

**REPORT OF
THE APA TASK FORCE ON
ADVERTISING AND CHILDREN
Section: Psychological Issues in the
Increasing Commercialization of Childhood**

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In 1874, the English Parliament passed the Infants' Relief Act to protect children "from their own lack of experience and from the wiles of pushing tradesmen and moneylenders" (James, 1965, p. 8). The act, which absolved fathers from their children's debts, is one of the earliest governmental policies to address children's unique vulnerability to commercial exploitation. This law was produced in an era long before major corporations earned huge profits by marketing products such as toys, snacks, sugared cereals, and fast food products directly to children, and also before the advent of television provided marketers of such products with unprecedented access to the minds of young people. The issues underlying this 19th century policy remain much the same today, more than 100 years later.

Because young children lack the cognitive skills and abilities of older children and adults, they do not comprehend commercial messages in the same way as do more mature audiences, and, hence, are uniquely susceptible to advertising influence. A substantial body of research evidence documents age-related differences in how children understand and are affected by television advertising. This evidence has formed the basis for a wide range of policies in the United States designed to protect children from advertising that would take unfair advantage of youngsters' limited comprehension of the nature and purpose of commercial appeals (Kunkel, 1990; Kunkel & Roberts, 1991; Young, 1990). These policies form the foundation of a broad societal consensus that children require special treatment and protection from the unbridled efforts of the economic marketplace.

Television has long been the predominant medium that advertisers have chosen for marketing products to children. It is currently estimated that the average child sees more than 40,000

television commercials a year, most of which are 15 to 30 seconds in length (Kunkel, 2001). Children from ethnic minority families are likely to see even greater numbers of ads, given that these groups tend to have heavier exposure to television than White families (Huston & Wright, 1998). Advertisers spend more than \$12 billion per year to target the youth market because of its strong contribution to the consumer economy (Lauro, 1999; Rice, 2001). According to one estimate, children age 14 years old and under make \$24 billion in direct purchases and influence \$190 billion in family purchases, underscoring the high stakes involved (McNeal, 1998). In addition, companies now recognize that brand loyalty built at an early age may reap economic rewards over a child's lifetime (McNeal, 1987).

The Increasing Commercialization of Childhood

Certainly, advertisers who rely upon television commercials have targeted several generations of children. Yet in recent years a number of convergent factors have contributed to an unprecedented level of growth in both the amount and type of advertising directed at children. First and foremost among these factors are changes in the media environment. Most advertising is delivered via media channels, and there have been radical shifts in the technological capabilities for delivering information into the home during the past decade or two. The number of television channels received in the average U.S. home has escalated with the diffusion of cable television and direct broadcast satellite technologies. The natural result of this technological shift has been the growth of niche program services that target narrow segments of the public. Channels devoted to golfing, cooking, shopping, and home decorating reside alongside others devoted to animal lovers, country music fans, and travel aficionados. In this new media environment, a growing number of competitors fight for smaller and smaller "pieces" of the unchanging "pie" of viewers in the available audience. Within this context, audiences comprised solely of children are no longer considered too small to be profitable.

When channel capacity was constrained, as in decades past, television programming targeted to children was limited in amount and relegated to time slots unpopular with adults, such as Saturday mornings (Turow, 1981). Yet in this new multi-channel era, there are numerous national program services primarily or exclusively devoted to children, including Nickelodeon, ABC Family, Disney Channel, Cartoon Network, and Noggin. Naturally, these channels deliver significant amounts of child-oriented marketing messages. This includes not only traditional commercial segments but also product sponsorships that are linked to programs and program characters, such as licensing agreements with food companies, toy companies, and fast food restaurants. For example, in recent years, Kraft Macaroni and Cheese products have used popular characters from such shows as "Rugrats," "Pokemon," "Blue's Clues," and "SpongeBob SquarePants" in their advertising aimed at children. Although parents may be pleased that their youngsters can now watch children's programming at any hour of the day, they may not recognize that such viewing opportunities entail

much greater exposure to child-oriented advertising than any previous generation of youth has experienced.

Another critical change in the nature of the media environment has been the growth of the Internet. A nationally representative survey of children's media use found that nearly half (48%) of 8–18-year-olds live in a home with a computer linked to Internet access, while households with younger children aged 2–7 years are just slightly less likely (40%) to be online (Roberts, Foehr, Rideout, & Brodie, 1999). Roughly one in five (19%) of 8–13-year-olds reported visiting a Web site on the previous day, and more than one in four (28%) of 14–18 year-olds indicated such use.

With this growth in children's access to the Internet, thousands of child-oriented Web sites have sprung up, and many are laden with commercial promotion (Austen, 1999; Montgomery & Pasnik, 1996). According to a *Business Week* article reviewing recent industry developments (Neuborne, 2001), "the number of children's [Web] sites with no advertising has dropped from 10% of all kids' sites last year to just 2% today" (p. 108). One of the unique aspects of marketing to children on the Internet is that the boundaries between commercial and noncommercial content (i.e., what is termed "the program" when referring to television) are blurred if not absent entirely (Hansell & Harmon, 1999; Montgomery, 2001). For example, a child visiting the *Barbie.com* Web site may play an interactive game in which the visitor is asked to convey her preferences for clothes and activities. At the end of the game the player receives a "suggestion" about which Barbie doll would be a good friend for her because of a match in personal interests. Clearly, changes in the technology by which advertising is delivered are playing a central role in contributing to children's increasing exposure to commercial persuasion.

Less tangible but probably no less important in understanding the increasing commercialization of childhood has been the expansion of contexts in which advertising messages are encountered. One such factor involves television's migration into the bedroom of most American children. Recent data show that 53% of all children aged 2–18 years have a television in their bedroom, with substantial proportions of 2–4-year-olds (26%) and 5–7-year-olds (39%) enjoying such privilege (Roberts et al., 1999). Simply put, it is now normative for American children to have a television set in their own room. This situation contributes to "privatization" in media consumption, with very young children increasingly experiencing media messages on their own without any parental supervision. This decreases parents' ability to serve as a buffer between their children and the commercial appeals that the media deliver to them.

Children are targeted by advertisers not only in the home, but in other contexts as well, most notably in the classroom. Advertising in schools has grown so extensively that we have prepared a separate report to document these changes and to explore the issues they raise (Palmer et al., 2004). Among the commercial messages conveyed in the schools are posters, billboards, corporate-sponsored educational materials, ads and product placement in textbooks, and even traditional

television commercials shown daily in “Channel One” newscasts, which are seen in more than one-third of U.S. middle and high schools (U.S. General Accounting Office, 2000).

In summary, it is clear that commercial practices targeting children have experienced profound changes over recent years, resulting in unprecedented levels of advertising reaching young audiences. Over the past several decades, a broad collection of academic research has addressed developmental differences in how children recognize and defend against commercial persuasion. That knowledge, which we consider in detail below, has been the basis for many policies involving both governmental laws and industry self-regulation that are intended to protect young children from excessive or inappropriate advertising tactics. To weigh the adequacy of these policies and consider the implications of these new advertising efforts for children, as well as for psychologists, it is essential to review the scientific evidence regarding how children understand and are influenced by commercial persuasion such as television advertising.

