

Report of the APA Task Force on Advertising and Children

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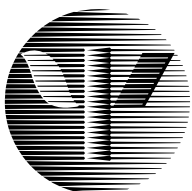
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**Report of
the APA Task Force on
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Chapter 1: Summary of the Findings and Conclusions¹

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The Task Force on Advertising and Children grew out of a general concern about the influence of commercialism in children's lives and about marketing and advertising to children and adolescents. For many years, young children were generally considered off limits to advertisers, with parents being the intended advertising audience for marketers who delivered products for this age group. More recently, however, children—sometimes very young children—are the audience directly targeted by advertisers. Many groups within and outside organized psychology began to speak out against these and other advertising practices, including that of psychologists serving as consultants to firms advertising to children.

To begin addressing these concerns from organized psychology's perspective, the APA Council of Representatives at its August 2000 meeting established the Task Force on Advertising and Children (TFAC), acting upon recommendations from the Board of Directors; the Board for the Advancement of Psychology in the Public Interest; the Committee on Children, Youth, and Families; and the Committee on Women in Psychology. Council charged the TFAC with the following:

- Collect and examine research on the impact of advertising on children and their families;
- Examine the impact of advertising on the social and cognitive development of children, with sensitivity to issues of gender, culture, and ethnicity;
- Examine the potential use and misuse of psychological research and the role of psychologists in advertising to children;
- Examine contemporary social and developmental factors contributing to children's vulnerability to advertising;
- Recommend roles for psychologists in assisting parents and schools in teaching media literacy skills to children;
- Delineate potential roles for psychologists in influencing public policy related to advertising and children.

¹ Supporting citations are found in the two papers appended to this summary.

This report summarizes the findings and conclusions of the TFAC. Two background papers were developed to address in greater depth particular issues of concern to the task force: The psychological implications of (1) the increasing commercialization of childhood, with particular respect to the role of television advertising; and (2) commercialism in schools. The task force also discussed at length the ethical issues surrounding the involvement of psychologists in marketing products to children. Similarly, the task force addressed roles psychologists and organized psychology might play in helping to mitigate some of the problems identified in our review of research on the effects of advertising and commercialism on children and youth. These deliberations yielded the accompanying set of recommendations, unanimously endorsed by the task force. We hereby submit this report, the attached recommendations, and the two background papers to the APA Council of Representatives and Board of Directors in hope that they will forward them to the appropriate APA governance entities for further consideration and action.

Task Force Composition and Activities

Following its establishment of the TFAC, the APA Council of Representatives solicited nominations for membership. In October 2000, the APA Board of Directors appointed the following six individuals to the task force: Joanne Cantor, PhD; Peter Dowrick, PhD; Dale Kunkel, PhD; Susan Linn, EdD; Edward Palmer, PhD; and Brian Wilcox, PhD (chair). Daniel Broughton, MD, served as liaison from the American Academy of Pediatrics, and two APA members, Allen Kanner, PhD, and Velma LaPoint, PhD, attended some of the task force meetings. The task force benefited enormously from the able assistance of several APA staff members: Jeanie Kelleher, Mary Campbell, Jeff McIntyre, Trena King, and Henry Tomes, PhD.

The task force held three meetings, all at the APA building in Washington, DC. The first meeting, held December 8–10, 2000, was designed to seek input from a variety of sources and to develop a work plan to guide the task force efforts. Prior to the meeting a variety of research articles were distributed to members of the TFAC. The task force members invited two guests to address them on developing issues in advertising and children. Arnold Fege, president of Public Advocacy for Kids (and former legislative director for the National PTA), spoke to the TFAC about commercialism within schools. Amy Aidman, PhD, director of research for the Center on Media Education, addressed the changing nature of commercial appeals to children in digital media, particularly the Internet. The task force also met with Nathalie Gilfoyle, JD, APA legal counsel, and Stephen Behnke, PhD, director of the APA Ethics Office, to discuss issues pertaining to the ethics of psychologists' involvement in advertising to children. Task force members then reviewed recent research on advertising and children and discussed a recent Federal Trade Commission (FTC) report on the marketing of violent entertainment to children. The first meeting concluded with the development of a plan to address three issues: (1) research on advertising and children, with implications for psychologists and

policymakers; (2) commercialism in schools; and (3) ethical issues for psychologists raised by advertising practices.

The second meeting was held June 30–July 1, 2001. Most of this meeting was devoted to reviewing background papers produced by committee members addressing the topics of television advertising to children and commercialism in the schools. A lengthy discussion was also held on the ethical issues of advertising to children, as well as some of the policy issues emerging from the two papers.

The third and final meeting was held November 30–December 1, 2001. Most of this meeting was devoted to development of final recommendations from the task force. Substantial follow-up work to refine these recommendations, and to review drafts of the final report, was conducted via e-mail and conference calls.

