the food commercials aired in 1981, 46% (39 and 7) in 1982, and 45% (35 and 10)

TABLE XXIX

SUMMARY OF RESULTS FOR HEALTH AND NUTRITION (POSITIVE) VARIABLES

VARIABLE	FREQUENCY (PERCENTAGE)									LEVEL OF SIGNIFICANCE			
	1981			1982			1983			1981	1982	1983	ALL
	NONE	ONCE	MORE	NONE	ONCE	MORE	NONE	ONCE	MORE	TO 1982	TO 1983	TO 1983	YEARS
ALL COMMERCIALS COMBINED:													
TIE-IN OF GOOD EATING WITH HEALTH	28(20.4)	2(1.5)	2(1.5)	46(23.6)	0(0.0)	0(0.0)	43(25.4)	4(2.4)	1(0.6)	0.021 ¹	0.035	NS ²	0.057
BALANCED MEAL PORTRAYED VISUALLY	10(7.3)	19(13.9)	3(2.2)	25(12.8)	18(9.2)	3(1.5)	26(15.4)	17(10.1)	5(3.0)	NS	NS	0.043	0.079
BALANCED MEAL SUGGESTED IN AUDIO	11(8.0)	20(14.6)	1(0.7)	26(13.3)	20(10.3)	0(0.0)	29(17.2)	18(10.7)	1(0.6)	NS	NS	0.022	0.057
PRODUCT RELATED TO HEALTH	25(18.2)	7(5.1)	0(0.0)	30(15.4)	16(8.2)	0(0.0)	40(23.7)	6(3.6)	2(1.2)	NS	0.014	NS	NS
HEALTH CLAIM MADE	29(21.2)	3(2.2)	0(0.0)	46(23.6)	0(0.0)	0(0.0)	44(26.0)	2(1.2)	2(1.2)	0.034	0.061	NS	NS
SUBSTANTIATED CLAIM OF NUTRITION	22(16.1)	9(6.6)	1(0.7)	42(21.5)	4(2.1)	0(0.0)	36(21.3)	10(5.9)	2(1.2)	0.023	0.069	NS	0.034
FOOD COMMERCIALS ONLY:													
TIE-IN OF GOOD EATING WITH HEALTH	28(87.5)	2(6.3)	2(6.3)	46(100.0)	0(0.0)	0(0.0)	43(89.6)	4(8.3)	1(2.1)	0.021	0.035	NS	0.057
BALANCED MEAL PORTRAYED VISUALLY	10(31.3)	19(59.4)	3(9.4)	25(54.3)	18(39.1)	3(6.5)	26(54.2)	17(35.4)	5(10.4)	NS	NS	0.043	0.079
BALANCED MEAL SUGGESTED IN AUDIO	11(34.4)	20(62.5)	1(3.1)	26(56.5)	20(43.5)	0(0.0)	29(60.4)	18(37.5)	1(2.1)	NS	NS	0.022	0.057
PRODUCT RELATED TO HEALTH	25(78.1)	7(21.9)	0(0.0)	30(65.2)	16(34.8)	0(0.0)	40(83.3)	6(12.5)	2(4.2)	NS	0.014	NS	NS
HEALTH CLAIM MADE	29(90.6)	3(9.4)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	44(91.7)	2(4.2)	2(4.2)	0.034	0.061	NS	NS
SUBSTANTIATED CLAIM OF NUTRITION	22(68.8)	9(28.1)	1(3.1)	42(91.3)	4(8.7)	0(0.0)	36(75.0)	10(20.8)	2(4.2)	0.023	0.069	NS	0.034

¹READ AS P = 0.021

²NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT

TABLE XXX

SUMMARY OF RESULTS FOR HEALTH AND NUTRITION (NEGATIVE) VARIABLES

VARIABLE	FREQUENCY (PERCENTAGE)									LEVEL OF SIGNIFICANCE			
	1981			1982			1983			1981	1982	1981	ALL
	NONE	ONCE	MORE	NONE	ONCE	MORE	NONE	ONCE	MORE	TO 1982	TO 1983	TO 1983	YEARS
<u>ALL COMMERCIALS COMBINED</u>													
PRODUCT IS A SUBSTITUTE FOR MEAL	32(23.4)	0(0.0)	0(0.0)	45(23.1)	1(0.5)	0(0.0)	48(28.4)	0(0.0)	0(0.0)	NS ¹	NS	NC ²	NS
HEALTH/NUTRITION INFORMATION OBSCURED	32(23.4)	0(0.0)	0(0.0)	46(23.6)	0(0.0)	0(0.0)	48(28.4)	0(0.0)	0(0.0)	NC	NC	NC	NC
NUTRITIONAL INFORMATION CONTRADICTORY	32(23.4)	0(0.0)	0(0.0)	46(23.6)	0(0.0)	0(0.0)	48(28.4)	0(0.0)	0(0.0)	NC	NC	NC	NC
<u>FOOD COMMERCIALS ONLY</u>													
PRODUCT IS A SUBSTITUTE FOR MEAL	32(100.0)	0(0.0)	0(0.0)	45(97.8)	1(2.2)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NS	NS	NC	NS
HEALTH/NUTRITION INFORMATION OBSCURED	32(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC
NUTRITIONAL INFORMATION CONTRADICTORY	32(100.0)	0(0.0)	0(0.0)	46(100.0)	0(0.0)	0(0.0)	48(100.0)	0(0.0)	0(0.0)	NC	NC	NC	NC

¹NS -- CHANGE WAS NOT STATISTICALLY SIGNIFICANT

²NC -- NO CHANGE WAS OBSERVED

in 1983 ($p = 0.162, 0.5333, 0.043,$ and 0.079). A balanced meal was also frequently suggested in audio: 66% (63 and 3) in 1981, 44% (44 and 0) in 1982, and 40% (38 and 2) in 1983 ($p = 0.054, 0.701, 0.022,$ and 0.057). Some commercials did relate the use of their product to good health. This was done in 22% (22 and 0) of the food commercials aired in 1981, 35% (35 and 0) in 1982, and 17% (13 and 4) in 1983 (most changes not statistically significant). Few food commercials made any health claims -- 9% (9 and 0) in 1981, 0% in 1982, and 8% (4 and 4) in 1983. Substantiated claims of nutrition were made by 31% (28 and 3) of the food commercials aired in 1981, 9% (9 and 0) in 1982, and 25% (21 and 4) in 1983 ($p = 0.023, 0.069, 0.539,$ and 0.034).

Negative Health/Nutrition information was quite rare. The only observed occurrence of negative nutritional information was recorded in 1982 when one candy commercial stated that the product could be used as a substitute for a meal.

Summary

This chapter has examined in great detail and from a longitudinal perspective, the various commercial characteristics of television commercials directed at children. Children's television commercials were found to have changed in many ways between Fall of 1981 and Fall of 1983. Some changes were statistically significant, while others were not. In the process advertising profiles have emerged.

Tables showing frequency of occurrence and percentage of occurrence for most of the items (variables) on the instrument were constructed. These percentage of occurrence tables provide advertising profiles for general (all commercials combined), toy, and food commercials because

they show which variables were used (and to what extent) to sell products to children. Food and toy commercials were observed using different techniques. A more detailed discussion of the conclusions derived from this research is deferred to Chapters V and VI.

CHAPTER V

COMPARISONS WITH PAST RESEARCH

Research Methods, Data Bases, and Spatial

Content

Whenever possible current research results should be compared to the results of past studies. Table XXXI lists the various studies done in this area (including this study) and compares the various methods and data bases used. With the exception of the Winick, et. al. study, all researchers videotaped their sample data directly from the air. This research followed the pattern of Atkin and Herald (1977), Doolittle and Pepper (1975), Cattin and Jain (1979), and Moncrief and Landry (1982) in its sampling procedure; i.e. it systematically videotaped all the commercials aired during the sampling period and included all the commercials in their respective sample bases.

Some studies used weighted data data in their analysis, while others used unweighted data. Unweighted data was used for most of the statistical analyses in this study (i.e., duplicate commercials were usually not included in the analysis of the data). Weighted data was used to determine the percentage of commercials by product category, average commercial length, commercial time per hour, and program separator usage. Unweighted data was used in the remaining analyses.

Barcus (1971 and 1975) was the only researcher to report what portion of broadcasting time was devoted to commercials. In 1971, he

TABLE XXXI
METHODS AND DATA BASES

Study	Month and Year Conducted	Time Period	Total Number of Commercials Recorded Off Air	Number of Different Commercials	% of Air-time	Mean Length of Each Commercial	Percentage of Commercials With Length		
							60 Sec	30 Sec	15 Sec
Barcus	June 1971	Saturday ¹	311	132	15.5	0.56 min.	NA	NA	NA
Barcus	April 1975	Saturday and Sunday Morning ²	403	NA	13.1	0.50 min.	NA	NA	NA
Winick, et.al.	1971	NA ³	NA ³	236 ³	NA	0.60 min.	21.2	78	0.8 ⁴
Atkin and Herald	November 1972	Saturday (8 a.m.-12 noon)	252	NA ⁵	NA	0.50 min.	3	92 ⁶	5
Verna	October 1973	Saturday (9 a.m.-12 noon)	173 ⁷	NA ⁵	NA	NA	NA	NA	NA
Atkin and Herald	November 1973	Saturday (8 a.m.-12 noon)	218	NA ⁵	NA	0.50 min.	2	96	2 ⁸
Doolittle and Pepper	February 1974	Saturday (9 a.m.-1 p.m.)	162	49 ⁹	NA	0.50 min.	2	98	0
Schuetz and Sprafkin	October 1974	Saturday (7 a.m.-1 p.m.)	414 ¹⁰	NA	NA	NA	NA	NA	NA
Welch, et.al.	Fall 1977	NA ¹¹	NA	60 ¹¹	NA	NA	NA	NA	NA
Cattin and Jain	February-April 1978	Saturday (9 a.m.-12 noon)	350	100	NA	NA	NA	NA	NA
Montcrief and Landry	April 1981	Saturday (9 a.m.-12 noon)	153	NA	NA	NA	NA	NA	NA
Clottey	November-December 1981	Saturday (7 a.m.-12 noon) ¹²	286	137	13.3	0.50 min	0.4	99	0.4
Clottey	November-December 1982	Saturday (7 a.m.-12 noon) ¹²	343	195	14.9	0.50 min	0.6	97	2.3
Clottey	November-December 1983	Saturday (7 a.m.-12 noon) ¹²	319	169	15.0	0.50 min	1.9	98	0

NA - Figures are not available.

¹Nineteen hours of Saturday morning broadcasting that was considered by Barcus to be children's programming were included in this study.

²Twenty-five and one-half hours of Saturday and Sunday programming that was considered by Barcus to be children's programming were included in this study.

³Commercials studied were supplied by the advertisers in response to researchers' request for copies of currently aired commercials.

⁴These commercials were ten seconds in length.

⁵Each presentation of a commercial message was weighted equally. A version of a commercial that was presented three times was counted three times, while a single presentation was tabulated only once.

⁶This figure included several piggyback pairs of 15-second ads by the same advertiser.

⁷A total of 182 commercials were recorded but five were discarded because they were Halloween related commercials and judged to be inconsistent with the rest of the sample. Four animated commercials were excluded because the sex of the character could not be determined.

⁸There were only four 15-second piggybacks out of all the 218 commercials.

⁹Analysis was based on a total number of exposures (146) rather than for the separate 49 commercials. These 49 commercials represented 93% of the total (162) commercial exposures broadcast by the networks during the sampling period.

¹⁰This figure includes public service announcements.

¹¹Sample consisted of sixty randomly selected commercials aired during Fall 1977 on weekday and Saturday mornings.

