The purpose of this study was to identify the effect of television advertising on different types of children—specifically, the cognitive responses and extra-product expectations fostered by television commercials in both white and black children. The subjects, 52 middle-class white children and 30 inner-city black children ranging in age from six to eight years, were asked to describe a television commercial, then were shown two McDonalds commercials in color, and finally were asked questions about the commercials. Analysis of results showed that white children indicate significantly higher levels of awareness than do black children and that older children demonstrate significantly higher levels of understanding than do younger children. Several disturbing health and nutritional implications are discussed, and the study concludes that it is important to know the extent to which subtle or implied appeals are internalized by children of various levels of cognitive development. (JM)
BLACK AND WHITE CHILDREN'S PERCEPTIONS OF THE INTENT AND VALUES IN SPECIFIC ADULT AND CHILD ORIENTED TELEVISION COMMERCIALS

by

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Most of the concern generated about the role of television advertising in children's lives has theoretically focused on two areas: (1) the effects of television advertising on specific consumer habits, desires and preferences, and (2) the role of television advertising in the socialization process including: gaining an awareness of advertisers' intent, the incidental learning of lifestyle orientation, the role advertising plays in learning sex and occupational roles, and the expectations fostered by the "happiness" that is promised through the acquisition of goods and services. From a theoretical perspective it is in the second area of concern in which television advertising has the most potential for the most far-reaching and long-term consequences. For example, educators, legislators and parents are beginning to question seriously the cumulative impact of tens of thousands of TV ads on children's perceptions of society and its institutions. Is it possible that the commonly acknowledged "puffery" used in TV advertising is fostering a distrust of adults and institutions? When children learn that products often do not perform as demonstrated and that the acquisition of specific goods seldom leads to the level of happiness experienced by consumers in the ads, they soon develop a sense of distrust of advertising. To what extent does skepticism generalize to other institutions which attempt to communicate with children?

It is clear that not all children respond to television advertising in the same way. It seems crucial therefore to identify the consequences of television advertising on different types of children. Thus, the concern of this study was the identification of the cognitive responses and extra-product expectations fostered by television commercials for both white and black children.

Early research in these areas attempted to determine age-related cognitive developmental stages at which understanding of TV commercials occurs including: why they are shown on TV, how commercials differ from TV programs, and how
children perceive the extent to which commercials do not necessarily tell the truth. For example, Ward and his associates (1972) found that among white middle class children aged 6-12, food commercials were the most liked and believability was a function of age; older children were far more likely than younger children to understand the manipulative intent of commercials. In addition, the authors discovered that older children (8-10 years) were clearly more distrustful than younger children of the claims made by advertisers.

In a 1974 study, Rossiter and Robertson focused on attitudinal and cognitive defense mechanisms of children and their susceptibility to the pre-Christmas barrage of TV advertising. The principal finding was that while cognitive and attitudinal defenses were strongest before the pre-Christmas TV advertising barrage, the defenses were neutralized by the conclusion of the campaign. They also found an "apparent shift in importance from attitudinal defense to cognitive defense with increasing grade level. By fifth grade, cognitive defense is the only screen."

Supporting evidence for cognitive defense was also reported by Bever and his associates (1975). In a study that focused on cognitive defense development, the authors found that by age 10 children were undeniably cynical and suspicious of TV commercials. By age 11, most believed that advertising was a sham and other societal institutions like "business" were replete with manipulative lies. Lastly, children were largely unable to detect faulty reasoning in most commercial messages.

In a departure from the previous authors' focus upon cognitive development of white middle class children, Meyer, Donohue, and Henke (1976) sought to determine age-related levels of cognitive defense development among culturally deprived black children. As expected, the authors found that black children, regardless of age, showed a higher rate of believing TV commercials than white
children in Ward's 1972 study; the biggest discrepancy occurred among the 5-7 year-olds where one half the blacks said commercials always tell the truth, as compared to only one third of white children who responded to the same question. Moreover, compared to the white children who had 85-90% with at least a minimal level of understanding of what commercials were and their intent, black children never had more than 56% with any awareness of commercials' purposes. These findings led the authors to conclude that black children are especially vulnerable to the manipulative attempts of TV advertisers.