Summary of the Task Force Findings

Advertising is hardly a recent human endeavor; archaeologists have uncovered signs advertising property for rent dating back to ancient Rome and Pompeii. Town criers were another early form of advertising. As an industry, advertising did not take off until the arrival of the various mass media: printing, radio, and television. Nevertheless, concerns over advertising targeting children preceded both radio and television. The British Parliament passed legislation in 1874 intended to protect children from the efforts of merchants to induce them to buy products and assume debt.

Commercial appeals to children, however, did not become commonplace until the advent and widespread adoption of television and grew exponentially with the advent of cable television, which allowed programmers to develop entire channels of child-oriented programming and advertising. Opportunities to advertise to children further expanded with the explosive growth of the Internet, and thousands of child-oriented Web sites with advertising content have appeared in the past few years.

Compounding the growth in channels for advertising targeting children has been another development: the privatization of children's media use. A recent study found that a majority of all U.S. children have televisions in their bedrooms. Many children also have unsupervised access to computers, meaning that much of the media (and advertising) content that children view is in contexts absent parental monitoring and supervision.

These two trends—the growth in advertising channels reaching children and the privatization of children's media use—have resulted in a dramatic increase in advertising directly intended for the eyes and ears of children. It is estimated that advertisers spend more than \$12 billion per year to reach the youth market and that children view more than 40,000 commercials each year. These figures represent dramatic increases over those from the 1970s.

The TFAC, responding to its charge, began by reviewing research on the impact of advertising on children,² with particular attention given both to the implications of children's cognitive development for understanding the potential effects of exposure to advertising and to specific harms that might result from exposure to advertising. There is a substantial body of scientific evidence addressing all of these basic issues. In contrast, concerns about advertising that have emerged as a result of new and changing technological capabilities, such as interactive forms of advertising and commercial Web sites targeting children, have yet to attract almost any empirical study. Consequently, our research review and conclusions are largely confined to more traditional advertising approaches, although we identify the issues in need of further research investigation within our final recommendations.

Cognitive Development and Advertising

Two important information processing tasks are required for any person to achieve a mature understanding of advertising messages. First, the individual must be able to distinguish between commercial and noncommercial content. In other words, an individual must be able to differentiate the ads from the programs. Studies of children indicate that those below the ages of 4–5 years do not consistently distinguish program from commercial content, even when program/commercial separation devices ("GoBots will be back after these messages") are used. As children reach the age of 4–5 years, they typically perceive a categorical distinction between commercials and programming, but primarily on the basis of affective ("commercials are funnier") or perceptual ("commercials are shorter") cues only.

The second essential cognitive task involved in a mature comprehension of advertising is the ability to recognize the persuasive intent of advertising and to apply that knowledge in the child's understanding of the advertising message. In other words, mature persuasive intent comprehension involves not only the recognition that the advertiser has a perspective different from the viewer and that advertisers intend to persuade their audience to want to buy their products, but also that such persuasive communication is biased, and that biased messages must be interpreted differently than unbiased messages.

Basic developmental research on egocentrism and perspective taking, along with a great deal of evidence specifically examining developmental differences in the comprehension of persuasive intent within advertisements, establishes clearly that most children younger than 7–8 years of age do not recognize the persuasive intent of commercial appeals. However, there is far less research examining whether and at what ages children begin to appreciate that advertising messages are inherently biased or on when children begin to develop strategies to counteract the bias within these messages. It is clear that both of these abilities are dependent upon the child's development of

² Childhood was defined by the task force as beginning at birth and ending at age 18 years. Most research in this area focuses on children in a narrow age range, and almost no longitudinal or cross-sectional research exists giving a sense of developmental trends outside of the area of cognitive development.

the ability to understand the persuasive intent of advertising, meaning that mature comprehension of advertising occurs no earlier than age 7–8 years on average. Further investigation is needed to establish the upper age boundary of children who are uniquely vulnerable to televised commercial persuasion as a function of normative developmental limitations on their information-processing capabilities. Nonetheless, a key conclusion of the task force, which is supported by a strong base of empirical evidence, is that young children below 7–8 years of age clearly lack an understanding of the persuasive intent of television advertising.

The Effects of Advertising on Children

The task force reviewed research addressing two important types of questions regarding the effects of advertising on children. First, does advertising affect children's commercial recall and product preferences? If not, the \$12 billion spent annually by advertisers in commercial appeals to children would represent a surprisingly poor investment. Second, does exposure to advertising result in consumption of products that are inimical to the health and well-being of children? For example, does advertising play a role in the overconsumption of candy and sugared cereals or in underage drinking of alcoholic beverages?