¹²Whenever local stations preempted children's programming with football, the sampling period was shorted accordingly to exclude both the football game and pre-game activities.

found that commercials made up 15.5% of airtime and 13.1% in 1975. The current research presented in this paper found commercials to make up 13.3% of airtime in 1981, 14.9% in 1982, and 15.0% in 1983. Average commercial time per hour seems to have declined in the early seventies and started to increase in the eighties.

Most researchers did not report any figures on commercial length nor any breakdown by commercial length. The average commercial length in this study was found to be 30 seconds in 1981, 1982, and 1983. This is consistent with the results that were reported by those researchers who did report these statistics. Atkin and Herald (1977) who also recorded television commercials directly from the air in 1973, found that 3% of the total commercials aired were 60 seconds long, 92% were 30 seconds long, and 5% were 15 seconds long. In 1974, they found these figures to be 2% for 60 second commercials, 96% for 30 second commercials, and 2% for 15 second commercials. In their 1974 study, Doolittle and Pepper found that 2% of the commercials were 60 seconds long, 98% were 30 seconds long, and 0% were 15 seconds long. Using the total number of commercials aired per year, the results of the current study show that:

1. In 1981
 - a. 0.4% were 60 seconds long
 - b. 99.2% were 30 seconds long
 - c. 0.4% were 15 seconds long
2. In 1982
 - a. 0.6% were 60 seconds long
 - b. 97% were 30 seconds long
 - c. 2.3% were 10 seconds long
3. In 1983

- a. 2% were 60 seconds long
- b. 98% were 30 seconds long
- c. 0% were 15 seconds long

Most children's television commercials in the eighties continue to be 30 seconds in length just as they have been in the past.

Commercial Content

Commercials analyzed by the various researchers are grouped by product category in Table XXXII. Only the two Atkin studies used data collected in the fall and in a manner comparable to the one used in this study. Atkin and Herald found that the number of toy commercials increased from 50% in 1972 to 66% in 1973. The results of the current study indicated that in 1981 toy commercials comprised 41% of all the commercials aired, 47% in 1982, and 41% in 1983. Percentage-wise the number of toy commercials aired during the Saturday children's viewing hours during the main Christmas shopping season has declined noticeably since 1973.

The proportion of cereal commercials aired seems to fluctuate widely. In 1982 and 1983, they fell to extremely low levels, but this decline was not the result of any expected shift toward a heavy concentration of toy commercials during the Christmas shopping season. Commercials for other edibles (Noodle-roni, Hawaiian Punch, and Tropi) and miscellaneous products (Levis Jeans and Love's Cologne) have become more frequent between 1981 and 1982. In 1983 they were about twice as high as the figures reported by Doolittle and Pepper in their 1974 study. The number of commercials for candies, sweets, and snacks also declined significantly between 1974 and 1981. Though they increased

TABLE XXXII
KINDS OF PRODUCTS ADVERTISED

(Figures are stated as percentages of total commercials analyzed unless indicated otherwise.)

Study	Toys	Cereals (Sugared & Un sugared)	Candies and Sweets	Snacks ¹	Other Foods	Eating Places	Vitamins and Medicine	Miscel- laneous Products
Barcus (1971) ²	23	23	21	<-- 23 -->		NA ³	1	9
Barcus (1975)	18	25 ⁴	25	4 ⁵	4	10	0	14
Winick, et.al. (1971) ²	0 ⁶	20	49	5	8	7	5	6
Atkin and Herald (1972)	50	27	<----->	21	<----->		NA	2
Verna (1973)	NA	<----->	46	<----->			NA	NA
Atkin and Herald (1973)	66	17	<----->	15	<----->		NA	2
Doolittle and Pepper (1974)	7	40 ⁷	18	12	7	NA	0	8
Schuetz and Sprafkin (1974)	NA	NA	NA	NA	NA	NA	NA	NA
Welch, et.al. (1977) ²	NA	NA	NA	NA	NA	NA	NA	NA
Cattin and Jain (1978) ²	NA ⁸	NA	NA	NA	NA	NA	NA	NA
Montcrief and Landry (1981)	22 ⁹	25 ⁷	NA	NA	NA	NA	NA	NA
Clottey (1981)	41	27	5	0	3	12	0	14
Clottey (1982)	47	13	5	0	7	6	0 ¹⁰	22
Clottey (1983)	41	13	6	0	3	12	0 ¹⁰	19

NA - Figures are not available.

⁶Winick's study excluded toy commercials and consisted entirely of commercials submitted by advertisers.

¹Drinks were included in this category.

⁷Category was breakfast foods.

²Figures are based on the total number of different commercials analyzed.

⁸Categories were food (73%) and nonfood (27%).

³Figures were not available and were included in "Miscellaneous Products" category.

⁹Categories were food (66%), breakfast foods (25%) and toys (22%).

⁴Category was divided into sugared cereals (18.9%), unsugared cereals (5.7%) and cereal companies (0.2%).

¹⁰One was recorded this year.

⁵Peanut butter and other spreads were considered snack food.

between 1981 and 1983, their number is still less than on third what it was in 1974.

No commercials for nonprescription drugs have been reported by researchers since 1971. Their use had been specifically forbidden by the NAB Code. The first nonprescription drug commercial found in scholarly research reappeared in 1982 when a commercial for "Sine-Aid" was aired by NBC. In 1983, a commercial for "Halls" was aired on NBC. Considering the large sample base used in this study, the relative and absolute number of nonprescription drugs aired in recent years is minute and these commercials may have been aired accidentally. However, it also may indicate that NBC is changing its policy toward children's television advertising. This factor will have to be determined by other content researchers in future years.

The proportion of miscellaneous products advertised has fluctuated over the years; however, in 1982 and 1983 they seemed to be at an all time high. In 1983 they were more than twice as prevalent as in 1974.

Commercial Character Content

The percentage of commercials using adult human characters (see Table XXXIII) has fluctuated widely over the years -- from a low of 23% in 1975 to a high of 58% in 1974. The results of this research show that 41% of the commercials aired in 1981 used adult characters, 76% in 1982, and 78% in 1983. Working definitions present a serious problem in this area. Some researchers classified animated and puppet characters into human adult male, human adult female, and human child categories making comparisons with certain studies quit difficult.

The number of commercials using minority group members as

TABLE XXXIII

COMMERCIAL CHARACTER CONTENT (HUMAN CHARACTERS ONLY)

(Figures are stated in percentages of total commercials analyzed unless indicated otherwise.)

Study	Adult Character Present	Non-white Character Present	Adult Female Present	Female Character Present	Spokesperson for Product ¹			Child Characters Present		
					Adult Male	Adult Female	Child	Children Only	Children and Others	
Barcus (1971) ²	NA	27	NA	NA	NA	NA	NA	NA	NA	
Barcus (1975)	23	NA	7	29	66	6	9	NA	NA	
Winick, et.al. (1971) ²	68 ³	24	-- ⁴	-- ⁴	NA	NA	20	NA	67	
Atkin and Herald (1972 and 1973 combined) ⁵	34 ⁵	20	NA	NA	NA	NA	NA	62	90	
Verna (1973)	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Doolittle and Pepper (1974)	58	17	NA	NA	NA	NA	NA	NA	74 ⁶	
Schuetz and Sprafkin (1974)	90 ³	10	NA ⁴	NA	NA	NA	NA	NA	NA	
Welch, et.al. (1977) ²	NA	NA	NA	67 ⁷	NA	NA	NA	NA	100 ⁸	
Cattin and Jain (1978) ²	NA ⁹	NA	5	NA ¹⁰	<-----	NA ¹¹	----->	<----	NA ¹²	-->
Montcrief and Landry (1978)	NA ¹³	NA	6	NA ¹⁴	NA	NA	NA	NA	NA	
Clottey (1981)	41	14	13	51	8	5	4	46	64	
Clottey (1982)	76	18	24	54	4	2	2	45	80	
Clottey (1983)	78	18	24	65	6	3	4	43	71	

NA - Figures are not available.

¹Figures are stated as percentages of the total number of analyzed commercials using a spokesperson.

²Figures are stated as percentages of the total number of different commercials analyzed.

³This figure included animated or puppet human adults.

⁴Merely stated that there are more males than females.

⁵Figures had been calculated for food and toy commercials only. There were discrepancies in figures reported by Atkin.

⁶Children were present in 74% of the commercials and teenagers were present in 6% of the commercials.

⁷The sample selection procedure required two thirds of the commercials to have a female child character present.

⁸Only commercials having child characters were included in this study.

⁹Adult males were present in 23% of the commercials and adult females in 5%.

¹⁰Girls were present in 52% of the commercials and adult females in 5%.

¹¹A spokesperson was used in 41% of the commercials.

¹²Boys were present in 64% of the commercials, girls in 52%, adult males in 23%, and adult females in 5%.

¹³Adult males were present in 12% of the commercials and adult females in 6%.

¹⁴Adult females were present in 6% of the commercials and female children in 22%.

characters has decreased significantly since 1971. It decreased from a high of 27% in 1971 (Barcus, 1971) to a low of 10% in 1974 (Schuetz and Sprafkin, 1978). Fourteen percent of the commercials aired in 1981 had minority group member characters and this figure increased to 18% in 1982 and 1983.

Human female characters have become more prevalent in television commercials in recent years. Barcus (1975) found that 29% of the commercials analyzed in his study used female characters. This study found that this figure had increased to 51% in 1981, 54% in 1982, and 65% in 1983. Female adult characters have also increased dramatically in children's television commercials in recent years. In 1975, only 7% of the commercials in Barcus' study used adult female characters. In 1978, this figure dropped to 5% in the Cattin and Jain study, and then rose to 6% in the Moncrief and Landry study (conducted in Spring 1981). The current study found that 13% of the commercials aired in Fall 1981 used adult female characters and that this figure rose drastically to 24% in 1982 and remained at 24% in 1983.

The use of product spokespersons has decreased drastically over the years. In 1975, Barcus found that the use of spokespersons was quite prevalent and that most spokespersons were adult males. Cattin and Jain (1979) found that 41% of the commercials used spokespersons, but they did not break this figure down by sex or age. The current research presented in this paper found that few commercials in the eighties use product spokespersons. Whenever spokespersons were used in the 1981 sample, for commercials using product spokespersons, adult male spokespersons were found to be the most common, followed by adult female spokespersons, and then by child spokespersons. In 1983, adult males

and children were used about equally as product spokespersons; i.e., 3% of the commercials used adult males as spokespersons and another 3% used child spokespersons. Adult females were used as spokespersons in only 2% of the commercials.

Most products advertised on Saturday morning children's viewing hours use children as characters in their commercials. Winick, et. al. (1973) found that 67% of the commercials in their sample used child characters. Atkin and Herald (1975) found an even higher percentage two years later. They reported that 90% of the commercials in their sample used children, and that in 62% of the commercials, children were the only human characters portrayed. Doolittle and Pepper (1975) found that 74% of their commercials used child characters. The statistics listed by Welch, et. al. (1979) are irrelevant here because they limited their study to only those commercials that used child characters. Cattin and Jain (1979) found that boys were present in 64% of the commercials and girls in 52%. The results of the current study presented by this paper showed that in 1981 child characters were used in 64% of all the commercials; and that in 46% of the commercials analyzed, children were the only human characters portrayed. These figures changed to 80% and 45% in 1982 and then to 71% and 43% in 1983. It is quite obvious from looking at these figures that the presence of child characters is considered to be quite useful in selling the product.

The character composition of toy commercials is quite different from that of other commercials (see Table XXXIV). The proportion of toy commercials using human adult characters is quite different from that of the average commercial. In 1975, Barcus found that 16% of the toy commercials used a human adult character in the commercial. This figure

TABLE XXXIV

COMMERCIAL CHARACTER CONTENT -- TOYS (HUMAN CHARACTERS ONLY)

(Figures are stated as percentages of total commercials analyzed unless indicated otherwise.)