In the following sections, we provide a context for evaluating these issues by reviewing what is known about (1) the nature and extent of children’s exposure to advertising, (2) the developmental differences that shape children’s ability to recognize and defend against advertising messages, and (3) the effects of advertising on children. Our focus is devoted primarily to the examination of television advertising for three reasons. First, marketers who seek child audiences for commercial purposes rely primarily on television because it is the easiest and most effective vehicle for reaching large numbers of children nationwide. Second, television affords marketers access to children at much earlier ages than print media can accomplish, largely because textual literacy does not develop until many years after children have become regular television viewers. And third, much is known about how children understand and are influenced by television advertising, while almost no evidence is yet available in the public domain regarding how children respond to advertising in new media environments such as the World Wide Web.

Children’s Exposure to Advertising

As noted above, the average child is exposed to more than 40,000 television commercials a year. Approximately 80% of all advertising targeted to children falls within four product categories: toys, cereals, candies, and fast-food restaurants (Kunkel & Gantz, 1992). This pattern has remained remarkably stable since the 1970s (Atkin & Heald, 1977; Barcus, 1980). Commercials are highly effective at employing production conventions, or formal features, to attract children’s attention, such as unique sound effects and auditory changes, rapidly moving images, and audiovisual gimmicks and special effects (Greer, Potts, Wright, & Huston, 1982; Huston & Wright, 1989).

According to Seiter (1993), advertising to children avoids any appeal to the rational, emphasizing instead that ads are entertainment and “enjoyable for their own sake,” as opposed to providing any real consumer information (p. 105). The most common persuasive strategy employed in

advertising to children is to associate the product with fun and happiness, rather than to provide any factual product-related information (Barcus, 1980; Doolittle & Pepper, 1975; Kunkel & Gantz, 1992). For example, a commercial featuring Ronald McDonald dancing, singing, and smiling in McDonald's restaurants without any mention of the actual food products available reflects a fun/happiness theme. This strategy is also found frequently with cereal ads, which often include spokes-characters (e.g., Tony the Tiger, Cap'n Crunch) to help children identify the product. In contrast, most commercials fail to mention even the major grain used in each cereal unless it is included as part of the product name (e.g., Rice Crispies).

Another common feature of advertising to children is the use of product disclosures and disclaimers such as "batteries not included" or "each part sold separately." Studies make clear that young children do not comprehend the intended meaning of the most widely used disclaimers. For example, fewer than one in four kindergarten through second grade children could grasp the meaning of "some assembly required" in a commercial; in contrast, the use of child-friendly language such as "you have to put it together" more than doubled the proportion of children who understood the qualifying message (Liebert, Sprafkin, Liebert, & Rubinstein, 1977; Lingsweiler & Wilson, 2002).

The phrase "part of a balanced breakfast" is also a frequent disclosure included in most cereal ads to combat the concern that sugared cereal products hold little nutritional value for children. Consistent with the data on toy disclaimers, research shows that most children below age 7 years have no idea what the term "balanced breakfast" means (Palmer & McDowell, 1981). Rather than informing young viewers about the importance of a nutritious breakfast, this common disclaimer actually leaves many children with the misimpression that cereal alone is sufficient for a meal. This pattern of employing creative terminology in advertising content so as to obscure certain information that might be unhelpful to the sponsor is a long-standing practice that often misleads the consumer (Geis, 1982).

Children's Comprehension of Television Advertising

Children must acquire two key information-processing skills in order to achieve mature comprehension of advertising messages. First, they must be able to discriminate at a perceptual level commercial from noncommercial content; and second, they must be able to attribute persuasive intent to advertising and to apply a degree of skepticism to their interpretation of advertising messages consistent with that knowledge. Each of these capabilities develops over time as a function of cognitive growth and intellectual development (John, 1999; Young, 1990).

Program/Commercial Discrimination

In their earliest years of television viewing, children do not yet recognize that there are two fundamentally different categories of television content: programs and commercials. Most children

below the age of about 4–5 years exhibit low awareness of the concept of commercials, frequently explaining them as if they were a scene in the adjacent program. Once this confusion diminishes, children first recognize the difference between programs and commercials based on either affective (“commercials are funnier than programs”) or perceptual (“commercials are short and programs are long”) cues (Blatt, Spencer, & Ward, 1972; Ward, Reale, & Levinson, 1972).

Most children's television shows include program/commercial separation devices (e.g., “We’ll be right back after these messages.”) whenever a commercial break occurs. However, research indicates that these separators generally do not help child viewers to recognize advertising content (Butter, Popovich, Stackhouse, & Garner, 1981; Palmer & McDowell, 1979; Stutts, Vance, & Hudleson, 1981). This likely occurs because most separation devices are not perceptually distinct from the adjacent programming that surrounds them; in fact, many separators feature characters who appear in the same show that the commercial has just interrupted.

Popular program figures are frequently used in advertising directed to children (Ross, Campbell, Wright, Huston, Rice, & Turk, 1984). When an ad includes one of the same characters who is featured in an adjacent program, this practice is known as host-selling. For example, Fred Flintstone appearing in an ad for Fruity Pebbles cereal that is shown during a break in the Flintstones cartoon show would be considered host-selling. This type of advertising makes the task of discriminating between program and commercial content particularly difficult for young children (Kunkel, 1988a), and thus the practice is restricted by the Federal Communications Commission (FCC) during children's programs.

In sum, the evidence indicates that most children below 4–5 years of age do not consistently discriminate between television program and commercial content. By about age 4–5, children typically develop the ability to distinguish between these two at a perceptual level. This ability, however, is only the first of two critical information processing tasks that children must master in order to effectively recognize and defend against advertising messages.

Children's Understanding of Persuasive Intent

The primary purpose of all television advertising is to influence the attitudes and subsequent behavior of viewers. For adults, the recognition that a given piece of television content is a commercial triggers a cognitive filter that takes into account factors such as the following: (1) The source of the message has other perspectives and other interests than those of the receiver, (2) the source intends to persuade, (3) persuasive messages are biased, and (4) biased messages demand different interpretive strategies than do unbiased messages (Roberts, 1982). When all of these considerations can be taken into account in a child's processing of advertising messages, then that child can be said to have developed mature comprehension of the advertising process.