Research on children's commercial recall and product preferences confirms that advertising typically achieves its intended effects. A variety of studies using differing methodologies find that children recall content from the ads to which they've been exposed. Product preference has been shown to occur with as little as a single commercial exposure and to strengthen with repeated exposures. Most importantly, studies have shown that product preferences affect children's product purchase requests and that these requests do influence parents' purchasing decisions.

The more fundamental concern regarding the effects of advertising on children relates to questions of potential harm resulting from exposure. A variety of research findings are relevant to this issue. Several studies, for example, have found that parent–child conflicts occur commonly when parents deny their children's product purchase requests that were precipitated by advertising. Considerable research has examined advertising's cumulative effect on children's eating habits. Studies have documented that a high percentage of advertisements targeting children feature candy, fast foods, and snacks and that exposure to such advertising increases consumption of these products. While consumption of nonnutritious foods per se may not be harmful, overconsumption of these products, particularly to the exclusion of healthier food, is linked to obesity and poorer health. Several studies have found strong associations between increases in advertising for nonnutritious foods and rates of childhood obesity.

A variety of studies have found a substantial relationship between children's viewing of tobacco and alcohol ads and positive attitudes toward consumption of such products. Children find many such commercials attractive (e.g., Joe Camel, the Budweiser frogs) and consequently have high brand awareness of such products and positive attitudes toward them. These products and their

spokes-characters have been found to be featured in programming and publications frequently viewed by minors, and reviews of this research (including the Surgeon General's analysis) conclude that advertising of them contributes to youth smoking and drinking.

Critics have also expressed concern regarding the prevalence of advertising of violent media, such as movies and video games, targeting children. Three reports by the Federal Trade Commission found considerable support for such charges, and while studies have not directly assessed the impact of such advertising, it is highly likely that such ads do affect children's media preferences.

Schools and Commercialism

The TFAC gave special consideration to commercialism in the schools for two reasons. First, children spend a considerable amount of their childhood in school settings, and because school attendance is compulsory, children have little freedom to avoid any commercial content they are exposed to in schools. Second, it is conceivable that commercial content delivered in schools may be assumed to have the tacit endorsement of respected teachers and school officials, thereby enhancing the effectiveness of the advertising.

Several recent analyses have summarized the extent and growth of advertising and other marketing activities in schools, including an important study by the U.S. General Accounting Office. Advertising and marketing takes several forms: direct advertising in school classrooms (via advertiser-sponsored video or audio programming), indirect advertising (via corporate-sponsored educational materials), product sales contracts (with soda and snack food companies), and school-based corporate-sponsored marketing research. Several of these advertising and marketing activities have been pursued aggressively by schools as a source of additional revenue, but these activities have generally been greeted critically by those outside school systems.

What surprised the task force was the dearth of research on commercialism in the schools. We found only two empirical studies that addressed in-school commercialism issues, one a content analysis of ads and the other a study of the effect of school-based ads on product-related attitudes and preferences and materialistic attitudes. Given the widespread nature of these advertising practices, along with their potential impact on consumer attitudes and behaviors and students' educational attitudes and achievement, it is perplexing that so little research has been conducted to date.

Public Policy Implications

Research indicates clearly that advertising exerts substantial influence on children's attitudes and behaviors, and these effects go well beyond moving product desire from one brand to another. More specifically, the evidence points directly to one fundamental concern: that advertising targeting children below the ages of 7–8 years is inherently unfair because it capitalizes on younger children's inability to attribute persuasive intent to advertising. As a result of this limitation, children below this

age comprehend the information contained in television commercials uncritically, accepting most advertising claims and appeals as truthful, accurate, and unbiased. Until fairly recently, advertisers tended to view children in this age range as off limits as advertising targets, but industry practices have changed as new developments in media technology have facilitated greater degrees of age-niche programming and related advertising.

Concern over the fairness of targeting such young children is not a new development. Research on the issue dates back to the late 1960s. In the early 1970s, the Federal Communications Commission considered a proposal to ban advertising to audiences of young children but settled on a more modest approach: limiting the amount of advertising time within children's programming and restricting certain advertising practices likely to make it more difficult for children to make attributions of persuasive intent. Later in the 1970s, the Federal Trade Commission also considered banning all television advertising to young children, citing exactly the type of developmental research the task force reviewed. Congress, responding to television and advertising industry pressure, forced the FTC to abandon this proposal by threatening the agency's funding. While the FTC did drop its effort to restrict advertising to children, it stated in its final order that the issue of advertising to young children is one that should remain a public concern, given the compelling body of scientific evidence documenting young children's unique vulnerability to commercial persuasion. Since that time, the advertising industry has recognized the sensitivity of these issues in its own self-regulatory advertising guidelines, but this code is exceedingly vague, compliance is completely voluntary, and enforcement is not actively pursued.