Study	Adult Character Present	Non-white Character Present	Adult Female Present	Female Character Present	Spokesperson for Product ¹			Child Characters Present	
					Adult Male	Adult Female	Child	Children Only	Children and Others
Barcus (1971)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barcus (1975)	16	NA	3	22	95	5	0	NA	NA
Winick, et.al. (1971)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Atkin and Herald (1972 and 1973 combined)	13	13	NA	NA	NA	NA	NA	87	99
Verna (1973)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Doolittle and Pepper (1974)	NA	40 ²	NA	NA	NA	NA	NA	NA	NA
Schuetz and Sprafkin (1974)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Welch, et.al. (1977)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cattin and Jain (1978) ³	4 ⁴	NA	0	56	NA	NA	NA	NA	NA
Montcrief and Landry (1981) ⁶	NA	NA	NA	NA	NA	NA	NA	NA	NA
Clottey (1981)	23	6	9	33	3	4	1	34	46
Clottey (1982)	29	8	8	30	0	0	1	33	47
Clottey (1983)	27	5	6	27	2	0	1	25	39

NA - Figures are not available.

¹Figures are stated as percentages of the total number of analyzed commercials using a spokesperson.

²Forty percent of the major figures were non-white.

³Category was non-food and the figures are based on the total number of different commercials analyzed.

⁴Male adults were present in 4% of non-food commercials.

⁵Boys were present in 82% and girls in 56%.

⁶Did not break down into these categories.

dropped to 13% during 1972 and 1973 (Atkins and Herald, 1977), and then increased significantly in 1981. The current study found that 23% of all toy commercials used human adult characters in 1981, 29% in 1982, and 27% in 1983. In 1981, children were the only human characters in 34% of the toy commercials, in 1982 this figure dropped slightly to 33%, and then in 1983 it dropped drastically to 25%.

Contrary to the findings reported in past research studies, the results of this research indicate that the use of human minority group members as characters in toy commercials has decreased since 1974. Atkin and Herald (1977) found that in 1972 and 1973 minority characters were present in 13% of the toy commercials; while in 1974 Doolittle and Pepper found the figure had increased to 44%. The current research indicates that in 1981 only 6% of the toy commercials aired used minority group characters. This figure increased to 8% in 1982 and then decreased to 5% in 1983.

Past research has indicated that adult females are rarely used in toy commercials. Barcus (1975) found that in 1975 only 3% of the toy commercials used adult female characters. In 1981 this figure rose to 9%; but it declined in 1982 and again in 1983. However, a much larger number of commercials were found to use female children as characters -- both in this study and in past research. In 1975, Barcus reported that 22% of all toy commercials used a human female character, while in 1978, Cattin and Jain found that 56% of the toy commercials used a human female character. The current study found that a much lower percentage of toy commercials used female characters (33% in 1981, 30% in 1982, and 27% in 1983) and that their presence in toy commercials is declining.

The Atkins and Herald study (1977) found that children were used as

characters in 99% of the toy commercials; and that in 87% of the toy commercials, children were the only human characters portrayed. This study found that the use of child characters in toy commercials has declined in the eighties. In 1981, only 46% of the toy commercials used child characters in their commercials. This figure increased to 47% in 1982 and then dropped to 39% in 1983. Children were the only human characters portrayed in 34% of the toy commercials in 1981, 33% in 1982, and 25% in 1983.

Commercial Appeal and Practices

Table XXXV shows the various commercial practices that have been identified by content analysis researchers. Direct comparisons across all studies are quite difficult because of the different working definitions used by the various researchers. In general it seems that the use of animation decreased between 1971 and 1973, increased in 1974, and has fluctuated ever since.

Price information is rarely presented in commercials. In 1971, Barcus found that 8% of the commercials contained price related information. This figure decreased to 5% in his 1975 study. In 1978, Cattin and Jain found that only 2% of the commercials contained any price information. This study found that in 1981, 9% of all commercials provided price information, but this figure has been decreasing steadily since then. In 1982, only 8% of the commercials contained price information, and by 1983, this figure had decreased to 5%. Several of the commercials aired in 1982 and 1983 included the words "only" or "just" before the price of the product. This practice had been forbidden by the NAB Code. Considering the total number of commercials

TABLE XXXV
COMMERCIAL APPEALS AND PRACTICES

(Figures are stated as percentages of total commercials analyzed unless indicated otherwise.)

Study	Animation or Cartoon Characters Present	Price Information Given	Premium Offers Used	Contests Used	Program Host Tie-ins Used	Product Endorsements Used	Audio Disclaimers Used	Visual Disclaimers Used	Both Audio and Visual Disclaimers Used	Jingles Used	Child Encouraged to Buy Product or Premium	Child Encouraged to Ask Parent to Buy Product
Barcus (1971) ¹	42	8	13	NA	5	4	16	7	3	NA	NA	NA
Barcus (1975)	42	5	17	2	-- ²	2	22	11	8	NA	NA	NA
Winick, et.al. (1971) ¹	46	NA	8.5	1	-- ²	NA	NA	NA	NA	NA	14.4	1.3
Atkin and Herald (1972 and 1973 combined)	26	0 ³	10	NA	-- ²	5	20 ³	14 ³	11 ³	40	NA	1.4
Verna (1973)	NA ⁴	NA	NA	NA	-- ²	NA	NA	NA	NA	NA	NA	NA
Doolittle and Pepper (1974)	35	NA	15	5	-- ²	NA	NA	NA	NA	NA	NA	NA
Schuetz and Sprafkin (1974)	NA	NA	NA	NA	-- ²	NA	NA	NA	NA	NA	NA	NA
Welch, et.al. (1977)	NA	NA	NA	NA	-- ²	NA	NA	NA	NA	NA	NA	NA
Cattin and Jain (1978) ¹	25 ⁵	2	13 ⁶	NA	-- ²	41	NA	NA	NA	56	NA	0
Montcrief and Landry (1981)	17 ⁷	NA	5	NA	-- ²	NA	NA	NA	NA	56	NA	NA
Clotley (1981)	33	9	7 ⁸	1	-- ²	1	<----- 42 ----->		NA	53	0	0
Clotley (1982)	21	8	3	0 ⁸	-- ²	1	<----- 37 ----->		NA	32	0	0
Clotley (1983)	36	5	4	2 ⁸	0 ⁹	1	<----- 33 ----->		NA	57	1 ¹⁰	1 ¹⁰

NA - Figures are not available.

¹Percentages are based on the total number of different commercials analyzed.

²The use of Program Host Tie-ins was, at this time, prohibited by the NAB Code.

³This percentage was computed using only the total number of toy commercials (270) as a base.

⁴Forty-eight percent of the food commercials were classified as animated (i.e. at least half of the ad was animated).

⁵This figure represents ads using fictitious characters only.

⁶Category was special offers and includes contests.

⁷Fictitious characters were present in 17% of the commercials and animated animals in 20%.

⁸Category was special offers, not just premiums.

⁹One commercial used a program host to sell the product.

¹⁰Only one commercial out of a total of 169 commercials.

aired, the relative number of commercials doing this is very small. Whether this is a case of advertisers experimenting with public reaction or a definite change in advertising policy is a question that will have to be answered by future content analysis studies.

The use of premium offers has also fluctuated over the years. In 1971, Barcus found that 13% of all commercials used premium offers. This figure increased to 17% in his 1975 study. However, Atkins and Herald found that in 1972 and 1973 only 10% of the commercials used premium offers. In 1974, Doolittle and Pepper found that the use of premium offers had increased to 15%. The use of premium offers declined steadily until 1981.

In 1981 the use of premium offers increased slightly, decreased in 1982, and then increased a little in 1983. Only 4% of all commercials aired in 1983 used premium offers. One important point concerning premium use must be mentioned here. Even though the use of premiums in commercials is not as prevalent in the eighties as it was in the seventies, another trend was noticed in 1983. A few commercials in 1983 did devote either their entire commercial time or the major part of it to selling the premium instead of the product. This practice is also one that had been previously forbidden by the NAB Code and is starting to surface again. This makes it another variable that needs to be measured in future content analysis studies.

Contests and other special offers are rarely used in children's television commercials. Program host tie-ins have not been used since they were forbidden by the NAB Code. In 1983, one commercial for Baby Ruth and Butter Fingers Candy Bars airing on ABC used the program's host as a spokesperson to sell the products. Here again, one commercial out

of 169 seems almost irrelevant, except that it is a drastic departure from past practices and may be an indication that more changes will be coming in this area.

Barcus (1971 and 1975) found that a little over 20% of all commercials used audio or visual disclaimers. Atkin and Herald (1977) found that 23% of toy commercials used audio or visual disclaimers. This study was the first study since the Atkin and Herald study (which was conducted in 1972 and 1973) to study disclaimers. Disclaimers were found to be used extensively in 1981 -- 42% of the commercials used them. In 1982, their use dropped to 37%, and then to 33% in 1983. This drop in disclaimer use occurred despite the fact that in both 1981 and 1983 toy commercials comprised 41% of the total commercials aired and that toy commercials are the primary users of disclaimers. These figures also indicate that a change in advertising policy may be taking place.

Use of jingles is another variable that was of little interest to most content analysis researchers. Atkin and Herald (1977) found that 40% of all commercials used jingles in 1972 and 1973. In 1981, the use of jingles had increased to 53%. This figure dropped to 33% in 1982 and then increased to 51% in 1983.

Winick, et. al. (1973) found that in the 1971 sample 14.4% of the commercials analysed actually encouraged the child to buy the product or premium. In 1983 only one commercial encouraged children to buy the premium. NBC aired a Hardees commercial (featuring stuffed animals as premiums) in which children were encouraged to buy the stuffed animals.

Very few commercials specifically encourage children to ask their parents to buy the product for them. Winick, et. al. (1973) and Atkin

and Herald (1977) found that in the early seventies a little over 1% of the commercials actually encouraged children to ask their parents to buy the product for them. This practice was prohibited by the NAB Code and has not been used since. Both Cattin and Jain (1979) and the current study checked for the presence of this variable and found it to be nonexistent in their sample data.

Table XXXVI is specifically concerned with food commercials. Barcus (1975) found that 12% of the food commercials specifically mentioned "sweetness". In the Winick study this figure increased to 19% and then increased again to 21% in the Atkin and Herald study. The NAB Code was later changed to specifically discourage this practice. By 1981, the number of commercials mentioning "sweetness" had dropped to 2% and it dropped again in 1983 to 10%.

Barcus (1975) found that 45% of the food commercials in his sample portrayed their product as part of a balanced meal. Using a similar methodology (counting duplicates as separate commercials), Atkins and Herald (1977) found that only 11% of the food commercials in their sample portrayed their product as part of a balanced meal. The Winick study (1973) which used nonduplicate commercials supplied by advertisers found that 10% of the commercials visually portrayed the product as part of a balanced meal and that 6% suggest a balanced meal in audio. Using only nonduplicate commercials, the results of the current study indicate that this practice is more prevalent today than in the past. Balanced meals were portrayed visually in 69% of the food commercials in 1981, 50% in 1982, and 45% in 1983. Balanced meals were suggested in audio in 66% of the commercials in 1981, 48% in 1982, and 39% in 1983.

TABLE XXXVI

FOOD COMMERCIALS

(Figures are in percentages)

Study	Sweetness Specifically Mentioned	Balanced Meal Portrayed Visually	Balanced Meal Suggested in Audio
Barcus (1971)	NA	NA	NA
Barcus (1975) ¹	12	<-----45----->	
Winick, et.al. (1971) ²	19	10	6
Atkin and Herald ¹ (1972 and 1973 combined)	21	<-----11----->	
Verna (1973)	NA	NA	NA
Doolittle and Pepper (1974)	NA	NA	NA
Schuetz and Sprafkin (1974)	NA	NA	NA
Welch, et.al. (1977)	NA	NA	NA
Cattin and Jain (1978)	NA	NA	NA
Montcrief and Landry (1981)	NA	NA	NA
Clottey (1981) ²	2	69	66
Clottey (1982) ²	2	50	48
Clottey (1983) ²	1	45	39

NA - Figures are not available.