Children below the age of approximately 7–8 years, by virtue of their limited cognitive development, typically lack the ability to apply such considerations to their understanding of television

advertising. Children in this age range tend toward egocentrism and have difficulty taking the perspective of another person (Carroll, 1984; Flavell, 1977; Kurdek & Rodgon, 1975; Selman, 1971; Shantz, 1975). It is true that role-taking ability is a progressively developing skill, and even preschoolers aged 3–5 years can demonstrate some modest competency in simple role-taking tasks that emphasize highly concrete elements (Urberg & Docherty, 1976). In more abstract situations, however, young children's role-taking skills are severely limited. For example, one study demonstrated that 6-year-olds were unable to self-promote; that is, to describe themselves favorably to enhance their chances of being selected for a team (Aloise-Young, 1993). A role-playing experiment involving Sesame Street characters found that preschool children understand the concept of buying much earlier than they can grasp and apply the concept of selling (Gentner, 1975). Finally, it should be noted that many children in special populations, such as those with developmental disabilities, have even greater limitations on their ability to recognize the perspective of others (Hobson, 1991; Peled, 1996), and thus are at particular disadvantage in this realm.

Another approach that is relevant in this domain is theory of mind research, which indicates that children do not develop a coherent understanding of mental events such as beliefs, desires, and motives until at least age 6 years (Wellman, 1990). Such knowledge is an obvious prerequisite for the development of children's comprehension of advertisers' persuasive intent (Friestad & Wright, 1994). Researchers have examined children's knowledge of persuasion in other types of contexts, such as interpersonal efforts to influence the behavior of peers or parents, and found that children as young as 3–6 years of age are certainly capable of efforts to persuade others (Bartsch & London, 2000; Kline & Clinton, 1998; Weiss & Sachs, 1991). These studies also indicate, however, that the persuasive efforts by those ages 8 years and under are limited in both scope and sophistication, as compared to children just a few years older (Bartsch & London, 2000; Kline & Clinton, 1998; Weiss & Sachs, 1991), reflecting the younger child's limited ability to understand and manipulate complex, abstract information about relationships between message sources and receivers (Bisanz & Rule, 1990).

Given the complexities involved in appreciating the source's perspective in the advertising process, there is a strong theoretical basis to expect that children below age 7–8 years will have difficulty recognizing the persuasive intent underlying television advertising. A substantial body of empirical evidence confirms this expectation.

Typical of studies on this topic, Ward and Wackman (1973) interviewed children aged 5–12 years to determine their understanding of the purpose of advertising. Rather than conducting their analysis by age, however, these researchers used independent measures to categorize children into three levels of cognitive ability, with the lowest level equivalent to Piaget's preoperational stage of development. Fifty-three percent of the 5–6-year-olds and 41% of the 7–8-year-olds were categorized as "low" in cognitive level. Low cognitive level was found to be a significant predictor of a low level of understanding of the persuasive intent of commercials. This study concluded that "the low cognitive

level children cannot abandon their own perspective and take the perspective of the advertiser when viewing commercials” (Ward & Wackman, 1973, p. 127).

Numerous other studies (Blosser & Roberts, 1985; Robertson & Rossiter, 1974; Rossiter & Robertson, 1974; Ward, Wackman, & Wartella, 1977) have produced comparable findings that age is positively correlated with an understanding of commercials’ persuasive intent, with 7-8 years the approximate point that such ability typically develops. There is some evidence that children from Black families are likely to be disadvantaged in their understanding of advertising’s persuasive intent (Donahue, Meyer, & Henke, 1978; Meyer, Donahue, & Henke, 1978), although these findings cannot be disentangled from the possible influence of social class differences. Consistent with theoretical expectations, Faber, Perloff, and Hawkins (1982) found that children’s skill at role-taking was the best predictor for comprehension of advertising’s persuasive intent.

Some researchers have raised a concern that children may “know more than they can tell,” arguing that youngsters perform poorly on persuasive intent recognition measures primarily because of their limited ability to verbalize such understanding for researchers (Gunter, 1981; Macklin, 1983; 1987). To overcome this potential limitation, one particularly controversial study created a nonverbal technique to measure persuasive intent attribution (Donahue, Henke, & Donahue, 1980). Children aged 3–6 years were asked to choose between two pictures (one of a mother and child buying cereal at a supermarket and one of a child watching television) to indicate what the commercial they had just seen wanted them to do. The results indicated that about 80% of the subjects picked the supermarket picture, a finding that the authors interpreted as indicating an understanding of advertising’s persuasive intent. However, numerous attempts to replicate these findings have proven unsuccessful (Ballard-Campbell, 1983; Kunkel, 1988a; Macklin, 1985), while recent research has reconfirmed that fewer than half of 8 year-olds comprehend advertising’s persuasive intent (Oates, Blades, & Gunter, 2002). Thus, the evidence as a whole indicates that most children younger than about age 7–8 years do not typically recognize that the underlying goal of a commercial is to persuade the viewer.

Furthermore, even if the data reported in studies such as these indicated stronger performance at recognizing that an ad seeks to have the viewer buy its product, such evidence would address only the most rudimentary aspect of persuasive intent attribution. That is, just because a child understands that an ad seeks to sell a product, it does not necessarily follow that the child will also recognize the bias inherent in persuasive messages and therefore view advertising claims and appeals more skeptically. As Roberts (1982) noted, each of these elements represents an increasingly sophisticated level of understanding about the advertising process, all of which are essential to achieve mature comprehension.

If there is a shortcoming in research in this realm, it is that too many studies limit their measurement of children’s comprehension of persuasive intent solely to items that assess whether or not a child recognizes that an ad seeks to sell a product, rather than probing more deeply for perceptions of inherent bias and recognition of the need for different information processing

strategies. Young (1990) warned of this issue, noting in his book-length literature review that the incongruities in findings across studies in this realm “demonstrate the importance of keeping commercial intent separate from persuasive intent in any analysis of the child’s understanding of the purpose of advertising” (p. 97).

A recent meta-analysis of studies in this area (Martin, 1997) disregards this warning, combining data from studies that examine children’s understanding of simple selling intent (e.g., the commercial wants the viewer to buy the product) with data that examine their more sophisticated understanding of advertising’s underlying persuasive intent (e.g., advertisers have something to gain by persuading the viewer to buy the product, so they present the product in the best possible light and may exaggerate its capabilities). Yet even this approach yielded the conclusion that age is positively correlated with an understanding of advertising’s intent, at $r = .37$ across 23 studies (Martin, 1997). This is the same general conclusion that has been drawn by major literature reviews in this domain that rely on a more interpretive approach (Chandler & Heinzerling, 1999; John, 1999; Kunkel, 2001; Young, 1990).

In sum, the numerous empirical studies in this realm indicate that the ability to recognize persuasive intent does not develop for most children before 8 years of age. Even at that age, such capability tends to emerge in only rudimentary form, with youngsters recognizing that commercials intend to sell, but not necessarily that they are biased messages which warrant some degree of skepticism. Finally, it is also critical to note that the emergence of this understanding is linked to the development of the child’s relevant cognitive capabilities, rather than to sheer amount of experience watching television commercials. Numerous studies show that children who are heavy viewers of television, and hence presumably see many more ads, perform no better than their same-aged counterparts at recognizing the persuasive intent of television advertising (Comstock & Paik, 1991).