In our view, the psychological evidence we have reviewed holds critical implications for public policy. The strength of the research documenting young children's limited ability to recognize and defend against television advertising has improved substantially since the 1970s, when both the FCC and the FTC seriously considered, although ultimately eschewed, broad-based restrictions on advertising targeting audiences of young children. We believe that the accumulation of evidence on this topic is now compelling enough to warrant regulatory action by the government to protect the interests of children, and therefore offer a recommendation that restrictions be placed on advertising to children too young to recognize advertising's persuasive intent. The implementation of such a policy would place the United States in good company, alongside such countries as Australia, Canada, Sweden, and Great Britain, which have already adopted regulations prohibiting advertising on programs targeting audiences of young children.

Implications for the Field of Psychology

There are three areas in which the task force considered implications of the evidence reviewed for the field of psychology, including the role of psychologists as researchers, educators, and the applied professional practice of marketing research.

While research psychologists have already established the cognitive limitations of younger children's comprehension of advertising messages, there are many important areas where further investigation is needed. Nearly all research on advertising to children involves studies of television, leaving us with little empirical knowledge about other commercial forms and contexts. For example, we know virtually nothing about how children recognize and defend against commercial messages delivered in new media environments, such as the Internet. We know virtually nothing about new interactive advertising strategies being employed on the World Wide Web. We have no clear indication whether advertising delivered in school environments is more influential, less influential, or indistinguishable from advertising delivered in other contexts or whether allowing advertising in the schools exerts adverse effects on young people's esteem for educational institutions. There is also a surprising paucity of research on the role of gender, race, ethnicity, and culture on the perception and comprehension of advertising as well as the ways in which they might influence responses to advertising. Given that advertisers develop ad campaigns to reach child audiences segmented by gender, race, and ethnicity, there is a clear need for research on these topics. Obviously, there is much of importance yet to be learned from psychological research in these topic areas, and thus it is an appropriate time for the field of psychology to reinvigorate the examination of how children understand and are influenced by contemporary advertising strategies and messages. Psychologists can also play important roles in educating their students, clients, and people in the communities they serve regarding the types of concerns raised in this report. Education, in the form of media literacy, may assist parents and older children to consider the influence of advertising in their lives more seriously and to take actions protecting them from unwanted commercial influence. It should be noted, however, that the task force did not place great emphasis on media literacy strategies for addressing the concerns about advertising to young children for two reasons. First, there is limited research documenting the efficacy of media literacy training in protecting young children against advertising effects, and this vacuum corresponds with strong theoretical grounds for expecting that such training cannot overcome the cognitive limitations of younger children in this realm. More research is needed before one should invest much faith in media literacy as a principal means of combating commercial persuasion targeting young children, although older children might be expected to benefit more productively from such efforts. Second, it was the sense of the task force that an overreliance on media literacy as a key strategy for defending against advertising effects is misdirected and places too great a responsibility on children. All too often we see calls for interventions designed to "world proof" the child when we would be better off relying on strategies that offer protections for children, in this case from advertising deemed to be unfair and potentially harmful to children. An over-reliance on media literacy could, in this instance, be tantamount to blaming the victim.

Finally, the growth in marketing efforts targeting children has seemingly fueled an increase in the industry's use of applied psychologists working as marketing researchers or consultants to

enhance the persuasive effect of child-oriented advertising campaigns. Given the well-established limitations on children's ability to recognize and defend against commercial persuasion, such efforts raise sensitivities that warrant careful consideration by the field and particularly by those individuals involved in such practices, especially in those cases when younger children are targeted by advertisers. If it is unfair to direct commercial persuasion to audiences of young children, then it would seem to be equally unfair to employ psychological theory and research evidence to more effectively accomplish persuasive outcomes in young child viewers, at least insofar as the promotion of applied commercial interests are concerned. While drawing lines in this realm may be challenging, careful consideration is warranted to insure that psychologists hold faithful to their mission to benefit their research subjects, their clients, and the society at large.

Conclusion

Advertisers know 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. The TFAC appreciates the role of advertising in our society and the contributions psychological research makes to effective marketing. Nonetheless, we are agreed that advertising that is unfair or that promotes the use of harmful products does a disservice to children. Given the significant role played by advertiser-supported media in the lives of the nation's children, it is time to move forward with new policies that will better protect the interests of children and new research that will address the vast array of unanswered questions in this important topic area. The stakes are too high to ignore these issues or their impact on the nation's youth.

Chapter 2: Recommendations

Submitted by

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I. PUBLIC POLICY

Restrict Advertising Primarily Directed to Audiences of Young Children

We recommend that television advertising be restricted during programming directed to or seen by audiences primarily composed of children 8 years of age and under.

Research establishes clearly that most children under the age of approximately 8 years do not comprehend the persuasive intent of advertising. Such children lack the capability to effectively evaluate commercial claims and appeals, and therefore tend to accept the information conveyed in advertising as truthful, accurate, and unbiased. Consequently, children in this age range are uniquely vulnerable to commercial persuasion.