¹Figures are based on total number of food commercials aired, including duplicates.

²Figures are based on the total number of different food commercials analyzed.

Summary

Changes in advertising practices have occurred over the years. Some change is inevitable because advertising practices change as our society changes. The more important changes that have taken place over the past few years are listed below:

1. Changes in program content

- a. Commercials for cold cereal have decreased.
- b. Toy commercials have decreased.
- c. Commercials aired during Saturday morning viewing hours are covering a broader range of products than in the past.
- d. Commercials for nonprescription drugs have reappeared.

2. Changes in Commercial Character Content

- a. Commercials aired in the 1980's use more adult characters.
- b. The use of minority group members as characters in commercials has declined in the eighties.
- c. The use of female characters (especially adult females) has increased over time.

3. Changes in Commercial Appeals and Practices

- a. The use of audio and visual disclaimers has increased significantly.
- b. The practice of presenting food products as part of a balanced meal has increased significantly over the years.

- c. Some practices which were formerly forbidden by the NAB Code have reappeared on a very minute scale after the Code's withdrawal.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study was a content analysis study of current children's television advertising. It is the first longitudinal study of its kind.

A number of interesting descriptive phenomena were observed:

1. Not a single commercial aired during the total sampling period specifically urged a child to buy the product himself or ask a parent to buy it for him.
2. Most adult characters were portrayed in stereotyped roles.
3. Minority group member children were common in television commercials; minority group adults were rare.
4. Advertisers prefer to use 30 second commercials.
5. Average commercial time per hour has increased by approximately one minute.
6. Price information was rarely provided.
7. Food commercials rarely mentioned sweetness.

A secondary purpose of this research was to determine what effect, if any, the withdrawal of the Code and freedom from regulation has had upon television commercials aimed at children. Through the analysis of primary data gathered before and after the withdrawal of the Code this study did the following:

1. It determined the changes that have occurred in television advertising aimed at children between Fall 1981 and Fall 1983.
2. It listed the specific changes that occurred.
3. It presented current advertising profiles of television advertising aimed at children.
4. It compared its results with past research findings.

Advertising practices have changed over the years and the last three years were no exception to the rule. When the NAB Code was withdrawn two years ago, there was great concern and confusion. Consumer advocates predicted that advertisers would immediately start using all sorts of socially irresponsible advertising techniques and practices. The results of this research indicate that this did not occur. A few commercials violated former Code regulations, but the vast majority adhered to the old standards. In the confusion surrounding the Code's withdrawal, most advertisers adopted a "wait-and-see" policy, even though a few thought they wanted to change before their competitors did. Some of those who changed their policies immediately after the withdrawal of the NAB Code had returned to their former policies by Fall of 1983. Overall, the withdrawal of the Code has had little effect upon advertising policies and standards. Advertisers have shown that the mere withdrawal of regulation was not sufficient reason for them to completely abandon advertising policies and standards that have worked well in the past. Consumers generally have a high degree of confidence in most advertisers' integrity and to destroy this confidence by switching to questionable advertising practices (i.e., ones that consumers find offensive) was considered unwise by most advertisers.

They did not want a few irresponsible advertisers to undermine the high level of consumer confidence that took years to achieve. Advertisers as a group have done a good job in advertising products to children. Most criticisms of children's advertising are based on perceptions and attitudes, not actual facts. There are, however, some criticisms of children's television commercials (primarily in the use of women and minority characters) that have been substantiated by this content analysis study and it is hoped that changes in these areas will be forthcoming in the near future.

Spatial Content

Average commercial length for television commercials aimed at children was 30 seconds. This is consistent with results found by past researchers. In spite of the fact that past research has demonstrated that children pay maximum attention to a 60 second commercial, rather than a shorter one, advertisers prefer to use 30 second commercials. A reasonable justification for the enormous popularity of the 30 second commercial is that marketers feel that the increased frequency of exposure to a shorter commercial is worth the lesser attention given to it.

Average commercial time per hour has increased, but not significantly. This indicates advertisers are not doing what consumer advocates insisted advertisers would do -- e.g., drastically increase commercial time per hour.

The removal of the NAB Code has had little effect upon the use of program separators that separate program material from commercial announcements. Both formal and informal separators were being used

quite extensively by broadcasters throughout the three year sampling time period. They were also used extensively in places where they were not crucially needed, i.e., to separate commercials from station identification, network identification, and after program credits. Most omissions occurred on locally produced programs (which have been the main source of consumer complaints in the past).

Program Content

There has been a definite change in the type of products that are advertised to children. A larger variety of products were being advertised to children in 1983 than in 1981. The number of cold cereal and restaurant commercials decreased, while commercials for other edibles, drinks, and crunchy snacks increased. During the Christmas shopping season, toy commercials accounted for about 40% of the television commercials aired during the Saturday morning children's viewing hours.

Cast of Characters

Upon studying the results found in this study, it becomes evident that television commercials aimed at children do have some important shortcomings. Most adult characters were presented in stereotyped ways. Significant changes have occurred by 1983 in the way adult white women, adult minority males, and adult minority females were presented. There was a definite shift toward presenting these groups in a more nonstereotyped manner. However, while reading these statistics, one must keep in mind that the total number of adult minority characters presented in television commercials is quite small. For example, not a

single toy commercial in the entire sample used a minority group member adult as a commercial character. Two out of a total of 137 different commercials aired in 1981 used minority group member adults as commercial characters; 5 out of 195 in 1982; and 6 out of 169 in 1983. Distributions such as these cause problems and generate accusations of socially irresponsible behavior on the part of advertisers.

Though the use of adult women as characters has increased over the sampling time period, adult women seldom actually sold the product. Also, the use of an unidentified female voice to sell the product has increased, but the unidentified male voice was still used almost four times as often as an unidentified female voice in 1983.

Commercial Appeals and Practices

Most commercials provided little product information. Most commercials also did not exaggerate a product's appearance visually or use sound to exaggerate a product's benefits. Not a single commercial in the entire sample specifically urged the child to ask a parent to buy the product for him or to buy the product himself. Some commercials have started using social acceptance appeals (a practice formerly forbidden by the Code).

It is interesting to note that food commercials (including commercials for sugared cereal) rarely mention the word "sugar" or "sweet" and that these words were used primarily by products that emphasized the fact that a low sugar content can still result in a sweet taste. Many food commercials presented the product as part of a balanced meal. Only one food commercial in the entire sample implied that the product could be a substitute for a balanced meal. Food

commercials rarely presented any information that was contrary to good health and nutrition standards. If one considers the mere presence of a certain type of commercial as being contrary to good health and nutrition standards, that is an entirely different matter from stating that food commercials actually provide misinformation, which they do not.

Recommendations for Future Research

As stated earlier, before one can study the effects of a particular stimulus upon children, the precise nature of that stimulus must be known. This study investigated this stimulus (children's television commercials) and identified its variables. Changes in television commercials between Fall of 1981 and Fall 1983 were noted precisely and detailed comparisons were made with previous research findings. Future researchers studying the effects of television advertising upon children need to be aware of the changes that have occurred in children's television commercials and design their research accordingly.

Periodic content analysis studies are needed in order to determine the current state of the art in children's television advertising and to identify trends. It is very difficult to set guidelines or pass laws that are fair to all the concerned parties, unless the current state of the art is known.

The results of this study indicate that some practices formerly forbidden by the Code (practices considered socially irresponsible because they took unfair advantage of child consumers) have started to reappear. It is unknown at this time whether these "violations" were merely isolated occurrences or indications of coming shifts in

advertising policies and practices. Some advertisers may merely be testing current consumer reaction to certain policies that many consider to be questionable in nature or inappropriate for child target markets. These are questions that remain to be answered by future content analysis researchers.

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APPENDIX A
OPERATIONAL DEFINITIONS

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OPERATIONAL DEFINITIONS

Product -

Refers to the branded product or service advertised, not the premium which refers to a subsidiary product or other item offered as a means of promoting the product.

I. Commercial Identification -

The purpose of this section is to identify each particular commercial.

1. Product Name -

Name of the product being advertised in the commercial.

2. Title Assigned to Commercial -

A descriptive title assigned to the commercial by the researcher and judge. This title will describe the commercial as briefly as possible. The only purpose of this category is to facilitate the counting of duplicate commercials.

3. Manufacturer/Marketer -

Name of company, group, or individual that sponsored the commercial.

4. Commercial Number -

Administrative figure that indicates the number of the tape on which the commercial is recorded and the commercial's sequential order on that tape. For example, 1-3 refers to the fact that this commercial is the third commercial on Tape 1.

II. Commercial Characteristics -

The purpose of this section is to classify each commercial according to the following dimensions.

1. Product Category -

Products will be classified into the following categories: Cereals - Cold, Cereals - Hot, Candy, Cookies and Cakes, Crunchy Snacks, Drinks, Other Edibles, Restaurants, Nonprescription Drugs, Toys, Miscellaneous Products, and Noncommercial Messages.

A. Cereals - Cold -

Breakfast cereals that are usually eaten cold with milk added and require no cooking before eating. Corn Flakes

and Rice Krispies are examples of this product category.

- B. Cereals - Hot -
Breakfast cereals that are usually cooked before consumption. Farina and oatmeal are examples of the product category.
- C. Candy -
Confections made of sugar with various flavorings and fillings. Hershey Bars, Mr Goodbar, and Life Savers are examples of this product category.
- D. Cookies and Cakes -
Sweet breads that take on various shapes, forms, and flavors. Twinkies, Hostess Donuts, and Nabisco Chocolate Chip Cookies are examples of products that should be classified in this category.
- E. Crunchy Snacks -
Non-sweet snack foods that emit a "crunch" sound when eaten. Potato chips, pretzels, and corn chips are examples of products that should be classified in this category.
- F. Drinks -
Food products designed for consumption in liquid form by swallowing and are not considered as an essential part of a balanced diet. Pepsi Cola, Hawaiian Punch, and Kool Aid are examples of products that should be classified in this category.
- G. Other Edibles -
Food products that do not fit into any of the above mentioned food categories should be classified in this category (for example, milk, orange juice, or raisins).
- H. Restaurants -
Commercials for public eating establishments (Mac Donald's, Wendy's, etc.) should be classified in this category.
- I. Nonprescription Drugs -
Products that can be bought without a prescription, their main purpose being the prevention, alleviation, or cure of disease. Vitamins and aspirin are examples of products that should be classified in this category.
- J. Toys -
Products that are specifically designed to be used by a child in play (for example, Tonka Trucks, and Barbie Dolls).
- K. Miscellaneous Products -
Products that do not fit into any of the above mentioned

categories. Commercials for furniture and automobiles are examples of products that should be classified in this category.

L. Noncommercial Announcements -

Public service announcements, station identifications, commercials for television programming and other announcements that do not specifically offer a product/product type for sale. These announcements will not be included in the analysis.

2. Commercial Length -

Time, in seconds, that it took to air the commercial.

3. Program Separator -

A program separator is something that separates the program from the commercial. It can be audio, visual, or both. It can also be formal or informal. A formal separator is one that explicitly states (visually, audibly, or both) that a message will follow or that the program is about to resume or start. An informal separator is one that visually or audibly dissociates the commercial from the program material without specifically stating that the program is about to end, be interrupted, resume, or start.