Effects of Advertising on Children

The impact of television advertising on preschool and elementary school-aged children occurs at multiple levels, including the relatively immediate product-persuasion effects intended by the advertiser as well as broader and/or more cumulative types of influences that accrue from exposure to large numbers of commercials over time. For example, a cereal ad may have the immediate effect of generating product-purchase requests and increasing product consumption, but it may also contribute to outcomes such as misperceptions about proper nutritional habits or parent–child conflict should a child’s purchase-influence attempt be rejected by the parent. Each of these distinct perspectives is addressed below.

Commercial Recall and Product Preference

Children’s recall of television commercials has been examined from a variety of perspectives. When experiments measure recall of advertisements immediately following viewing, more than half of

the children studied tended to remember an ad for such products as toys, cereals, and ice cream even when each ad is shown just once during a program (Gorn & Goldberg, 1977, 1980; Zuckerman, Ziegler, & Stevenson, 1978). Recall can also be inferred from survey data indicating the source of children's product knowledge. When children are asked where they learned about toys they would like to have, they most often identify television commercials as the source (Caron & Ward, 1975; Donahue, 1975), a finding that is corroborated by parental reports (Barry & Sheikh, 1977; Isler, Popper, & Ward, 1987).

Brand preferences can be manipulated by exposure to a single commercial (Resnik & Stern 1977; Goldberg, Gorn, & Gibson, 1978), although stronger effects (e.g., increased desire for the advertised product; increased preference for the advertised brand over other competing brands) are more likely to result from repeated exposure (Galst & White, 1976; Gorn & Goldberg, 1982; Robertson & Rossiter, 1977). Interestingly, although children's recall of commercials may decay quickly over time, positive attitudes toward an advertised product can persist a week later, even after the ad has been forgotten (Silverman, Jaccard, & Burke, 1988).

Experimental studies that compare children who are shown a particular commercial with those who are not provide some of the most direct evidence of advertising impact. Although it is typical for half or more of control group children to spontaneously report strong desire for a given toy or cereal (i.e., even without being shown a related commercial), exposure to an ad leads to statistically significant increases in children's desire for the advertised merchandise (Atkin & Gibson, 1978; Stoneman & Brody, 1981).

Certain advertising strategies tend to enhance the effectiveness of advertising appeals to children. For example, characters and celebrities are important in shaping children's views of advertised products. Experiments presenting virtually identical versions of ads, one with and one without a celebrity endorser, show that popular figures significantly enhance children's liking of the product (Atkin & Block, 1983; Ross et al., 1984). Premium offers, such as those in which a small toy figure is included with the product, are also effective. In one study, researchers observing parents and children at the supermarket found that almost half of the children making cereal requests were influenced by premium offers (Atkin, 1978). Another study found that commercials offering premiums were more persuasive than commercials featuring popular program characters, even when such ads were embedded in programs featuring the same characters (Miller & Busch, 1979).

From the advertiser's perspective, the ultimate intended effect of airing a commercial is for the product to be subsequently purchased by viewers. Both Atkin (1978) and Galst and White (1976) found that amount of television viewing was a significant predictor of the frequency of children's product-purchase requests at the supermarket. In the latter study, three fourths of all parent-child exchanges about products were child demands for merchandise advertised on television. This pattern has been observed in other countries as well. For example, Buijzen and Valkenburg (2000) reported that Dutch children's requests for Christmas gifts were significantly related to their television viewing.

Furthermore, cross-cultural research comparing families from Japan, England, and the United States has demonstrated a positive relationship between children's amount of television viewing and their product-purchase requests, although notably the level of purchase-influence attempts was greatest in the United States (Robertson, Ward, Gagnon, & Klees, 1989).

Finally, research shows that children's purchase-influence attempts have a relatively high degree of success. Frequent parental yielding to children's purchase requests has been reported in studies that rely on parent self-reports (Frideres, 1973; Ward & Wackman, 1972) as well as unobtrusive observation of behavior in the supermarket (Atkin, 1978; Galst & White, 1976). In sum, although the process may be indirect, television commercials targeted at children are highly effective at accomplishing their intended goal of promoting product sales.

Parent-Child Conflict

An important side effect of the influence of advertising on children's desire for products is the parent-child conflict that emerges when refusals occur in response to children's purchase-influence attempts (Robertson, 1979). Parents obviously cannot honor all purchase requests triggered by television advertising, given the volume of commercials that the average child sees. In one study, Atkin (1975) found that more than half of children reported arguing or becoming angry when a toy request was denied; in another (Atkin, 1978), he observed high rates of child disappointment and anger in response to the majority of parent refusals for cereal requests at the supermarket. Other studies confirm these patterns (Goldberg & Gorn, 1978; Sheikh & Moleski, 1977). In sum, the frequent purchase requests associated with children's advertising exposure may place strain on parent-child interaction.

Materialistic Attitudes

Although each ad may have as its primary purpose the promotion of sales of its featured product, the cumulative impact from the totality of advertising seen by children may exert far broader sociological influence. For example, scholars have advanced the hypothesis that advertising cultivates a materialistic value system in young people. In this context, materialism can be defined as the view that products and their acquisition are the basis for determining one's personal worth. As Baran, Mok, Land, and Kang (1989) expressed it, people develop the mind-set that "you are what you buy." Material possessions become the source of judgment by others as well as the source of one's own self-evaluation.

The extent to which the development of materialistic values contributes to psychological good or ill is a complex issue that is beyond the scope of this review. Nonetheless, it is interesting to observe that degree of advertising exposure correlates positively with children's acceptance of materialism. Adler et al. (1980) found stronger materialistic values among fourth to seventh graders who were heavy television viewers than among their lighter-viewing classmates. Similarly, others

have reported that 6th through 12th graders' viewing of advertising was positively related to materialistic values (Greenberg & Brand, 1993; Moschis & Moore, 1982).

Unhealthy Eating Habits

One of the most heavily studied areas of advertising's cumulative effects is the impact of commercials on children's eating habits. As noted above, commercials for candy, snacks, and fast food are mainstays of the advertising targeting children. It is well documented that such ads are typically effective in persuading children to like and request the product (Borzekowski & Robinson, 2001; Galst & White, 1976; Goldberg, Gorn, & Gibson, 1978; Taras, Sallis, Patterson, Nader, & Nelson, 1989). In a study with particularly strong external validity, Gorn and Goldberg (1982) controlled the advertising shown to 5- to 8-year-old children at a 2-week long camp. Some children saw commercials for fruit and fruit juice, while others viewed ads for candies and Kool-Aid, a sugar-sweetened drink. As expected, children's actual food and drink choices during the camp were significantly influenced by the ads they viewed.