Beyond the cognitive developmental research approach, several studies have focused on the incidental learning that accrues from viewing television commercials. In an experimental study, Atkin and Miller (1975) designed four versions of a 15-minute tape that contained both off the air and experimenter-produced advertising as well as program content. Among the manipulations were occupational and recreational sex role, hygiene socialization, and patent medicine orientation. The major findings included: (1) subjects' exposure to a particular occupational model predicted judgments of the appropriateness of that occupation for women, (2) females who saw a commercial in which girls were playing with traditionally male-oriented toys (car racing set) were far more likely to feel that it was appropriate for girls to be playing with the toys and were slightly more desirous of doing so, and (3) subjects who viewed a headache remedy ad that was qualified highly indicated that people shouldn't take pills for mild headaches and personally indicated they would take fewer pills.

In a 1976 study, Atkin investigated observational learning that occurs from TV ads in an experimental situation. The major findings included: (1) attention to hygiene ads correlated moderately with perceptions of the frequency with which people use deodorant, mouthwashes, skin preparations, as well as with their concern with those problems and with actual use of the product; (2) blacks who viewed a commercial with white children playing with the product chose to
play with the toy more often than blacks who viewed black children playing with the toy and (3) disinhibition of excessive candy eating occurred from extensive exposure to candy commercials.

Lastly, Donohue (1975) attempted to determine what impact television commercials had on black children's nutritional and health values. The results indicated that overwhelmingly black children perceived that the first thing one should do when he/she did not feel well was "eat aspirin" and take patent medicines (cough syrups and Geritol, etc.). Conversely, to maintain good health significant numbers of black children indicated that eating vitamins, drinking Coke and ingesting fast food of all sorts was the most appropriate behavior. Lastly, children perceived that fast foods (including candy, soft drinks, cupcakes, and hamburgers) were equal in nutrition, if not superior, to foods one normally got at home.

Based on a review of the previous research, two variables emerge as central to any investigation of the cognitive development and value orientation of children: race and age. Moreover, with the exception of the Atkin studies, no attempt has been made to determine what values children perceive in specific television commercials. Lastly, since advertisers admittedly employ different strategies in persuading adults and children, it seemed useful to investigate children's perceptions of both adult and children's television commercials.

Hypotheses

Two hypotheses emerged as the focus of this study:

$H_1$: White children would indicate significantly higher levels of understanding of television commercials than black children regardless of age.

$H_2$: Older (8-year-olds) children would indicate significantly higher levels of understanding of television commercials than would younger children (6-year-olds).
In addition, investigations would be conducted into the relationship between other perceptual variables including: awareness of intent of advertising per se and intent of specific commercials, perceptions of the happiness demonstrated by television commercial actors and themselves, and the level of understanding of adult and children's commercials. However, due to the exploratory nature of the thrusts, no hypotheses were warranted.

Method

In order to test the hypotheses and answer the research questions, two sample populations were interviewed in Hartford, Conn. Of the 82 subjects, 52 were selected from white middle class schools and neighborhoods, and 30 were selected from inner city black schools and neighborhoods. The subjects ranged in age from 6 to 8 years old and were selected at random from their respective classrooms. A team of three trained graduate students interviewed the children one at a time in a private room; one interviewer escorted the children to and from the classroom, another ran the video equipment while the third questioned and recorded the students' answers. Each interview lasted approximately 30-40 minutes and all interviews were completed in a 3-week period. Most children were eager to participate and no reluctance to respond was noted by the interviewers.