III. Product Information -

The term "product" refers to the branded product or service advertised, not the premium which refers to a subsidiary product or other item offered as a means of promoting the product. Product name is regarded as product identification instead of product information. "Frosted Flakes" or "Sugar Smacks" would not be classified as sweet unless this informational part becomes a substantial part of the presentation. The purpose of this section is to determine the amount of product information contained in a commercial.

1. Price -

A reference to the price of a product or to matters pertaining to price, such as economy size packaging is made. For example, a character in the commercial says, "You can buy this doll at Wall Mart for \$5.95" or "Buy the ten ounce size of potato chips because it is cheaper per ounce than the two ounce size."

2. Durability -

Ability to withstand frequent use and/or hard wear. For example, a voice in a Tonka Truck commercial tells the audience that Tonka Trucks are built to drive over rough terrain and can take rough handling.

3. Availability -

Mention of where the product can be purchased. For example, a character in the commercial tells the audience that Tonka Trucks are for sale at Wall Mart Stores.

4. Sweetness -
A specific reference to the product as sweet or to sugar as an ingredient or the use of a descriptive term that denotes sweetness, such as "sugary." Product name is regarded as product identification. "Frosted Flakes" or "Sugar Smacks" would not be classified as sweet unless this information becomes a substantial part of the presentation. In the case of cereals, this item would not include a mere visual or audio presentation of a person or character adding sugar to the product.
5. Flavor other than Sweetness -
Any flavor (other than sweetness) is specified. This item will not include a general reference such as "great flavor." For example, a character in a toothpaste commercial says, "Oh, what a cool mint taste."
6. Guarantees or Warranties -
A pledge or assurance is made or implied that the product is as represented and will be replaced, repaired, or money will be refunded, if the customer is not satisfied. An example of this item would be: "If this truck breaks within one year of purchase, just take it back to the store and your money will be refunded."
7. Comparison with Other Brands that are Generically Different -
Refers to the direct (competing brand is named) or implied comparison between products of different classes. An example of this item would be: "Raisins are better than candy."
8. Comparison with Other Brands that are Generically the Same-
Refers to the direct (competing brand is named) or indirect comparison with products of the same product class. Generic groupings include items such as: cookies, candybars, cereal, games, trucks, blue jeans, etc. An example of this item would be: "Pepsi tastes better than Coke."
9. Mention of Appropriate Age for Usage -
A statement (verbal or visual) that specifically mentions the age for which the product is intended.
10. Product Distinctiveness Based on Research -
Results of studies done on the product are stated or implied. Item will include such comments as "new and improved" products. Studies can be either company sponsored or based on independent research.
11. Audio or Visual Disclaimers Used When Needed -
A disclaimer is a statement that indicates to the viewer that the product being advertised in the commercial will not perform as advertised unless certain other conditions are present (adult assembly required, batteries not included, doll clothes must be purchased separately, etc.).

IV. Cast of Characters -

These content items require an on-camera appearance, except where there is an off camera voice sound of a character in a key role within a story.

1. Human Male Child -
Refers to a real-life male child (person under eighteen).
2. Human Female Child -
Refers to a real-life female child (person under eighteen).
3. Minority Group Member Human Child -
Refers to a nonwhite real-life child (person under eighteen).
4. Human Adult Male -
Refers to a real-life adult (eighteen year and older) male human.
5. Human Adult Female -
Refers to a real-life adult (eighteen years and older) female human
6. Minority Group Member Human Adult -
Refers to a nonwhite real-life adult (eighteen years and older).
7. Animal with Added Human Qualities -
Refers to an animal with a human characteristic, the possession of which constitutes fantasy.
8. Talking and/or Acting Inanimate Object -
Refers to a nonhuman or nonanimal entity who, although inanimate in reality, actively demonstrates a human or animal characteristic as a fantasy character.
9. Cartoon or Fantasy Character -
Refers to any animated character or a representation of a character nonexistent in the real world.
10. Character from a Program Series -
Refers to a character who is or has been among the characters of a radio or television series.
11. Character Synonymous with the Product -
Refers to a character whose name or appearance embodies a feature of the product or its packaging. Also refers to a character who by its reputation has become identified with the product.

V. Health/Nutrition (Food Items Only) -

1. Tie-In of Good Eating With Health -
Refers to a specific indication of a relationship between good eating in general and health, even though the product itself

may not be directly brought into the relationship. Copy such as "eight essential vitamins" or "minimum daily requirement" would be coded here.

2. **Balanced Meal Portrayed Visually -**
Refers to a reasonably discernable visual representation of a balanced meal, though the meal does not technically need to include every basic nutrient that the body needs. In other words, the visual suggestion of balanced eating is sufficient for coding. The clarity of display and particular array of foods used would determine the extent to which this item applies.
3. **Balanced Meal Suggested in Audio -**
Refers to a specific reference to balanced eating or to the enumeration of several foods that suggests balanced eating.
4. **Product Related Specifically to Health -**
Refers to a representation of a direct association of the product as a feature of a balanced meal, the product itself as nutritious, the product as a source of vitamins, iron, protein, etc., or that the product helps the body grow right or function properly.
5. **Health Claim Made -**
"Health claim" is a copy point or representation associating a product or premium (or their use) with general health or well-being (e.g., exercise, growth, nutrition). The use of language such as "Hey, kids! Eat Wonder Bread for healthy strong bodies," warrants coding.
6. **Substantiated Claim of Nutrition -**
Nutritional claims are backed by a full or partial listing of nutritional content.
7. **Product Portayed as a Substitute for a Balanced Meal -**
The product is portrayed as an alternative to a diet of varied and nutritionally balanced foods.
8. **Health/Nutrition/Safety Information Obscured -**
Effective communication of sound health, nutrition or safety information presented in the commercial is diminished because of a delivery technique, such as being "lost" in a lively jingle or drowned out by a dominating audio effect.
9. **Nutritional Information Contradictory -**
Any audio or visual representation that directly or indirectly counteracts or reduces a notion of the relationship of good eating to health present in the commercial and coded under V-1 and/or V-4.

VI. Setting -- Story Elements -

1. **Real Setting**

Refers to features of a setting that, when taken in context, are sufficient to denote reality even where a fantasy character or fantasy situation is presented.

2. Fantasy -
Refers to an aspect of a setting or story that could not exist in the real world.
3. Human Family Interaction -
Refers to a real-life human family interaction.

VII. Production Techniques -

1. Animation -
Cartoon-type or puppet animation is used.
2. Jingles -
Refers to a musical vocalization of the message.
3. Exaggeration of Sound -
Refers to the exaggeration of a product attribute through the use of a sound effect.
4. Exaggeration of Appearance -
Refers to the exaggeration of a product attribute through the use of visual effects.
5. Exaggeration of Child's Reaction to Product -
Refers to the depiction of a child's reacting to the product in a manner that is inconsistent with the type of reaction that could be reasonably expected in real life.
6. Magnification of Product Benefits -
Refers to a verbal or visual representation of a consequence of product use which could not be expected to occur in the normal usage of the product.

VIII. Sales Pitch Delivery -

1. Direct Testimonial -
Refers to a representation that specifically indicates a personal endorsement of the product or its attributes by an actual real-life person through direct testimonial.
2. Indirect Testimonial -
Refers to an actual real-life person represented in the process of eating or drinking the product; or in the case of nonedibles, using the product, or to a depiction of the anticipation or remembrance of pleasure derived from the use of the product.
3. Adult Spokesperson -- Male -
Refers to a human real-life male adult (person over eighteen) who speaks on camera on behalf of the product.

4. Adult Spokesperson -- Female -
Refers to a human real-life female adult (person over eighteen) who speaks on camera on behalf of the product.
5. Adult Spokesperson -- Minority -
Refers to a nonwhite human real-life adult (person over eighteen) who speaks on camera on behalf of the product.
6. Child Spokesperson -- Male -
Refers to a human real-life male child (person under eighteen) who speaks on camera on behalf of the product.
7. Child Spokesperson -- Female -
Refers to a human real-life female child (person under eighteen) who speaks on camera on behalf of the product.
8. Child Spokesperson -- Minority -
Refers to a nonwhite human real-life child (person under eighteen) who speaks on camera on behalf of the product.
9. Cartoon/Fantasy Character Spokesperson -
Refers to a cartoon or fantasy character who speaks on camera on behalf of the product.
10. Male Voice -
Refers to the presence of a male voice whose visual source is absent.
11. Female Voice -
Refers to the presence of a female voice whose visual source is absent.

IX. Sales Persuasion Techniques -

1. Child Urged to Ask Parent to Buy the Product -
Language used in the commercial directly encourages children to ask parents to get the product (or premium) or to ask them to perform any other action related to promoting the sale of the product. For example, a commercial specifically says: "Ask your mother to buy"
2. Child Exhorted to Buy the Product -
Language used in the commercial is specifically addressed to children and exhorts them to get the product. For example, a commercial specifically says "Get it, kids" or "Kids look for it at your store." If the total context of the commercial, including the type of spokesman, mode of delivery, type of language, justifies an inferred exhortation to children to get the product or premium (even though they are not overtly addressed), this would be coded.
3. Child Exhorted to Buy the Premium -
Definition similar to the one above except that the word premium would be used instead of the product.

4. Special Offer Other than Premium -
Special offers, such as; contest, price reductions, etc., are used in the commercial.
5. Appeals to Social Acceptance -
Intangible rewards such as peer acceptance or parental approval are related to product usage.
6. Product Use Equals Fun -
The copy specifically associates the product with fun, happiness, or pleasure. An audio or visual representation of fun, happiness, or pleasure that results from product use would be coded. A general fun context would not in itself be sufficient for coding under this item.
7. Demonstration -
The product is shown in use.

X. Social Stereotyping -

The purpose of this section is to determine whether the adult characters presented in the commercial are portrayed in stereotyped occupations or situations.

1. Male -- White -
White males over eighteen are portrayed in traditional roles, such as a father, skilled labor, or professional.
2. Female -- White -
White females over eighteen are portrayed in nonauthoritative traditional roles, such as a secretary, nurse, homemaker.
3. Male -- Minority -
Nonwhite males over eighteen are portrayed in a stereotyped role, (e.g., unskilled labor or unemployed) and as having little or no authority. Minority characters portrayed as entertainers or athletes will be considered as being portrayed in stereotyped roles. A nonwhite male portrayed as a father (in upper or middle class surroundings or situations) will be considered as being portrayed in a nonstereotyped role.
4. Female -- Minority -
Nonwhite females over eighteen are portrayed in a stereotyped role, (e.g., maid or housekeeper) and as having little or no authority. Minority characters portrayed as entertainers or athletes will be considered as being portrayed in stereotyped roles. A nonwhite female portrayed as a mother (in upper or middle class surroundings or situations) will be considered as being portrayed in a nonstereotyped role.