A difficult issue for the critics of advertising unhealthy foods to children is the fact that many parents and pediatricians consider the occasional use of candy, sugared cereal, and desserts not to be harmful. What becomes harmful is when nonnutritious foods are eaten regularly and supplant nutritional foods in the child's diet. The concern here, of course, is that commercials for candies, snacks, and sugared cereals far outnumber commercials for more healthy or nutritious food (Atkin & Heald, 1977; Barcus, 1980; Kunkel & Gantz, 1992). One study even suggests that the influence of an ad for healthy foods can be overcome when a commercial for snack foods (e.g., Hostess Cup Cakes) is shown immediately afterward (Cantor, 1981). The general finding that eating habits formed during childhood often persist throughout life underscores the serious implications of advertising influence in this realm (Jacobson & Maxwell, 1994). Observers have linked the dramatic increase in the prevalence of childhood obesity to the emergence of the advertising of unhealthy foods to children (Dietz, 1990; Horgen, Choate, & Brownell, 2001; Troiano & Flegal, 1998).

Positive Attitudes Toward Tobacco and Alcohol Consumption

Although some observers may argue that there is nothing harmful about the consumption of snacks and sweets if carried out in moderation, there are other widely advertised products that are intrinsically harmful to children's physical and psychological development, even when consumed in moderation. The most obvious of these products are tobacco and alcohol. Both alcohol and tobacco are considered so detrimental to the health of children that the sale of both types of products to children and adolescents is illegal in the United States. Research shows that underage smoking and drinking are rampant in the United States. The mean age of first use of alcohol declined from approximately 18 in 1968 to 16 in 1996; in 1998, one in five teenagers were alcohol drinkers (Greenblatt, 2000). Similarly, the average age of first use of cigarettes is 15.4 years (SAMHSA,

1999); in 2000, approximately 13% of those between ages 12–17 reported smoking during the previous month (SAMHSA, 2001).

The tobacco and alcohol industries publicly maintain that they do not advertise or promote their products to children or adolescents, yet evidence strongly suggests that youth are both exposed to and influenced by ads for tobacco and alcohol products (Grube, 1995; U.S. DHHS, 1994). Tobacco cannot be advertised on television, but it is heavily promoted in magazines. Although the four largest U.S. tobacco companies pledged in a Master Settlement Agreement in 1998 not to promote their products to children younger than 18 years of age, recent research reports that three of the four companies continue to advertise in magazines with a substantial youth readership (King & Siegel, 2001). In contrast to tobacco, beer and wine are frequently advertised on television, and beer ads are especially prevalent in sports programming, which has a sizable youth audience (Grube, 1995; Slater et al., 1997). Moreover, in June 1996, the liquor industry dropped its voluntary ban on radio and television advertising (Elliot, 1996), and recent concerns have been raised about the newer “alcopops” or “starter brews.” These are sweeter alcoholic drinks, such as “hard” lemonade, that have effectively targeted the underage market (Center for Science in the Public Interest, 2001).

Research shows that children notice and remember advertising for tobacco and alcohol. For example, one study showed that among 6-year-olds, Joe Camel was as recognizable as the Mousketeer logo for the Disney Channel (Fischer, Schwart, Richards, Goldstein, & Rojas, 1991). Similarly, in a study of alcohol-brand awareness, nearly as many 9- and 10-year-olds were able to identify the Budweiser frogs as could identify Bugs Bunny (Leiber, 1996).

Reviews of research demonstrate that the advertising of both tobacco and alcohol products creates more than brand awareness. The consensus of both short-term experimental research and longitudinal studies is that advertising and marketing contribute to youth smoking and alcohol consumption (Atkin, 1995; Strasburger, 2001). The research suggests that such advertising is particularly effective when it makes drinking alcohol and smoking seem normative and when it is associated with sex appeal and glamour (DHHS, 1994; Strasburger, 2001).

Marketing of Violent Media to Children

Psychologists have been publishing research demonstrating the harmful effects of exposure to media violence for more than 50 years. Meta-analyses confirm that exposure to media violence promotes aggressive behaviors, attitudes more accepting of violence, increased hostility, and other antisocial outcomes (Anderson & Bushman, 2001; Bushman & Anderson, 2001; Bushman & Huesmann, 2001; Paik & Comstock, 1994). Other research documents the association between exposure to media violence and fears, anxieties, and sleep disturbances (Cantor, 1998; Harrison & Cantor, 1999; Owens, Maxim, McGuinn, Nobile, Msall, & Alario, 1999; Singer, Slovak, Frierson, & York, 1998). Although the television, film, electronic game, and music industries all have policies that include warnings or ratings to inform parents of potentially harmful content, the success of these

policies is undermined when content labeled as appropriate for mature audiences only is actively marketed and advertised to younger audiences.

The marketing of media violence to children was recently highlighted in a Federal Trade Commission report (FTC, 2000) and several follow-up reviews (FTC, 2001a; 2001b; 2002). The initial report examined and severely criticized practices in the movie, video game, and music recording industries related to the marketing of violence. The research in the report revealed that the majority of violent media offerings with mature ratings (R-rated movies, recordings with Parental Advisory labels, and M-rated electronic games) had marketing plans that explicitly targeted children who, according to the rating or label, were too young to see, hear, or play them. Consequently, such advertising typically appeared in venues frequented by underage children. The FTC report also studied the marketing of violent PG-13 rated movies, and noted that the majority were advertised in programming blocks popular with children under 11 years old, such as Saturday morning cartoon shows. Fast-food tie-ins and licensing with toy companies were also identified as prominent means of promoting PG-13 movies to younger children.

The follow-up reports note some improvements in reining in the marketing of violent media products to children, but encourage the entertainment industries to expand their efforts to implement reforms. The FTC has indicated it will continue to monitor this issue in the future.

Public Service Announcements

A distinct type of short, persuasive message known as a public service announcement, or PSA, is occasionally directed to children during program breaks. These messages are pro-social in nature and seek to promote safety concerns (Witte, Stokols, Ituarte, & Schneider, 1993), encourage healthy behaviors or discourage unhealthy ones (Bernhardt, Brown, & Golden, 1998), or provide information about beneficial community services or organizations. Because they are typically aired without charge by the station or network distributing them, PSAs are not considered advertising for purposes of governmental regulatory policy, as they do not meet the criterion of being air time sold for purposes of promoting a product or service. The impact of these messages on children varies according to the campaign (Atkin, 2001), and is often constrained by the relatively modest number of times that PSAs appear on television (Gantz & Schwartz, 2002). Young children do not recognize PSAs as distinct from other commercial messages (Blosser & Roberts, 1985; Christenson, 1982), although this poses no particular concern given the benign nature of their content. From a broad perspective, PSAs represent merely a tiny fraction of the overall amount of persuasive messages directed to children, the vast majority of which are commercial advertisements (Kunkel & Gantz, 1992).

In summary, it is well established that television commercials are effective at accomplishing their intended goal of influencing children's attitudes and behaviors toward advertised products, as well as contributing to such unintended effects as parent-child conflict, unhealthy eating habits, and

more positive attitudes toward sensitive products such as tobacco and alcohol. These outcomes have raised societal concern and led to efforts to alleviate the influence of advertising on children. One such effort is an attempt to inoculate children against advertising effects through the use of media literacy interventions.