Long-standing public policy in the area of advertising holds that all commercial content must be clearly identifiable as such to its intended audience, in order to allow the consumer to consider the source of the message in evaluating its claims. Advertising that violates this standard is deemed unfair, and a violation of federal law. Given that young children inherently lack the cognitive capability to effectively recognize and defend against televised commercial persuasion in this manner, we recommend that policymakers pursue efforts to constrain advertising specifically directed to this particular age group.

In recent years, television advertisers have increased their efforts to target young child audiences. While it is impossible to protect this age group from all commercial exposure, it is pragmatic to restrict efforts by advertisers when they focus primarily, if not exclusively, on this uniquely vulnerable segment of the child population. Programs clearly intended for very young child audiences should exclude advertising targeting this age group. Similar policies that accomplish this goal have already been adopted by many of the major developed countries of the world, including Australia, Canada, Great Britain, and Sweden.

All advertising to children too young to recognize the persuasive intent of such messages is by its very nature exploitative. This policy recommendation would insure that children who lack such capability are protected from being directly targeted by advertisers who seek to benefit from their

naiveté. Such a policy is the only effective means to address the inherent unfairness of advertising to audiences of young children who lack the capability to evaluate biased sources of information such as those found in television commercials.

State Advertising Disclaimers So They Can Be Understood by the Intended Audience

We recommend that advertising disclaimers in children's programming be stated in language children can understand and be aired in both audio and video for a time length conducive to reading, hearing, and comprehending.

Research has demonstrated children's ability to understand simply worded disclaimers (e.g., "You have to put it together" rather than "Partial assembly required"). Yet in most advertising to children, disclaimer wording continues to be at complex levels many child viewers cannot understand. Furthermore, many disclaimers are presented in both audio and video formats for such a brief time frame that even adults cannot read, hear, and comprehend them. The task force recommends that all advertising to children utilize existing psychological data and expertise in formulating disclaimers compatible with the developmental levels of the intended child audience. The task force notes that the Guidelines of the Children's Advertising Review Unit (Council of Better Business Bureaus) acknowledge that "Advertisers should always take into account the level of knowledge, sophistication and maturity of the audience to which their message is primarily directed" (First Principle) and "should communicate information in a truthful and accurate manner and in language understandable to young children" (Fourth Principle). These principles apply compellingly to disclaimers.

II. PSYCHOLOGICAL RESEARCH

Conduct Research on the Changing Contexts and Modes of Advertising Practices

We recommend that psychologists conduct research on what is new and what is different in advertising that targets children and adolescents, and consider its implications.

It is widely acknowledged that significant qualitative and quantitative changes in advertising to children and youth have occurred over the last 10 years. Yet despite these striking developments and the engagement of an ongoing public debate about the implications of these issues for child welfare, the field of psychology has provided very sparse data to inform this dialogue and address these societal concerns. Among the claims that have surfaced are: (1) The purchasing power of children has increased significantly, making children more attractive targets for advertisers. (2) The volume of advertising to children of all ages has increased markedly. (3) Advertisers are targeting younger and younger children. (4) Advertising strategies have become more invasive. (5) Advertising in schools has grown in extent and changed in nature. (6) Advertising is reaching children in ways of

which their parents are unaware. (7) There are a number of ways in which technology, especially on the Internet, has altered the nature of advertising. (8) The World Wide Web has enabled new forms of advertising and instantly reflexive purchasing that raise unique concerns for children.

Although substantial descriptive data exist to address three of these trends (numbers 1, 2, 5), most of these topics have not yet been adequately explored by scientific research. Indeed, many of these topics present rich and important challenges for psychological researchers, and evidence in these areas will clearly hold important implications for future public policy and industry practice in this realm. It is essential that the strong expertise of the field of psychology be brought to bear on these important issues.

Investigate Ad Processing/Effects in Interactive Media Environments

We recommend that psychologists actively investigate how young children comprehend and are influenced by advertising in new interactive media environments such as the Internet and the World Wide Web

Substantial research has identified the developmental progression by which young children first distinguish commercial from noncommercial content on television at a perceptual level and then later come to comprehend the persuasive intent that necessarily underlies advertising messages on TV. This pattern of developmental capabilities occurs in a media environment with relatively clear demarcation between commercial and noncommercial messages. In the interactive media environment, however, many of the traditional boundaries between advertising and entertainment content are blurred in new and unique ways. For example, ads on many children's Web sites consist not only of banners and billboards, but also include cartoons, puzzles, activities, and games that prominently feature products and product-related characters. These so-called "branded environments" are a key aspect of marketing to children in the new media environment, yet little is known about how young children understand and are influenced by such commercial efforts. Given the clear evidence of young children's limited comprehension of televised commercial persuasion, there is substantial cause for concern about their vulnerability to even more complex forms of interactive media advertising. Empirical evidence is needed to help determine whether any new policies are called for to protect children from commercial exploitation in interactive media environments.