Each child was asked age, grade (later verified with the teacher) and was asked if he/she could tell the interviewer what a television commercial was. Those who responded affirmatively were asked to describe a television commercial, at which point the response was recorded verbatim. Then subjects saw two McDonald commercials in color videotape on a 16-in. set (one commercial followed by questions about the commercial, then the second, followed by different questions). The commercials were provided by the McDonald Corporation and were sent in response to a request for a 60" spot designed for adults and one 60" spot
designed for children. The commercial designed for adults showed two attractive early-thirtyish parents taking their children (approximate age of 8-10, one male, one female) to McDonald's for lunch. The parents were particularly affectionate and attentive to the children and all appeared to be very happy. Each got what he/she asked for and they were pictured enjoying the meal and each other's company. The theme of the commercial was "come in out of those crazy prices" and the script generally reinforced the economy and subsequent peace of mind one experienced at McDonald's. The commercial designed for children featured Ronald McDonald at the carnival and included the standard cast: Hamburgler, Grimace, Captain and the others. The theme centered around the Hamburgler who was extorting hamburgers from all the other characters as payment for gaining access to the rides at the carnival. After several incidents of extortion, Ronald suggested that the entire cast head for McDonald's. Shortly after their arrival, Ronald emerged from the store with food for all suggesting that a good time and food would be had by all.

Questions based on the content for the adult commercial included: 1. What is the purpose of the commercial you just saw? 2. Tell me about the family in the commercial: do you think they are happier, less happy or about the same, happiness-wise, as your family? Why? 3. Do your parents take you to McDonald's? Do you have fun when you go there? 4. Do you think McDonald's food is more, less or about the same in nutrition as the food you normally get at home? 5. Do you think the food at McDonald's tastes better, worse or about the same as the food you normally get at home? 6. Do you think McDonald's food is more expensive, cheaper or about the same cost as the food you normally eat at home? 7. What restaurant makes your favorite hamburger?

After the Ronald McDonald commercial was viewed the following questions were asked: 1. What is the purpose of this commercial? 2. Did you like it? (if yes) What did you like best about it? (if no) What didn't you like about it?
3. Did you think it was funny? 4. What was Hambergler doing during the first part of the commercial? Was it right for him to do that? 5. Which of the characters would you most want to be like? Why? Which character would you least want to be like? Why? Why do you think Ronald took all the characters to McDonald's?

The children's responses to the initial question, which asked the child to indicate his perceptions of what TV advertising was, were then coded according to Ward et al's (1972) awareness criteria: 1. No awareness -- don't know, no response; 2. Low awareness -- confused perceptions based on coincidental reasoning; explained in terms of specific categories or products ("when they show toys") ("a little program"); 3. Medium awareness -- notion of information about products; the identification of "advertising concept"; minimal understanding of the notion of advertising, or explanation with reference to the fact they are advertising; 4. High awareness -- the child shows he clearly understands the intention of commercials (to get people to buy, notion of program sponsorship).

Each of the specific commercials was coded using the same criteria and levels of awareness were judged based on the degree to which the child understood that the advertisers wanted people to buy McDonald's products specifically, and for a particular reason. Two trained graduate assistants coded responses with the few differences being easily reconciled. Coded responses on completed questionnaires were then punched on cards for computer analysis which consisted of cross-tabulations by demographic variables, multiple regression and canonical correlation.

A possible objection to the use of correlational analyses for these data centers around the nature of the scales used. Role taking, perceived comparisons and affect scales are usually considered to be at the ordinal level of measurement. Traditionally, statisticians have held that regression procedures are appropriate only for interval or ratio-scaled data. In recent years, evidence has been offered (Labovitz, 1967, 70) that ordinal and "quasi-interval" data may be analyzed with
those procedures without introducing large amounts of error into the analysis.

**Results**

The results of the study provided support for both research hypotheses. The first hypothesis predicted that white children would indicate significantly higher levels of awareness than black children and the second hypothesis predicted that older children would report significantly higher levels of understanding than younger children. Multiple regression of demographic variables with levels of understanding provided support for the first hypothesis in that race was the most potent predictor of all levels of understanding ($r = .35$, $f = 10.68$, $p < .02$).

The application of multiple regression analysis to predict level of awareness of commercials per se, using as predictor variables race, level of understanding of each of the commercials, and perceived nutrition of McDonald's food, revealed that only understanding of the child-oriented commercial and perceived nutrition of the food were significant ($r = .55$, $f = 7.67$, $p < .0001$). The last regression analysis used age, race, sex, and level of understanding for commercials one and two to predict level of awareness of the purpose of TV commercials. As expected, age and race were the only significant predictor variables ($r = .73$, $f = 6.66$, $p < .01$). Further confirmation for the hypothesis was revealed through canonical correlation analysis. The variables of age (.35), sex (.44), race (.30) and perceived nutritional value of McDonald's food (.51) predicted the criterion variables of level of awareness of television commercials, level of awareness of the adult and child-oriented commercial, and the child's perceived ability to describe the purpose of a TV commercial ($r_c = .63$, $p < .0001$).