Media Literacy Interventions

Research in a variety of topic areas has explored the potential for counteracting some of the media's undesirable influences by increasing children's critical viewing skills through media literacy training (Brown, 1991; 2001). Media literacy curricula strive to teach children about many fundamental aspects of the television industry, including the knowledge that commercials are meant to persuade and therefore must be viewed cautiously. There is a modest body of evidence testing the effectiveness of school-based media literacy efforts to teach the critical viewing of advertising (see Boush, 2001; Brown, 1991; 2001 for reviews). In general, the research shows that interventions can teach children about advertising processes, techniques, and goals, as well as increase their self-reported skepticism about advertisements (Brucks, Armstrong, & Goldberg, 1988; Donohue, Henke, & Meyer, 1983; Feshbach, Feshbach, & Cohen, 1982; Hobbs & Frost, 2001; Peterson & Lewis, 1988; Rapaczynski, Singer, & Singer, 1982; Roberts, Christenson, Gibson, Mooser, & Goldberg, 1980; Singer, Zuckerman, & Singer, 1980).

These studies, however, have typically involved children aged 8 years and above. There is ample theory and research in children's cognitive development that indicates it is difficult to train children below age 7–8 years to view commercials defensively. For example, Roedder (1981) suggests that children below the age of 6 years are considered *limited processors*, who cannot retrieve stored information to address new processing tasks even when that knowledge is cued; and that slightly older children may be capable of learning such information but are unlikely to apply it spontaneously in later viewing situations without being prompted to do (see also Brucks et al., 1988).

Children under the age of 8 years are also perceptually dependent, focusing more on how something looks than what is said about it (Bruner, 1966; Hoffner & Cantor, 1985; Hoffner, Cantor, & Thorson, 1989; John, 1999). Therefore, if the visual aspects of an ad contradict the semantic meaning of an intervention, young children's reactions are likely to be dominated by the impression made by the visual, with little impact from the modifying words in the media literacy training effort. Comprehension of material provided in an intervention strategy may also be limited among younger children, due to deficiencies in vocabulary (Cantor & Wilson, 1984), in inference-drawing (Collins, 1983), and in understanding sentences with complex grammatical forms (Wilson & Cantor, 1987).

Finally, it should be noted that only a single study among all of the evidence in this realm has documented any reduction in children's desires for the advertised products as the result of a media literacy training effort (Feshbach et al., 1982). That study, involving second- and fourth-grade children

(mean ages 7:8 and 9:7, respectively), reported a small but statistically significant reduction in the desire for the advertised products immediately after the final lesson in the series, when compared to children in a control condition who saw the same advertisements without any training. Thus, it has not been established that the increased understanding of advertising that may be accomplished by media literacy training actually moderates the persuasive impact of the ad once children are distanced from the intervention training.

In conclusion, much more research is needed to determine the extent to which media literacy techniques can alter the impact of advertising on children's knowledge and attitudes, and particularly on their desires for products and their consumer behaviors. Given the constraints in children's cognitive development common in those below age 8 years, it seems unlikely that media literacy training can play a significant role in alleviating concern about the fairness of advertising to children.

The Issue of Fairness in Advertising to Young Children

This review of research indicates clearly that advertising exerts substantial influence on children's attitudes and behaviors, and these effects reach well beyond moving product desire from one brand to another. Although it is true that effective commercials can successfully influence even the most intelligent adult, research in this area indicates that young children who lack the ability to attribute persuasive intent to television advertising are uniquely vulnerable to such effects. Children below age 7–8 years tend to accept commercial claims and appeals as truthful and accurate because they fail to comprehend the advertiser's motive to exaggerate and embellish. When advertised products appeal to them, children are more likely to focus on the concrete aspects of the product and consequently overlook the abstract nature of the relationship between the advertiser and the audience viewing the commercial.

Research corroborates the more effective power of commercials on younger children who do not yet comprehend the persuasive intent of advertising as compared to older children who do. Numerous studies report a decline with increasing age in children's purchase requests for heavily advertised products, even when controlling for amount of television exposure (Robertson & Rossiter, 1976; Ward & Wackman, 1972; Ward, Wackman, & Wartella, 1977). Robertson and Rossiter (1974) correlate this pattern with increases in children's understanding of advertising's persuasive intent, as Table 1 demonstrates. Note that the proportion of children at each grade level who demonstrate awareness of the persuasive nature of commercials is almost directly inverse to the proportion of children who trust commercials and who report wanting all advertised products.

* * * * *

Table 1

Summary of Results From Robertson and Rossiter (1974)

	<u>First</u> <u>grade</u>	<u>Third</u> <u>grade</u>	<u>Fifth</u> <u>grade</u>
Has awareness of the nature of commercials	43%	71%	94%
Trusts all commercials	65%	30%	7%
Wants all advertised products	53%	27%	6%
N =	(85)	(95)	(94)

From Robertson, T., & Rossiter, J. (1974). Children and commercial persuasion: An attribution theory analysis. *Journal of Consumer Research*, 1, 13-20.

* * * * *

Experimental research could potentially provide even more compelling evidence of the differential impact of commercials on children as a function of their understanding (or lack thereof) of advertising's persuasive intent. Surprisingly, however, no study could be located among the hundreds published in this domain that has directly examined the relationship between these variables. Most studies tend to focus on either children's comprehension of advertising messages or the influence of such messages on child viewers, but none link the two together statistically. For example, Kunkel (1988a) reported experimental data indicating that 7–8-year-old children had a significantly greater understanding of advertising's persuasive intent than 4–5-year-olds and also that the older group of children was significantly less influenced by exposure to two cereal commercials. Similarly, Christenson (1982) found that fifth/sixth graders scored significantly higher on understanding of persuasive intent than first/second graders and were also significantly less influenced by exposure to three commercials, one each presenting a cereal, a candy, and a toy. Yet neither of these studies examined directly the influence of persuasive intent attribution on commercial influence measures.

In summary, younger children are more strongly influenced to request advertised products after watching commercials, which seems indicative of younger children's weaker cognitive defenses against advertising claims and appeals. It appears quite clear that children's understanding of advertising's persuasive intent plays an important role in helping them to defend against commercial persuasion. This evidence raises fundamental issues of fairness in terms of allowing advertising to target audiences of young children.

The History of Policy Efforts To Restrict Advertising to Children

In the early 1970s, the Federal Communications Commission (FCC) considered a proposal to ban all television advertising to audiences of young children, but chose instead to simply place limits on the amount of time that could be devoted to commercials in children's programs (FCC, 1974). The agency also restricted certain advertising practices directed to children, including host-selling and program-length commercials. Although these policies have been the focus of controversy from time to time (Kunkel, 1988b; Kunkel, 2001), they all remain in effect today for broadcast television, with the restriction on advertising time during children's programs (10:30 per hour on weekends; 12 minutes per hour on weekdays) also applied to cable channels as well as broadcast stations. The FCC has no authority to regulate Internet advertising, and thus none of its policies apply in that realm.