Study the Development of Understanding of Persuasive Intent in More Sophisticated Fashion With Children Older than 8 Years of Age

We recommend that psychologists renew their investigation of the age at which children come to fully comprehend the persuasive intent that necessarily underlies all television advertising.

Children who fail to recognize the persuasive intent of television advertising are more likely to accept commercial claims and appeals as truthful and accurate and are therefore more susceptible to advertising influence. Consequently, researchers have invested significant effort over the years to identify the age at which children come to recognize persuasive intent in television advertising and to then take this consideration into account in their processing of commercial messages. Most research to date, however, has examined only a relatively limited dimension of children's understanding of persuasive intent, focusing solely on whether or not a child understands that an advertisement seeks to sell a product. In fact, such understanding is only the first and most basic of the information-processing capabilities required for a mature comprehension of commercial messages.

It is equally important to assess children's understanding of the concept that commercial messages are biased and that biased messages demand different interpretive strategies than unbiased messages. While existing research has established clearly that most children develop the ability to recognize that commercials seek to sell products by about age 8 years, the developmental progression of this more sophisticated level of advertising comprehension remains unclear. Such knowledge would significantly enhance our understanding of how children comprehend advertising messages, as well as provide important evidence to help policymakers weigh the appropriate protections to afford children against possible commercial exploitation.

Study the Role of Gender, Ethnicity, and Culture in Relationship to the Psychological and Social Effects of Advertising on Children

We recommend that psychologists examine whether the psychological processes involved in the understanding of persuasive intent, as well as the impact of exposure to advertising, vary in relationship to gender, race, ethnicity, and culture.

The task force was surprised by the striking absence of psychological research on children's advertising that considered issues of gender, race, ethnicity, and culture. While some descriptive information exists regarding the manner in which advertisers target children of different genders, races, and ethnicities, there is almost no research examining the ways in which gender, race, ethnicity, and culture might influence how advertising is perceived and comprehended, or whether there are variations in sensitivity to advertising influence techniques by these variables. Given that much advertising is highly segmented by the gender, race, and ethnicity of the target audience, the absence of research looking at these issues with children is surprising.

Conduct Research on Media Literacy

We recommend that psychologists conduct media literacy research to assist in the development of effective curricula for students at different grade levels.

Research shows that children of different ages have different cognitive abilities, such as those that are needed to discriminate between commercials and other material, recognize persuasive intent, strategically process the content of media messages, weigh conceptual vs. perceptual information, and understand varying levels of vocabulary. Whereas federal and state agencies have promoted the development of media literacy curricula, little evaluation research has ensued. Research by psychologists with expertise in cognitive development, persuasion, and educational processes can improve ways of effectively teaching an understanding of the processes of advertising and, more importantly, help children resist being unduly influenced by advertising pressures. It can also explore the limits of media literacy interventions for younger children under 8 years of age, who may lack the fundamental cognitive abilities required to achieve certain media literacy goals.

III. APPLIED PSYCHOLOGY

Provide Public Education

We recommend that psychologists who are knowledgeable about the effects of advertising on children and youth be encouraged to communicate with parents and professionals who work with children and youth.

It is the sense of the task force that only a small minority of parents and professionals working with children have an appreciation for the ubiquity of advertising that targets children and the potential impact it can exert on children and their families. Psychologists, in their varied roles as educators and practitioners, can perform a valuable service in helping parents and other professionals to appreciate these effects and provide them with strategies for combating the more pernicious effects of massive advertising that targets children. Psychologists who work with children in clinical settings, for example, might assess the *media diets* of children and discuss the implications with the children and, when appropriate, with their parents. In particular, psychologists who deliver media literacy training should assure that advertising issues are an integral part of such training.

Support Continuing Education

We recommend that APA support continuing professional education (CPE) programs for psychologists on media literacy, with particular attention paid to issues related to media advertising and marketing to children.

Many psychologists are uniquely positioned to help educate children, their families, and other professionals who work with children concerning the importance of recognizing and addressing the impact of advertising on the lives of children. Psychologists work in a variety of child-service settings—schools, clinics, hospitals—and are also sought out by community groups

supporting children. Unfortunately, few psychologists are trained in media literacy skills and content, particularly with respect to advertising issues. APA should seek out psychologists who can provide such training and offer media-literacy-for-psychologists continuing professional education programs on a regular basis.

Weigh Professional Practices Associated With Advertising to Children

We recommend that APA undertake efforts to help psychologists weigh the potential ethical challenges involved in professional efforts to more effectively advertise to children, particularly those children who are too young to comprehend the persuasive intent of television commercials.