**Perceptions of Specific Commercials**

In keeping with the hypothesis that predicted of race differences in general perceptions, analysis of perceptions of each of the commercials was done on the basis of race. Consequently, SPSS cross tabulations of responses by race were
In answers to questions about the adult commercial, clear race differences were apparent. In response to the question, "Do you think the family in the commercial is more, same or less happy than your family?", blacks responded in the following manner: less happy 8%, same 17%, happier 75%, while whites were less pessimistic; less happy 3.8%, same 41.5%, happier 54.7%, ($x^2 = 7.76, df=2, p < .05$). In response to the question, "Do you think McDonald's food is more, same, less nutritious than the food you normally get at home?", black children responded with the following: 10.7% less nutritious, 35.7% same, 54% more nutritious. Whites reported less favorably for McDonald's food; 15% less nutritious, 70% same, 15% more nutritious ($x^2 = 13.4, df=2, p < .001$). A similar result was apparent for perceived "taste" of McDonald's food. Blacks generally felt that the food tasted better than the food they normally got at home: Blacks—tastes worse 3.6%, same 28.6%, better 67.9%; Whites—worse 15.1%, same 52.8%, better 32.1% ($x^2 = 9.89, df=2, p < .007$). Surprisingly, other specific factors in which one would have expected racial differences including, the purpose of the commercial, whether the family eats at McDonald's, cost of the food, and whether the family was happier because it went to McDonald's, were nonsignificant. However, an analysis of levels of awareness of the adult commercial was conducted to facilitate a comparison of the child-oriented commercial. Overall levels of awareness include: no response/don't know 13.6%, low awareness 37.0%, medium awareness 34.6%, high awareness 14.8%.

Perceptions of the child-oriented commercial were more definitive by race. In articulating what they thought was the purpose of the commercial blacks reported the following: no response/don't know 39%, low understanding 46.4%, medium awareness 14.3%, high awareness 0%; whites indicated higher awareness levels: no response/don't know 18.9%, low understanding 43.4%, medium
understanding 37.7%, high understanding 0%, (x^2=6.4, df=2, p .04). Overall levels of awareness for the child's commercial are as follows: no response/don't know 26.9%, low 44.4%, medium 29.6%, high awareness 0% (x^2=33.22, df=3, p<.0001). Chi-square analysis was conducted to facilitate a comparison of the overall levels of awareness for both commercials. The results indicated significant differences in levels of awareness for the adult and child-oriented commercial (x^2=16.2, df=3, p<.05).

Questions about the action in the commercial also revealed racial differences. The children were asked "Do you think what the Hamburgler was doing is right?" Blacks reported yes 28.6%, no 71.4%, while whites indicated yes 5.7%, no 94.3%, (x^2=6.36, df=1, p .01). The children were also asked, "Which character would you most want to be like?" Blacks indicated the following identification: Ronald McDonald 47.2%, Hamburgler 15%, Grimace 28.3%, the Captain 3.8%, all other and no response 6%, (x^2=11.48, df=5, p .04). Subsequently, the children were asked why they wanted to be like that character. Blacks indicated the following reasons: like to be like him 25.0%, curious appearance 17.9%, having fun 10.7%, gets his way 5%, no response: no reason 41.5%. Whites reasoned differently: like to be like him 26.4%, curious appearance 13.2%, having fun 17%, gets his way 26.4%, no response: no reason 17%, (x^2=10.67, df=4, p <.03). Lastly, the children were asked why they thought Ronald took all the characters to McDonald's at the end of the commercial. Responses were divided into those which indicated an altruistic reason and those that indicated an ulterior motive. Blacks reported altruistic reason 32%, ulterior 28.6%, no response: don't know 39.3%; whites indicated altruistic 60%, ulterior 22%, no response 17%, (x^2=6.83, df=2, p <.03). No other questions were significant.
Discussion