APPENDIX B

MEASURING INSTRUMENT

APPENDIX B

MEASURING INSTRUMENT

I. Commercial Identification

1. Product Name _____
2. Title Assigned to Commercial _____

3. Manufacturer/Marketer _____
4. Commercial Number _____

II. Commercial Characteristics

1. Product Category _____
2. Commercial Length _____
3. Program Separator Present:
Yes -- Formal ___ No ___
Yes -- Informal ___ N/A ___

III. Product Information

1. ___ Price
2. ___ Durability
3. ___ Availability
4. ___ Sweetness
5. ___ Flavor Other Than Sweetness
6. ___ Guarantees or Warranties

7. ___ Comparisons with Other Brands (generically different)
8. ___ Comparisons with Other Brands (generically the same)
9. ___ Mention of Appropriate Age for Usage
10. ___ Product Distinctiveness Based on Research
11. ___ Audio/Visual Disclaimer used when needed

IV. Cast of Characters

1. ___ Human Male Child
2. ___ Human Female Child
3. ___ Minority Group Member Human Child
4. ___ Human Adult Male
5. ___ Human Adult Female
6. ___ Minority Group Member Human Adult
7. ___ Animal with Added Human Qualities
8. ___ Talking and/or Acting Inanimate Object
9. ___ Cartoon or Fantasy Character
10. ___ Character from a Program Series
11. ___ Character Synonymous with Product

V. Health/Nutrition (Food Items Only)

1. ___ Tie-in of Good Eating with Health
2. ___ Balanced Meal Portrayed Visually
3. ___ Balanced Meal Suggested in Audio
4. ___ Product Related Specifically to Health
5. ___ Health Claim Made
6. ___ Substantiated Claim of Nutrition

7. ___ Product Portrayed as a Substitute for Balanced Meal

8. ___ Health/Nutrition/Safety Information Obscured

9. ___ Nutritional Information Contradictory

VI. Setting -- Story Elements

Yes No

1. ___ ___ Real Setting

2. ___ ___ Fantasy

3. ___ ___ Human Family Interaction

VII. Production Techniques

Yes No

1. ___ ___ Animation

2. ___ ___ Jingles

3. ___ ___ Exaggeration of Sound

4. ___ ___ Exaggeration of Appearance

5. ___ ___ Exaggeration of Child's Reaction to Product

6. ___ ___ Magnification of Product Benefits

VIII. Sales Pitch Delivery

Yes No

1. ___ ___ Direct Testimonial

2. ___ ___ Indirect Testimonial

3. ___ ___ Adult Spokesperson -- Male

4. ___ ___ Adult Spokesperson -- Female

5. ___ ___ Adult Spokesperson -- Minority

6. ___ ___ Child Spokesperson -- Male

7. ___ ___ Child Spokesperson -- Female

8. ___ ___ Child Spokesperson -- Minority

9. ___ ___ Cartoon/Fantasy Character Spokesperson
10. ___ ___ Male Voice
11. ___ ___ Female Voice

IX. Sales Persuasion Techniques

1. ___ ___ Child Urged to Ask Parent to Buy the Product
2. ___ ___ Child Exhorted to Buy Product
3. ___ ___ Child Exhorted to Buy Premium
4. ___ ___ Special Offer Other Than Premium
5. ___ ___ Appeals to Social Acceptance
6. ___ ___ Product Use Equals Fun
7. ___ ___ Demonstration

X. Social Stereotyping

Yes No

1. ___ ___ Male -- White
2. ___ ___ Female -- White
3. ___ ___ Male -- Minority
4. ___ ___ Female -- Minority

APPENDIX C

CODING INSTRUCTIONS

APPENDIX C

CODING INSTRUCTIONS

I. Commercial Identification

Items 1, 2, 3, and 4 require a fill-in answer that is in accordance with the operational definitions listed in Appendix A. For example, if the commercial being analysed is for "Simon" (an electronic toy manufactured by Milton Bradley), write the word "Simon" in the space after "Product Name." After "Title Assigned to Commercial" write the very brief descriptive title you have given to the commercial. After "Manufacturer/Marketer" write the words "Milton Bradley." If this commercial is the third commercial on Tape 1, write "1-3" for commercial number.

II. Commercial Characteristics

Items 1 and 2 require a fill-in answer that is in accordance with the operational definitions listed in Appendix A. For example, if the commercial being analyzed is for "Simon" (an electronic toy), write the word "toys" in the space after "Product Category." The operational definitions have divided this category into twelve parts: Cereals - Cold, Cereals - Hot, Candy, Cookies and Cakes, Crunchy Snacks, Drinks, Other Edibles, Restaurants, Nonprescription Drugs, Toys, Miscellaneous Products, and Noncommercial Announcements. If you are unsure of what answer to write in, please refer to the operational definitions in Appendix A. If this particular commercial is 30 seconds long, write the number "30" in the space after "Commercial Length."

In item 3, place an "x" in the "Yes-Formal" space if the commercial is immediately preceded or followed by a formal separator. A formal separator is one that explicitly states (visually, audibly, or both) that a message will follow or that the program is about to resume or start. Place an "x" in the "Yes -- Informal" space if the commercial is immediately preceded or followed by an informal separator. An informal separator is one that will visually or audibly dissociate the commercial from the program material without specifically stating that the program is about to end, be interrupted, resume, or start. Place an "x" in the "No" space if a separator is not used when needed. Place an "x" in the "N/A" space if the commercial is surrounded by the other commercials and a separator is not necessary to separate the commercial from the program. If the product category is "Noncommercial Announcements", stop coding the instrument at this point (II-3); otherwise continue coding the instrument.

III. Product Information

All items in this section will be coded according to the following value scale:

Not mentioned	-- 0
Mentioned once	-- 1
Mentioned repeatedly	-- 2

Using sweetness as an example, if the commercial contained no mention of sweetness (as it is operationally defined in Appendix A), write "0" in the space provided. If there is only one reference to sweetness in the commercial, write "1" in the space provided. If there is more than one reference to sweetness, write "2" in the space provided.

IV. Cast of Characters

The items in this section will be coded in the following manner:

0 characters	-- 0
1 or 2 characters	-- 1
3 or more characters	-- 2

For example, item 1 is "Human Male Child." If no human male child is present in a particular commercial, write "0" in the space provided. If 1 or 2 human male children are present in a particular commercial, write "1" in the space provided. If 3 or more human male children are present in a particular commercial write "2" in the space provided.

V. Health/Nutrition (Food Items Only)

This section will be coded for food commercials only. For nonfood commercials skip this section and continue on with coding the rest of the instrument. The items in this section will be coded in the same manner as those in Section III, using the following three point scale:

Not mentioned	-- 0
Mentioned once	-- 1
Mentioned repeatedly	-- 2

For example, if a food commercial makes no claim that the product is nutritious, write "0" in the space before the item titled "Substantiated Claim of Nutrition." If this commercial mentions once that the product is good for you because it contains iron, write "1" in the space provided. If the commercial repeatedly mentions that the product is nutritious because it contains iron, write "2" in the space provided.

VI, VII, and VIII. Setting -- Story Elements, Production Techniques, and Sales Pitch Delivery

The items in this section require a yes or no answer. For example, if animation is used in the commercial, place an "x" in the yes column. If animation is not used in the commercial, place an "x" in the no column.

IX. Sales Persuasion Techniques

The items in this section will be coded in the same manner as those in Section III, using the following three point scale:

Not mentioned	-- 0
Mentioned once	-- 1
Mentioned repeatedly	-- 2

For example, if the commercial does not specifically tell children to ask their parents to buy the product for them, write "0" in the space provided for the item titled "Child Urged to Ask Parent to Buy the Product." If the commercial specifically tells the child to ask their parents to buy the product for them and does this only once, write "1" in the space provided. If the commercial specifically tells the child more than once to ask their parents to buy the product for them, write "2" in the space provided.

X. Social Stereotyping

The items in this section require a yes or no answer similar to those in sections VI, VII, and VIII. For example if an adult female who is not of the white race is portrayed as a maid in the commercial, place an "x" in the yes column. If this same female were portrayed as a doctor, place an "x" in the no column.

APPENDIX D

REVIEW OF THE LITERATURE ON THE EFFECTS OF
TELEVISION ADVERTISING ON CHILDREN

APPENDIX D

REVIEW OF THE LITERATURE ON THE EFFECTS OF TELEVISION ADVERTISING ON CHILDREN

Background

The body of literature on the effects of television advertising on children is quite small and the majority of it has been published since 1974. Most of the research has been conducted by advertisers testing the effectiveness of advertising campaigns and individual commercials (National Science Foundation, 1977). These studies are usually kept confidential because advertisers prefer not to share the data with competitors and they share a general view that such research is of little interest to the scientific community (Griffin, 1976).

Academic research in this area is much less extensive than that of advertisers. A complete bibliography might list over a thousand sources of information on television advertising to children. Only a fraction, however, would deal specifically with the effects of television advertising aimed at children, and most of these would cite speeches and testimony in various hearings rather than studies. Many of the empirical findings have had little replication of findings (National Science Foundation, 1977).

It is generally agreed, however, that research is sorely needed. Recently, Emilie Griffin (1976), director of the Children's Advertising Review Unit, stated that "research is needed because it will serve to

make guidelines, codes, and governmental actions fair to children and advertisers alike."

Effects of Television Advertising on Consumer

Socialization

Ward (1974) defines consumer socialization as the continuous ongoing process by which children learn skills, knowledge, and attitudes relevant to their present and future behavior as consumers. Ward and his associates, who have done a considerable amount of research in this area, believe that viewing television commercials is an important part of the consumer socialization process. Little agreement is found in the literature, however, about what skills, knowledge, and attitudes comprise consumer socialization. But, it is a generally accepted fact that various agents have a role in this process -- parents, peers, schools, the community, and television advertising (National Science Foundation, 1977). Researchers have been trying to determine whether viewing television commercials contributes to the development of good or effective consumer skills during childhood and later years. Some critics insist that advertising actually interferes with the development of these skills. One reason critics are skeptical of Ward's findings is that his studies are cross-sectional rather than longitudinal. The few longitudinal studies reported in the literature (Guest, 1964) suffer from the common difficulty of low response rates in the later time period.

McNeal (1964) conducted one of the earliest studies of children's consumption patterns. He individually interviewed 60 children, five, seven, and nine years old. His results indicated that differences in consumer behavior are positively correlated with age and parental

training. Negative attitudes toward television commercials were found to increase with age and no significant differences in consumer behavior were related to a child's sex.

Ward and his colleagues (Ward, Wackman, and Wartella, 1973; Wackman and Wartella, 1977; Wackman and Ward, 1973; Ward, Wackman, and Wartella, 1977) have done extensive research in the consumer socialization area. Their reports are drawn from data involving over 600 children in the Boston and Minneapolis area. They found that mothers view consumer education of their children as a low priority activity, regardless of the socio-economic status and sex of the child. They also reported that as children get older they are more likely to discuss television commercials with their parents.

Ward's data also indicate that major changes in the way children process information take place between kindergarten and the third-grade levels. Older children were found to use more information and more kinds of information in making product choices. One of his most important findings is that children who understand the persuasive intent of commercials tend to be more reflective information processors than their counterparts who do not fully realize the nature of the intent. Other researchers have also reached the same conclusions (Banks, 1981; Roberts, Gibson, and Bachen, 1979; Robertson and Rossiter, 1974).

The results of this type of research have led to the small but growing demand for consumer education at the elementary level. The study of consumer socialization has been approached from several theoretical viewpoints, the main ones being social learning theory, cognitive development theories, and information processing.

Social Learning Theory Perspective

Gerwitz (1969) defines social learning as a category of learning involving stimuli provided by people. Basically there are two social learning processes that influence behavior: direct instrumental training where a teacher explicitly attempts to shape responses via differential reinforcement and imitation where an observer matches responses to discriminate cues provided by responses of a model. This latter process comprises the vast majority of a child's socialization process.

Traditional learning theories portray behavior as a function of experimental reinforcements. However, Bandura believes that "virtually all learning phenomena resulting from direct experiences can occur on a vicarious basis through observation of other people's behavior and its consequences for them" (Bandura, 1971). This enables man to acquire behavior by example without tedious trial and error practices; similarly, behavioral inhibitions can be induced by observing punishment of others for their activities. The important cognitive component in this approach is that people symbolically represent and process external influences for later guidance in performance (Bandura, 1962, 1965, 1971, 1973).

According to Bandura, most of the behavior that people display is learned, either deliberately or inadvertently, through example. Most of the mass communications applications of vicarious social learning theory have concerned the relationship of television violence portrayals to anti-social behavior with more recent research examining the role of the modeling process in learning of prosocial behavior and cognitive skills (National Science Foundation, 1977).