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 promote products to young children. Given the well-documented limitations in young children's capabilities to defend against commercial persuasion, such uses of psychological knowledge may raise important sensitivities. We believe it is necessary for psychologists who work in this area to be cautious in their efforts and to weigh the ethical challenges that may be involved.

As cognitively immature individuals, children have reduced capacity for autonomy and self-determination. Psychologists should recognize this limitation and its implications for advertising practices that might capitalize on children's inability to understand the persuasive intent of advertising. In addition, psychologists are charged with carefully considering the impact of their work on the welfare of the broader population, a principle known as beneficence. Psychologists whose work involves marketing to young children should be mindful of the relevance of these broad ethical principles. We urge APA to assist in this effort by engaging in educational activities to sensitize its members, as well as others whose work is applied to children's marketing and advertising efforts, to these issues.

IV. INDUSTRY PRACTICES

Encourage More Rigorous Industry Self-Regulation

We recommend that the Children's Advertising Review Unit (CARU) of the Council of Better Business Bureaus publicize its guidelines more widely so that parents and others can call to its attention deviations from the guidelines.

CARU has seven basic principles, including the responsibility of advertisers to "take into account the level of knowledge, sophistication, and maturity of the audience" and "to protect children from their own susceptibilities." These principles further state that "unreasonable expectations of product quality or performance should not be stimulated either directly or indirectly by advertising."

CARU's guidelines include such admonitions as "advertisements should not convey the impression that possession of a product will result in more acceptance of a child by his or her peers," and "all information that requires disclosure for legal or other reasons should be in a language understandable by the child audience." We enthusiastically affirm and endorse these principles while recognizing that the modest level of staffing at CARU and the practice of reviewing ads on a complaint-only basis cannot realistically accomplish these goals industry wide. The above recommendation urges CARU to provide the publicity, the staffing, and the review practices necessary to achieve its stated principles and foster adherence to its guidelines.

V. MEDIA LITERACY

Develop Media Literacy Curricula

We recommend that psychologists take a central role in developing and implementing effective advertising media literacy curricula for all school grade levels from 3rd through 12th.

As advertisers and marketers have discovered all too well, the school classroom is a unique setting in which all children can be reached and targeted. Correspondingly, it is an important if not essential setting for educating children about advertising techniques, messages, and goals.

By creating units appropriate to each grade level from 3rd through 12th, schools can provide the tools children need to develop critical viewing skills, which might help them resist advertising's negative effects on them. Developmental, educational, and school psychologists have the expertise to take the lead and work closely with educators in developing curriculum units that might assist children in becoming more sophisticated consumers of advertising and marketing.

VI. ADVERTISING AND SCHOOLS

Restrict School-Based Advertising That Targets Young Children

We recommend that advertising in all forms should be restricted in school environments serving children 8 years old and under.

As we have already established, children below approximately 8 years of age typically lack the capability to recognize and defend effectively against commercial persuasion. Despite the fact that advertising is widespread in society, we must conclude, based upon the relevant psychological evidence, that it is unfair to direct commercial content specifically to children too young to recognize the persuasive intent of advertising and to filter its messages accordingly.

As schools face serious economic pressures and challenges, advertisers are increasingly offering resources to educators in return for access to school children as audiences for their

commercial messages. While the funds derived from advertising may be put to good use, local decision makers often lack any broad-based understanding of the issues this report raises, which document young children's unique vulnerability to commercial persuasion. We believe the evidence in this realm makes clear the inappropriateness of directing advertising to this young age group. This recommendation, however, is not meant to imply that the task force finds school-based advertising targeting older children either acceptable, reasonable, or without concern. Unfortunately, the paucity of research in this area does not yet allow us to understand the potential consequences of the growing commercialization of the school environment, or permit us to make sound, empirically based recommendations at any broader level.

Conduct Research on Effects of School-Based Commercial Practices

We recommend that psychologists engage in research on the impact of advertising and commercialism in schools.

Our report documents that there is very little research exploring the effects of advertising when it occurs on school grounds. It is crucial that psychologists find the answers to a variety of questions, including how the potency of advertising changes when it occurs in schools, whether advertising in the classroom adversely affects the learning environment or distracts from student learning, whether the use of brand names in textbook examples and sponsored educational materials enhances or undermines educational lessons, whether apparel ads in schools intensify consumer pressures to the point that they contribute to interpersonal hostilities and even criminal theft, and whether pouring contracts and other arrangements with food and drink manufacturers undermine child health by changing attitudes toward proper nutrition. Given the pervasiveness of advertising in schools and the well-documented findings of harmful effects of advertising outside of school, such research is sorely needed.