The findings of this study serve to reinforce the black/white disparity in awareness of commercials' motives found in previous investigations. Race was consistently the strongest demographic predictor of level of awareness. Meyer et al. (1976) argue that such a finding is ironic in that "without the ability to understand the manipulative and biased approach taken by advertisers, millions of younger black children may well be very vulnerable to the influence of commercials. ... because black children watch so much TV and so many commercials, far more than their suburban counterparts." The health and nutritional implications of this finding are disturbing. Because white middle-class children are likely to get reasonably nutritionally-balanced meals, they are not as likely to be hurt by ingesting candies, confections, fast foods and soft drinks as would poor black children whose families traditionally must make do with far less balanced meals. The expectations of the needs that will be satisfied by products become more clear when one looks at the black/white differences in perceived nutrition and taste of McDonald's food compared to that which they normally get at home. Nearly 70% of the blacks responded that they felt McDonald's food is more nutritious than food served at home, while only 15% of the white children felt similarly. While it is possible that some black children could be theoretically correct in that judgment, it is highly unlikely for such a large percentage to be correct. Additionally, analyses of children's favorite commercials (Ward 1972, Donohue, 1975) reveal that both white and black children's favorite commercials are for food, candy and soft drinks. From a consumer advocate perspective, it is even more unfortunate that fast and convenience foods are consumed by more poor black children than white middle class children because when one considers the astronomical cost of those foods on a per-weight-measure basis, the best cut of meat is a bargain by comparison.
Another major racial implication of this study is found in an analysis of perceptions of the expectations fostered by the commercials. Black children generally perceived the social relationships and goods in the commercials to be superior to their own situations. For example, three fourths of the blacks perceived that the family in the commercial was happier than their family, while only slightly over half the whites responded likewise. If such perceptions are sufficiently broad and persist over time, one can only conjecture at the sense of alienation and distrust, the feeling of disenfranchisement, that could possibly occur.

A third major implication of this study is found in analysis of all children's awareness levels for the two commercials. The results indicate that children had much less difficulty in articulating or determining the purpose of the adult commercial than the child-oriented commercial. Whereas it is possible that such a finding is an artifact of the commercials used, it is more likely (since the commercials were selected because they were typical of the genre used by McDonald's to reach the intended audience) that some insights into the potential impact of children's TV commercials on children can be postulated. Apparently, in some cases advertisers approach children with a more subtle approach. For example, in the adult commercial "price consciousness" was clearly the stated objective. However, in the children's commercial the purpose was more nebulous. An amorphous "good time" was the focus of the commercial and being at McDonald's clearly facilitated comraderie, peer acceptance and fun. This notion is further reinforced by looking at the small percentage of children (26%) who thought Ronald had ulterior motives in taking the cast to McDonald's. For children who have not learned the purpose of commercials and that "puffery" is a part of the game, the implications are substantial. They may come to expect that consumption per se leads to happiness, peer acceptance and self-fulfillment. Consequently, children may experience many
disappointments which may lead to the more generalized distrust of adult institutions discussed earlier.

The last major implication of this investigation lies in the analysis of children's awareness levels for the adult and child-oriented commercials. That children had greater difficulty in understanding the child-oriented commercial is indicative of the approach many advertisers use in communicating to children. Advertisers have traditionally attempted to sell products by demonstrating the positive experiences one will have by consuming the product. In the case of children, advertisers have been even more subtle. There have been attempts to make commercials indistinguishable from programs (banned by NAB since 1973) and to show the tremendous amount of fun and friends one has as a direct function of product consumption.

Lastly, advertisers have been reprimanded for showing toys and other products performing in television commercials far beyond their capacity to do so in real life. When one is unaware of the purpose of a commercial, it is difficult to summon the cognitive defense mechanism to refute claims that have not been made overtly. The implication that those who consume "look" happier than they did previously is probably a sufficiently subtle appeal to escape evaluation and could well lead to acceptance. Thus, it is important to know to what extent subtle or implied appeals are internalized by children of various cognitive developmental levels.
References