The agency charged with regulating advertising regardless of its medium of distribution is the Federal Trade Commission (FTC). The FTC also formally considered a prohibition on all television advertising to young children in the late 1970s. Drawing upon a comprehensive research review produced by the National Science Foundation in 1977 (Adler et al., 1977), the FTC developed a 300-page staff report supporting its position that it was inherently unfair to direct advertising to audiences too young to recognize the persuasive intent of such messages (FTC, 1978). While the FTC initially felt its arguments were compelling, the affected industries disagreed strongly and took their case to Congress, which sided with the marketers.

When the FTC refused to back down, Congress acted to rein in what some termed "a national nanny" by temporarily halting all funding for the agency. This action literally forced the FTC to shut down all operations, which were resumed only after Congress passed legislation rescinding a critical portion of the agency's powers, the regulation of "unfair" advertising, that were the basis for the proposed regulations (Pertschuk, 1986). In its final order abandoning the proposed ban, the FTC (1981) nonetheless reaffirmed its judgment that "child-oriented television advertising is a legitimate cause of public concern ... [because] young children do not possess the cognitive ability to evaluate effectively [such] advertising" (p. 2). The agency simply lacked the power at that point to do anything about it. This decision sets the United States apart from many other developed countries that have chosen to ban all television advertising directed to young children, including Australia, Canada, and Great Britain.

The advertising industry itself acknowledges the unique sensitivity of the child audience and therefore maintains a set of self-regulatory guidelines administered by the Children's Advertising Review Unit (CARU) of the National Council of Better Business Bureaus. The CARU operation relies on the good-faith cooperation of advertisers to accomplish its work, which consists of enforcing guidelines intended to promote "truthful and accurate advertising sensitive to the special nature of children" (Weisskoff, 1985, p. 12). Guidelines are established in such areas as product presentations and claims, sales pressure, and product disclosures/disclaimers.

An independent evaluation of compliance with the guidelines (Kunkel & Gantz, 1993) found that 96% of more than 10,000 ads met the CARU standards that offered specific criteria amenable to empirical examination (e.g., "a product should be demonstrated in a way that can be duplicated by the child for whom the product is intended"). But the same study also found that many of the guidelines were too vague and general to even be subject to empirical assessment (e.g., "care should be taken not to exploit a child's imagination"). The limits of self-regulation are well underscored by the policy on disclosures and disclaimers, which are encouraged to help insure that children are not misled by claims in the ads. The guidelines currently state, "All information that requires disclosure for legal or other reasons should be in language understandable by the child audience" (CARU, 2002), yet it remains common for most toy ads to include sophisticated language, such as "some assembly required," and quite uncommon for them to use simpler phrases such as "you have to put it together." As with all self-regulatory standards, compliance with CARU's advertising guidelines is voluntary on the part of the industry.

In sum, both public policymakers and the advertising industry itself have made clear they believe there are serious issues of concern surrounding the practice of advertising to children. These concerns have led to both formal public policies and industry self-regulatory guidelines that limit commercial efforts that target children. Yet the increasing efforts to target the child audience with commercial persuasive messages raise new-found concern about the fairness of advertising to children too young to recognize and defend against such efforts. Is it fair to allow advertisers and marketers unlimited access to such easily impressionable minds? As the new media evolve, should we try to extend the protections afforded in "old" media, such as television, to the Internet and other emerging technologies? These and many other related questions are important issues for the American Psychological Association and its members to consider. Yet one further concern of particular salience to psychologists has also emerged in this realm, which requires the careful attention of the field of psychology and the related social sciences. That issue involves the use of psychological research to more effectively market products to young children.

The Use of Psychological Research for the Purpose of Marketing to Children

Along with the growth in marketing efforts directed toward youth has come an upsurge in the use of psychological knowledge and research to more effectively market products to young children. There is an increasing number of companies headed by people trained as child psychologists that specialize in market research on children. Books such as *Kids as Customers: A Handbook of Marketing to Children* (McNeal, 1992), *Marketing to and Through Kids* (Guber & Berry, 1993), *What Kids Buy and Why: The Psychology of Marketing to Kids* (Acuff & Reiher, 1997), and *Creating Ever-Cool: A Marketer's Guide to a Kid's Heart* (Del Vecchio, 1997) target this segment of the advertising industry, as do newsletters such as *Children's Business*, *Kids Marketing Report*, and *Selling to Kids*. These books and publications draw upon principles in developmental psychology and apply them to the goal of more effectively persuading children to want advertised products and to influence their parents to purchase these products.

Using research to support marketing to kids is hardly new. Indeed, William Wells, an early pioneer in the realm of child-oriented consumer behavior, began to translate child development knowledge into marketing advice as early as the 1960s (Wells, 1966). Yet even though the use of child psychology to market products is not new, the pattern of growth is certainly accelerating as a result of the new marketing opportunities brought about by the recent changes in the media environment (Lindorff, 1999). As the competition stiffens among child-oriented advertising firms seeking to attract clientele, trade press accounts of proprietary studies have become commonplace. These accounts provide just a glimpse into the world of applied research that is conducted to serve the goals of the marketer, which is of course to persuade and to sell. For example, one report described a study of children that was designed to determine which message strategy would most effectively induce children to nag their parents to buy the advertised product ("The old nagging game," 1998).

It is clear that commercial practices targeting children have changed in recent years, resulting in increasing levels of advertising reaching young audiences. It is also clear that psychologists are among those using their tools to more effectively accomplish the persuasive goals of these advertising messages. What are the implications of these developments for the field of psychology?

Implications for the Future

We offer three areas of discussion regarding the issues and evidence presented above. First, we consider the potential ethical concerns raised for those engaged in child-based marketing research. Second, we address the public policy implications of the existing base of knowledge about children's comprehension of advertising messages. And third, we offer a research agenda to

stimulate further investigation in this realm, taking into account the changing media environment as well as recent industry innovations for delivering commercial messages to young child audiences.

From an ethical perspective, psychologists are charged with carefully considering the impact of their work on the welfare of the broader population. In the case of research conducted to more effectively market products to young children, some may argue that such efforts are defensible because there is no substantial ill effect even if a young child is persuaded to want a toy, candy, or cereal product after watching an ad. A parent presumably mediates the purchase decision, and thus may be considered as culpable as any research-based advertising effort in determining the outcome at the cash register.

We believe, however, that an alternative perspective must be taken into account, one that involves weighing the fundamental fairness of advertising to young children given the well-documented limitations in their ability to recognize and defend against commercial persuasion. It is a long-standing principle in communication law that for advertising to be considered fair, it must be readily identifiable as such to its intended audience (Middleton, Trager, & Chamberlin, 2001). Indeed, Section 317 of the Communications Act, which governs broadcast radio and television, requires that all advertising “be announced as paid for or furnished as the case may be.” Legal scholars Carter, Franklin, and Wright (1999) observe that such information is obvious in most cases; for example, a commercial for a specific brand of automobile is assumed to have been purchased by the manufacturer of the featured car. Yet these scholars make clear that a teaser ad with no sponsorship identification (e.g., “On August 2, automotive history will be made.”) would be an obvious violation of law, due to its failure to convey to the audience the source of the commercial message.