Much of the reasoning behind the demand for more socially responsible advertising is based on Bandura's social learning theory. The great majority of research regarding television's effects suggest that television does have the capacity to shape a variety of both prosocial and antisocial behavior in children (Goldberg and Gorn, 1979). The social learning theory of Bandura has often been confirmed by children who reflect the behavior they have observed from symbolic models (television models). If a child sees actors engaging in violent behavior, he may feel that it is all right to imitate them. If he sees actors engaging in cooperative behavior, he may decide that he should do the same.

Cognitive Development Approach

Cognitive development theories have been devised to explain development as a function of qualitative stages in cognitive organization that occur between infancy and childhood. Piaget (1928, 1952, 1954) and Kohlberg (1969) are the main theorists in this area. They define stages in terms of a formal system (primarily cognitive structures) that the child can implement in perceiving and dealing with the environment at different ages. Cognitive development theories are focused primarily on the interaction of personal and environment factors, while learning theories usually describe behavior as a result of strictures imposed on the child (Ward, 1974).

The studies of Ward and his associates on consumer socialization closely parallel the work of Piaget, principally, however, by implication. Their findings have usually been delineated in terms of cognitive development concepts that characterize differences between children at the preoperational (roughly two- to seven-year-olds) and

concrete operational (roughly seven- to thirteen-year-olds) development stages (Ward, 1974).

Effects of Television Food Advertising

A much debated issue is the effects of television food advertising on children. Criticism of food advertising on television has been directed both at the quality of the food products and at the methods of presentation in television commercials.

A child's developing sense of what our culture deems fit to eat is influenced by what he or she sees in television commercials (Jerome, 1975). Other factors significantly influence the child, such as ethnicity, socio-economic status, and nutritional education by parents (Goldblith, 1976). Critics claim that the mere presence of ready-to-eat cereal commercials, candy commercials, or other highly sweet food commercials suggests to children that these products are desirable and appropriate for consumption (National Science Foundation, 1977). Furthermore, these heavily advertised products have more exposure than the full range of food products that children should eat. This imbalance in favor of highly sugared foods has caused concern that children, while still young enough to be forming their ideas on what is good to eat, are being urged by television to eat foods that neither contribute to good health nor should become lifetime food habits (Gussow, 1972).

Critics also dislike the modes of presenting food advertising. For example, commercials typically promote confections and snacks on the basis of their taste; and they often associate food products, such as breakfast cereals, with toys and other premiums. According to critics (primarily Action for Children's Television), food advertising has a

negative effect upon children's nutritional knowledge and attitudes toward food and nutrition, their eating habits, and even their physical health. Food commercials have been accused of being disruptive to parent-child relationships in that conflicts may be precipitated when parents refuse children's requests for advertised food (Choate, 1972; Jerome, 1975).

Research shows that children's responses to food advertising are related to their age and cognitive development (Haefner, 1975; Galst, 1978; Roberts and Gibson, 1979; Roberts, et. al., 1979). Younger children tend to express more acceptance of food product claims than older children. They also exhibited greater shifts in belief of product claims subsequent to viewing a commercial.

Another important mediating variable is parent-child interaction, that is interfamily communications about food products. The parent's role in mediating the influence of television advertising is quite complex. The findings of Clancy-Hepburn, Hichey and Neville (1974) support the existence of a positive relationship between parents' and children's attitudes and behavior toward food advertising. They found that children of mothers with a high knowledge of the validity of nutritional product claims expressed significantly fewer preferences and requests for advertised foods. These children also reported lower consumption of these products.

Several studies also demonstrate a positive relationship between children's requests for advertised food products and parental yielding to these requests (Reilly Group, 1973a; Reilly Group, 1973b; Wells, 1966; Atkin; 1975; Galst and White, 1976). Denial of children's requests for certain food sometimes results in parent-child conflict.

Some research supports the belief that nutritional content and the value of food products can be effectively communicated to children with commercials (Atkin, 1975; Goldberg and Gorn, 1979; Goldberg, Gorn, and Gibson, 1978; Gorn and Goldberg, 1982; Lemnitzer, Jeffrey, Hess, Mickey, and Stroud, 1979; Roberts, et al., 1979). Other researchers' (Fox, Balfour, Dahlkoetter, McLellan, and Hickey, 1980; Galst, 1979) results could not support these conclusions. Enough support has been generated for this belief, however, to result in the many pro-good-nutrition public service commercials being aired today.

Source Effects and Self-Concept Appeals

Various kinds of characters appear as product presenters or users in most children's commercials and the impact of these characters on the television audience is known as the "source effect." Some critics allege that the use of certain characters in commercials create source effects that take unfair advantage of the child audience (National Science Foundation, 1977). In this report prepared for the National Science Foundation, Adler and his colleagues describe some of the supposedly negative source effects as listed below:

1. Certain types of characters in commercials, notably program personalities and cartoon characters, may contribute to children's confusion between programs and ads. Atkin called this the confusion effect. This confusion effect may be heightened when program personalities and cartoon creatures appear in commercials shown within or adjacent to their own program -- adjacency effect.
2. Celebrities or authority figures can lead children to

attribute excess qualities to the endorsed product (i.e., qualities that it does not have) -- endorsement effects.

3. Certain characteristics of product presenters or users -- sex, race, occupation, social behaviour -- can contribute to children learning social stereotypes -- social stereotype effect.
4. Certain types of advertising appeals, usually but not always involving product presenters or users, may affect a child's self-concept -- Self-concept effect. Personal enhancement appeals, social status appeals, and exaggerated or unrealistic product appeals fall into this category.

Although many young children confuse programs with commercials, there is still no evidence to support the hypothesis that the use of program characters in commercials contributes to this confusion. The research on endorsement effects has yielded more concrete results, even though this whole area is badly in need of theoretical direction and improved methodology.

Another gray area is the question as to whether commercials contribute to the formulation of social stereotypes. Ratio analysis of social cue content in commercials (male-female, black-white) suggest that they at least have the potential to do so. If these ratios can affect children's beliefs about the real world, an extremely complex and value-laden issue arises. The issue is whether commercials should be expected to match real-world ratios or whether some kind of over-compensation is justified (e.g., for women or ethnic minority groups).

Few studies have been conducted in the area of self-concept appeals

and none of them really tried to measure the principal variable -- the child's self concept.

Deception

Deception is the most complicated issue in all advertising. Although much has been written about deception in advertising, it is still not clear what conditions constitute deceptive advertising to adults, let alone children (Barry, 1977). Barry (1980) devised some formulae to distinguish between deceptive advertising and unfair advertising, but they fall short of providing a solution to the problem. Advertisers are presently pressuring Congress to define deception by legislation (Gordon, 1982). Advertisers hope to divest the FTC of the power to attack unfair advertising by having deception defined by law, not the FTC. Almost everyone agrees that outright lying is wrong and should be illegal, but for less obvious forms of deception the lines are not as clearly drawn.

The FTC's current mandate is that advertising not be deceptive or unfair. Most industry spokespersons agree that advertising directed at children should be truthful, accurate, and fair to children's perceptions (National Advertising Division -- Council of the Better Business Bureaus, 1977).

APPENDIX E

COHEN'S COEFFICIENT OF AGREEMENT

APPENDIX E

COHEN'S COEFFICIENT OF AGREEMENT

Cohen's Coefficient of Agreement between two judges is a more appropriate method for determining reliability than merely reporting the percentage of agreements between two judges. Cohen's formula is

$$K = (P_o - P_e) / (1 - P_e)$$

where P_o is the observed proportion of agreements between the two judges, and P_e is the expected proportion of agreements between two judges. This method results in a lower reliability score than the percentage of agreement method because that portion of agreement due to chance alone is eliminated.

APPENDIX F

DETAILED RESEARCH FINDINGS AND RESULTS

TABLE XXXVII

COMMERCIALS AIRED IN 1981

Aim
Alpha Bits
Barbie Beauty Secrets
Barbie Dream Pool and Patio Fun
Barbie Golden Dream
Barbie Star Traveler Motor Home
Barbie Super Vet
Barbie -- Western
Barbie's Cosmetic Case
Big Bolt Construction Set
Big Red Clutch Popper
Bob Mills Furniture Store
Bonkers
Boomer Sooner Telephone Box
Bubble Yum Gum
Bumbling Boxers
Burger King -- 1
Burger King -- 2
Burger King -- 3
Burger King -- 4
Burger King -- 5
Burger King -- 6
Captain Crunch Cereal
Cheerios -- 1
Cheerios -- 2
Chipmunks Christmas Carol and Urban Chipmunks Record/Cassette
Cinderella and Friends Movie
Clown Around
Cocoa Puffs Cereal
Cookie Crisp Cereal
Crest Gel
Dallas Horse
Darth Vader Collectors Case
Dinky Donuts Cereal -- 1
Dinky Donuts Cereal -- 2
Dolly Pops Dress Show -- 1
Dolly Pops Dress Show -- 2
Donutz Cereal -- 1
Donutz Cereal -- 2
Easy Bake Mini Wave Oven
Express Align
Fast One
Fruit Flavored Trix
Gagobah Action Playset
Gimme 5
Glamour Gals Beautiful Bride -- Jessy Doll

TABLE XXXVII (CONTINUED)

Glamour Gals Collection
 Glamour Gals Collection and Showplace
 Glamour Gals Collection and Showplace Collectors Case
 Hand Command Turbo Prop
 Hershey Bar -- 1
 Hershey Bar -- 2
 Honey Comb Cereal
 Hot Wheels (for 8)
 Hot Wheels Criss Cross Crash
 Indiana Jones Action Figure
 Jude and Jody Furniture Store
 Kellogs Banana Frosted Flakes
 Kellogs Corn Pops
 Kellogs Pop Tart
 Lawrence Photo
 Legoland Fire Station and Main Street
 Legoland Public Works and Gas Station
 Legoland Mator 1 Command Base
 Lucky Charms Cereal -- 1
 Lucky Charms Cereal -- 2
 Littles Furnished Homes
 Mad Magazine Game
 Madcap Marathon
 Magic Musical Thing
 Malt-O-Meal
 Mathis Brothers Furniture Store -- 1
 Mathis Brothers Furniture Store -- 2
 Mathis Brothers Furniture Store -- 3
 McDonalds -- 1
 McDonalds -- 2
 McDonalds -- 3
 McDonalds -- 4
 McDonalds -- 5
 McDonalds -- 6
 McDonalds -- 7
 McDonalds -- 8
 Merlin
 Mighty Rough Neck Pickup
 Monchhichi
 Moffets Secret Doll House
 Mr. Mouth
 Mousetrap Game
 Nestles Quick Chocolate -- 1
 Nestles Quick Chocolate -- 2
 Night Rescue Shoots Away
 Pebbles Fruit Cereal and Pebbles Cocoa Cereal
 Play Doh Construction Set
 Play Doh Sizzlin Skillet

TABLE XXXVII (CONTINUED)

Pretty Cut and Grow
 Push Over
 Raiders of the Lost Ark Toys
 Reeses Pieces
 Run Yourself Ragged
 Rolo
 Safe Football -- 1
 Safe Football -- 2
 Sew Perfect
 Showbiz Pizza Place
 Slave I
 Slinky Tower Set
 Smaller Homes
 Smurf All Star Show Album/Cassette
 Soundtrack
 Spirograph
 Star Maker Guitar
 Star Wars Action Figures
 Stomper 4X4 Danger Mountain Set
 Stomper 4X4 Wild Mountain Set
 Stomper Super Cycle
 Strawberry Shortcake Bake Shop
 Strawberry Shortcake Dolls
 Strawberry Shortcake Garden House
 Strawberry Shortcake Scented Dolls
 Strawberry Shortcake Snail Cart
 Super Sugar Crisp Cereal -- 1
 Super Sugar Crisp Cereal -- 2
 Tidal Wave Bubblegum
 Tippee Toes
 Toys-R-us -- 1
 Toys-R-us -- 2
 Trust Me
 Turbo Clutch Poppers
 Underoos -- 1
 Underoos -- 2
 Waffelos Blueberry Waffalos Cereal
 Wall Mart -- 1
 Wall Mart -- 2
 Willman's Furriers -- 1
 Willman's Furriers -- 2