The premise underlying this legal requirement is that it is unfair and deceptive for commercials to bypass the cognitive defenses against persuasion which adults are presumed to have when they understand that a given message consists of advertising content and can identify the source of the message. If it is unfair and deceptive to seek to bypass the defenses that adults are presumed to have when they are aware that advertising is addressed to them, then it must likewise be considered unfair and deceptive to advertise to children in whom these defenses do not yet exist.

Media literacy training has been suggested as a potential means to alleviate young children’s unique susceptibility to televised commercial persuasion. However, as noted earlier in this report, there is little evidence that media literacy interventions can effectively counteract the impact of advertising on children of any age, much less the younger ones who are most vulnerable to its influence. Both theory and research regarding children’s cognitive development suggest that children aged 8 years and under will be unlikely to benefit from critical viewing interventions intended to teach them about advertising’s persuasive intent, even if they are successful in mastering the knowledge such curricula convey (see Roedder, 1981).

It is clear that the age-based constraints on children’s comprehension of the nature and purpose of commercials are grounded in fundamental limitations in youngsters’ cognitive abilities, and

hence are not subject to remediation through training efforts such as media literacy campaigns. Thus, based upon the compelling evidence presented above that documents young children's limited ability to recognize and defend against commercial persuasion, we believe the most obvious implication of this knowledge is that advertising specifically directed to audiences of children below the age of roughly 7–8 years should be considered unfair. This conclusion has significant implications for both professional concerns as well as for public policy in the realm of advertising regulation.

If it is unfair to direct commercial persuasion to audiences of young children, then it would seem to be equally unfair to use empirical research to identify the most effective strategies to persuade child viewers, at least in relation to product marketing. Note that our position would certainly not indict basic research in persuasion involving children, which has broad application beyond the promotion of commercial interests. For example, such knowledge can just as well be applied to pro-social marketing efforts like those found in public service announcement campaigns, as it can be used to sell products to children. Furthermore, we do not mean to suggest that all marketing research related to children, such as gathering information about their wants or needs, is necessarily inappropriate. In sum, while we recognize that line-drawing may well prove to be difficult, we nonetheless believe that some research efforts are capable of crossing the line of appropriate sensitivity to the unique vulnerabilities of young people in this realm. Given that judgment, we believe it is important for the field of psychology to help sensitize its members to the potential ethical challenges involved in pursuing efforts to more effectively advertise to children, particularly those who are too young to comprehend the persuasive intent of television commercials.

In our view, however, the critical implication of the evidence we have reviewed herein links more directly to basic public policy than to professional standards. More specifically, we believe that the existing base of knowledge about young children's limited comprehension of television advertising presents a clear and compelling case in support of a restriction on all advertising primarily directed to audiences of children below the age of 7–8 years. This is the age at which most children develop the first critical aspect of comprehension about the selling intent of advertising messages, and prior to this point they are inherently susceptible to commercial persuasion, as we have documented. This susceptibility is associated with numerous adverse consequences for youngsters, including increased consumption of unhealthy products as well as parent–child conflict triggered by repeated product purchase requests that are the intended result of children's extensive exposure to advertising messages.

Some may object that such a policy cannot be implemented effectively or is likely to cause the unintended effect of threatening the future viability of television programming for young children. As with all policy, some balancing of interests would be required. A restriction on advertising during programs in which children aged 8 years and below comprise a majority of the audience would be an obvious starting point for discussion about how best to accomplish such regulation. While this approach would not accomplish the goal of protecting children age 8 and under from *all* advertising

exposure, it would seriously constrain marketers' ability to specifically target such a uniquely vulnerable audience. It would also achieve the outcome of significantly reducing young children's viewing of ads that are most salient for them, and thus most likely to exert influence.

The concern that such a tactic might lead to the disappearance of programming for young children from the television airwaves could be addressed by a number of alternatives. On broadcast television, the requirements of the Children's Television Act could easily be amended to require educational programming for children aged 8 and below, rather than for children aged 16 years and below as currently written. With such a change, each station would be obligated to provide a minimum of 3 hours per week (the FCC's current expectation in this area) of educational and informational programming for young children, and to do so commercial free, as part of their public interest obligations. On cable television, alternative revenue models would be likely to develop, such as sponsorship of prestigious programs as is done on public television or the migration of children's programming to commercial-free premium cable channels that are supported by subscriber fees rather than advertiser revenues.

By these arguments, we do not mean to suggest that the impact of a restriction on advertising to young children would be of modest consequence to the television industry. Similarly, we do not take the position that such a policy would resolve all the concerns about advertising to youth, nor do we mean to imply that unbridled advertising to children older than age 7–8 years is acceptable. But we are confident of the scientific foundation of evidence that supports this proposal, just as we are equally confident that the ingenuity of both the television industry's leaders and the nation's public policymakers is capable of resolving any critical implementation challenges in successful fashion. To object to the proposal solely because of implementation concerns is to sell short the interests of young children and the capabilities of American industry. Numerous countries internationally prohibit advertising to young children for exactly the reasons we have outlined in this report, yet still provide ample programming for their youth. The issues involved in effectively implementing such a policy are not intractable.

Conclusion

Children in the United States deserve the same protection against advertising as that afforded to adults. Existing law is specific in requiring that commercial messages be clearly identifiable as such to their intended audience. Certainly, it would be impossible to protect young children from exposure to all advertising on television. But as we have documented, there is a significant amount of advertising uniquely designed for and specifically directed to audiences of young children. Such advertising efforts, in our view, are fundamentally unfair because of young children's limited comprehension of the nature and purpose of television advertising, and therefore warrant governmental action to protect young children from commercial exploitation.

The existing base of research knowledge regarding children and advertising is substantial and clearly adequate to justify the firm conclusions required to support this obviously provocative policy recommendation. Nonetheless, there is a need for further investigation in this area to examine the intricacies of how children recognize and defend against commercial messages in new media environments, such as the Internet and the World Wide Web. For example, how do interactive media environments affect young children's ability to parse commercial from noncommercial content? What is the impact of labeling billboard displays on a Web site as an "ad" or a "commercial," an increasingly common practice on the more responsible child-oriented Web pages? While such labeling might well increase children's recognition of billboard ads as commercial content, it could conceivably cause a boomerang effect, reducing the likelihood that certain children will recognize other less obvious forms of commercial content that go unlabeled on the same or other Web sites.

With the evolution of new media and the innovative commercial practices now being directed to children, it is essential that the field of psychology and the related social sciences reinvigorate their examination of how children understand and are influenced by contemporary advertising messages. In so doing, we will gain a better understanding of how a child's mind works, as well as provide critical empirical evidence to help shape the future of both public policy and responsible industry practice in this area. Advertisers know well that their efforts influence child audiences, and they put their money on the line in support of this assumption with the placement of every commercial message they buy. Given the significant role played by media in the lives of the nation's children, it is time to move forward with new academic research initiatives in this realm. The stakes are too high for these questions to remain unanswered.

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