TABLE XXXVIII
COMMERCIALS AIRED IN 1982

Advanced Dungeons and Dragons
Alpha Bits
Andy's Marine
Annie Doll
Annie's Mansion
Atkin's Hair Center
Baker's Dolls and Toys Store
Barbie -- Magic Curl
Barbie -- Pink and Pretty
Barbie -- Western -- 1
Barbie -- Western -- 2
Barbie Bubble Bath
Barbie Dream Pool and Patio Fun
Barbie Electronic Piano
Barbie Star Traveler
Barbie Super Vet
Barbie Traveling Trailer
Barbie Western Star Traveler
BMX Mongoose -- 1
BMX Mongoose -- 2
Brooke Shields Doll
Bubblicious Gum
Bubble Yum Gum
Bye Bye Diapers Doll
Candyland Game
Captain Crunch Cereal -- 1
Captain Crunch Cereal -- 2
Castle Grayskull
Certs -- 1
Certs -- 2
Cheerios
Chic
Clearasil
Clutch Popper Road Boss
Clutch Poppers Racers
Colgate Gel
Connect Four
Cookie Crisp Cereal
Cosmic Ark
Cracker Jack Fresh Popcorn
Crest Gel
Crystal's Pizza
Dallas Horse
Dark Crystal Movie
Datson King Cab Neisson
Dazzle City

TABLE XXXVIII (CONTINUED)

Dazzle Doll -- 1
 Dazzle Doll -- 2
 Dentyne
 Demonds to Dimonds
 Dickens Christmas Expo
 Dukes of Hazzard Speed Jumper
 Dungeons and Dragons
 Easy Bake Mini Wave Oven
 Erin in Fancy Fiesta
 Franco Spagettios
 Fruit Loops Cereal
 GI Joe
 GI Joe Attack Vehicle
 GI Joe Motorized Battle Tank
 Glamour Gals -- 1
 Glamour Gals -- 2
 Glamour Gals Beauty Salon
 Hardees
 Hawaiian Punch
 Heidi's Song
 Hershey Bar -- 1
 Hershey Bar -- 2
 Hershey's Syrup
 Honey Nut Cheerios
 Hot Wheels Criss Cross Crash
 Hot Wheels Inside Track
 Hubba Bubba
 Intermountain Express Set
 Indiana Jones Figures
 Impulse
 Jif Peanut Butter
 Joe Rella Honda
 Jude and Jody Furniture Store -- 1
 Jude and Jody Furniture Store -- 2
 KEBC FM Radio
 Kellogs Apple Jacks
 Kellogs Raisin Bran -- 1
 Kellogs Raisin Bran -- 2
 Kellogs Sugar Corn Pops
 Kellogs Sugar Frosted Flakes
 Kernals Corn
 Last Unicorn
 Legoland Castle
 Legoland Mata 1 Command Base and Mobile Rocket Transport
 Legoland Gas Station
 Lock and Chase -- 1
 Lock and Chase -- 2
 Love's Baby Soft

TABLE XXXVIII (CONTINUED)

Mathis Brothers Furniture Store -- 1
 Mathis Brothers Furniture Store -- 2
 Mathis Brothers Furniture Store -- 3
 Mathis Brothers Furniture Store -- 4
 Magic Sand
 McDonalds -- 1
 McDonalds -- 2
 McDonalds -- 3
 McDonalds -- 4
 McDonalds -- 5
 McDonalds -- 6
 McDonalds -- 7
 McDonalds -- 8
 Mega Force
 Memorex
 Mr. Buck
 Mickey Mouse Talking Phone
 Monchhichi -- 1
 Monchhichi -- 2
 Mountain Master
 Nerf Football
 Nerf Soccer Ball
 Nestle Quick Chocolate Drink -- 1
 Nestle Quick Chocolate Drink -- 2
 Noodleroni
 Numbers Up Game
 Old Spice
 Operation
 Pac Man Board Game
 Pac Man Video Game
 Pebbles Fruit Cereal and Pebbles Cocoa Cereal -- 1
 Pebbles Fruit Cereal and Pebbles Cocoa Cereal -- 2
 Peter Pan Movie
 Pizza Hut
 Play Doh Fun Factory
 Power Movers
 Reeses Peanut Butter Cups
 Reeses Pieces
 Remco
 Rolo
 Service Merchandise -- 1
 Service Merchandise -- 2
 Sine-Aid
 Sit and Spin
 Soundtrack -- 1
 Soundtrack -- 2
 Star Wars Action Figures -- 1
 Star Wars Action Figures -- 2

TABLE XXXVIII (CONTINUED)

Star Wars Action Figures -- 3
 Star Wars Collection
 Star Wars Rebel Transport
 Star Wars Zoids -- 1
 Star Wars Zoids -- 2
 Starburst
 Stomper 4X4 Pull Set -- 1
 Stomper 4X4 Pull Set -- 2
 Stomper 4X4 Rough Riders
 Stomper 4X4 Wild Country Set
 Stomper Semi
 Stomper Semi Inter Mountain Express Set
 Stomper SSC Supercycle Bomberang Stunt Set
 Strawberry Shortcake Baby Dolls
 Strawberry Shortcake Big Berry Trolley
 Strawberry Shortcake Cereal -- 1
 Strawberry Shortcake Cereal -- 2
 Strawberry Shortcake Miniatures -- 1
 Strawberry Shortcake Miniatures -- 2
 Strawberryland Miniatures
 Sugar Crisp Cereal
 Sunny Delight
 Superman Video Game
 Superman Peanut Butter
 The Beat
 Tippiie Toes Doll
 Taco Bellgrande
 Toys-R-us -- 1
 Toys-R-us -- 2
 Toys-R-us -- 3
 Three Muskateers Bar
 Trident
 Trouble
 Tunneyville Choo Choo
 Twister Game
 Underalls
 Underoos -- 1
 Underoos -- 2
 USA Hot Wheels Building Set
 Yars Revenge Video Game
 X-Wing Fighter and Imperial Te Fighter
 Waterbeds by Waterbed Palace
 Waterbed Showroom -- 1
 Waterbed Showroom -- 2
 Worcestershire Sauce
 Willman's Furs
 Wison Catalog Showrooms
 Wrangler

TABLE XXXIX
COMMERCIALS AIRED IN 1983

Advanced Dungeons and Dragons
Aim
Alpha Bits
Aaron Rents
Attack Trak
Baby Ruth and Butterfingers -- 1
Baby Ruth and Butterfingers -- 2
Baby Alive
Baby Skates
Barbie -- Angel Face
Barbie Dream Bed
Barbie Dream Cottage
Barbie Dream Date
Barbie Dream Pool and Patio Fun
Barbie Dream Store
Barbie Heavenly Holidays Fashions
Barbie Loves McDonald's Play Set
Barbie Super Vet
Bigfoot 4X4 Truck
Bubblicious Gum -- 1
Bubblicious Gum -- 2
Bubblicious Gum -- 3
Bubble Yum -- 1
Bubble Yum -- 2
Cabbage Patch Kids
Candyland Game
Capri Sun
Captain Crunch Cereal
Care Bears Books -- 1
Care Bears Books -- 2
Care Bears Miniatures
Castle Grayskull -- 1
Castle Grayskull -- 2
Certs
Chaps
Chipmunks
Chipmunks on Tour Fan Set
Chutes and Letters
Clearsil
Colgate Gel -- 1
Colgate Gel -- 2
Connect Four
Crest Gel -- 1
Crest Gel -- 2
Crossroads Mall
Dance Madness

TABLE XXXIX (CONTINUED)

Dallas Horse
 Dancing Strawberry Shortcake
 Dentyne Gum
 Dizzy Driver
 Donkey Kong Cereal
 Donkey Kong Junior Cereal
 Draw Rings
 Energizer
 Ewok Village Play Set
 Four on the Flour Speed Blaster
 Frogger Video Game
 GI Joe Battle Tank
 Halls
 Happy Returns Doll
 Hardees
 High Point Coffee
 Hershey's Syrup
 Hot Tracks Album
 Hungry Hungry Hippos
 Heaven Scent Collection
 Hershey's Bar
 Honeycomb Cereal
 Inchworm
 Intellivision II
 Jif Peanut Butter -- 1
 Jif Peanut Butter -- 2
 Kellogs Apple Jacks
 Kellogs Fruit Loops -- 1
 Kellogs Fruit Loops -- 2
 Kellogs Fruit Loops -- 3
 Kellogs Honey Smacks
 Kellogs Rice Krispies
 Kellogs Strawberry Krispies
 Kellogs Sugar Frosted Flakes -- 1
 Kellogs Sugar Frosted Flakes -- 2
 Kellogs Sugar Frosted Flakes -- 3
 Krunch Twists
 Legoland Building Set 566
 Levis Jeans and Cords
 Levis Jeans -- 1
 Levis Jeans -- 2
 Levis Jeans -- 3
 Levis Jeans -- 4
 Levis Jeans -- 5
 Lewis Jewelers
 Love's Baby Soft
 M&Ms
 Manglors

TABLE XXXIX (CONTINUED)

Man-E-Faces
 Mars Bar
 Matchbox Official Steering Wheel Collector Case
 Mathis Brothers Furniture Store
 McDonalds -- 1
 McDonalds -- 2
 McDonalds -- 3
 McDonalds -- 4
 McDonalds -- 5
 McDonalds -- 6
 McDonalds -- 7
 McDonalds -- 8
 McDonalds -- 9
 McDonalds -- 10
 Mickey's Christmas Carols and The Rescuers
 Memorex
 Memory Game
 Mountain Master
 My Little Pony
 Nate and Hayes Movie
 Nesles Quick Chocolate Drink -- 1
 Nesles Quick Chocolate Drink -- 2
 Noxema
 O.B. Tampons
 Otasco
 Pearl Drops
 Bubble Yum -- Pink Lemonade
 Pigs in Space
 Pigs in Space Video Game
 Play Doh Fun Factory
 Poochie Doll
 Poochie Notes and Stuff, Overnighter, and Glamour Nails
 Power Movers
 Reese's Peanut Butter Cups
 Return Of the Jedi Game
 Rice Krispies
 Rolo
 Rub-A-Dub Doggie
 Rough Riders 4X4 Impossibles
 Seven-UP
 6X6 Highrisers
 Slam Shifters Pit Stop Speedway
 Smurf Berry Crunch Cereal
 Smurf Spin Around Game
 Snoopy and the Red Baron Video Game
 Soundtrack
 Space Raiders Movie
 Spaghetti-O's

TABLE XXXIX (CONTINUED)

Starburst
Stomper II Wild Canyon Set
Stomper 4X4 Pull Set
Stomper Mobile Force Bridge Buster Set
Strawberry Shortcake and Berry Merry Worm
Strawberry Shortcake Baby Dolls
Strawberry Shortcake Berry Cycle
Strawberry Shortcake Shampoo
Strawberry Shortcake with Gooseberry
Super Sugar Crisp Cereal
Taco Bell's Nachos
Talin Fighter
Talking Viewmaster
The Knight 2000 Crash Set
Tracy Doll
Tropi
Twirly Curls Barbie
Twister
Underoos -- 1
Underoos -- 2
U.S. 1 Fire Alert
Venture Stores
Viewmaster 3-D
Vista and Mongoose
Vista Family Bicycles
Xonox Double Ender Video Game -- 1
Xonox Double Ender Video Game -- 2
Zooroni

VITA 2

Birute Ann Clottey

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