Advocate Professional Collaborations

We recommend that APA collaborate with other professional and educational organizations to raise public, professional, and political awareness with respect to the increased commercialization of schools.

The issue of commercialization of educational environments has already gained some measure of public attention. Citizen interest groups have formed in a variety of locations, and some groups have successfully curtailed the more extreme forms of commercialization that have developed. Professional and educational organizations, such as the American Academy of Pediatrics and the National Parent Teachers Association, are developing public information and advocacy programs around the commercialization of school environments. The task force believes that APA

should join forces with these groups to support research needed to answer the many questions concerning the impact of these practices on educational processes and outcomes, to join them in educating the public regarding the need to examine these practices more seriously, and to collaborate in efforts to educate policymakers concerning the inherent unfairness in targeting advertising and marketing to the younger school audiences.

Chapter 3: 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, Gatignon, & 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)

	First <u>grade</u>	Third <u>grade</u>	Fifth <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.

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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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Chapter 4: Psychological Implications of Commercialism in Schools

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As advertising to children has expanded with the diffusion of cable television, the Internet, and other new vehicles of communication, so its presence has mushroomed in classrooms and other school venues over the past few decades. This report addresses advertising and commercialism in schools, with specific attention to their implications for psychologists. As the report titled "Psychological Issues in the Increasing Commercialization of Childhood" demonstrates, the growing commercialization of childhood raises strong concerns about potential negative impacts on the social development and well-being of children and adolescents.

Why Psychologists Should Care About Advertising in Schools

Commercialism in schools raises particular concerns because of the extent to which it has increased in the last 10 years and the vulnerabilities of children in a compulsory educational system. Many of the concerns about commercialism in schools are similar to those expressed about the commercialism of childhood in general. As they do in the outside world, commercial pressures in schools may create desires for products that children do not need or cannot afford and/or that are psychologically or physically harmful to them. These effects, in turn, may cause conflict within families and may lead to discontent and diminished self-esteem, especially among economically disadvantaged youth. These commercial forces may also increase materialistic attitudes to a degree that is psychologically unhealthy.

Psychologists should be especially concerned with in-school commercialism because there are reasons to believe that the effects should be stronger in the school context. First, students at school are a "captive audience," required by law to attend school (and with some practices, required by teachers to pay attention to advertising). The first step in any effect of advertising is exposure. In an environment cluttered with advertising, it is a great advantage for an advertiser to appear in a location where attendance is mandatory and where there are fewer commercials competing for attention. And because children go to school every day, advertising in schools usually entails repeated exposure, which research shows is more effective than a single viewing (e.g., Borzekowski & Robinson, 2001).

A second reason why effects might be stronger in the school context is that whatever occurs at school might be perceived as having the implied endorsement of school officials. Psychological research shows that expertise and prestige increase the persuasive power of a message's source (see Hass, 1981). The prestige and expertise of school personnel may very well become associated with commercial items that are provided or promoted on school grounds. For example, a free sample of deodorant given by the school nurse or gym teacher as part of education about puberty might well have a stronger impact on students' attitudes about that brand, about deodorants in general, or about the issue of perspiration and body odor than would the same sample handed out at a mall. Similarly, an advertisement for a soft drink or fast food that is seen on school grounds might convey the message that such products are more appropriate or less unhealthy than would the same ad seen on television at home. Indeed if products that parents discourage children from consuming are advertised on school grounds, perhaps parents' criticisms of the products become less credible.

Beyond the effects of specific commercial messages, the sheer magnitude and pervasiveness of commercial forces within the school may contribute to a sense of the overwhelming importance of material acquisitions and values.

Types of Advertising and Commercialism in Schools

According to a report of the U.S. General Accounting Office (GAO Report, 2000), in-school advertising has both direct and indirect dimensions. Direct advertising seeks to gain the student's purchasing dollar through a diverse range of in-school ad venues (e.g., television, Internet, radio, billboards, posters, book covers, school buses, and kiosks). Indirect advertising seeks to convey a positive, favorable corporate image to students which, in a later context, may translate into purchasing preference and loyalty for the brands of that corporation. Two other GAO categories—product sales and marketing research—are also common school-based commercial activities.

Direct Advertising

Channel One, a 12-minute news program including 2 minutes of advertisements, is the most far-reaching example of direct advertising in the classroom during school time. Schools that receive Channel One contractually agree to carry the program and its ads in 80% of all classrooms on 90% of all school days (U.S. General Accounting Office, 2000, pp. 20, 26). According to a Channel One official, roughly 38% of all middle and high schools in the United States currently are connected to the Channel One system, and another 1,000 schools are expected to join the existing 12,000 in the next several years (U.S. General Accounting Office, 2000, p. 27). Another example of media-based advertising is Star Broadcasting, which provides Top-50 rock or country music and advertisements to schools' hallways and lunchrooms. Star Broadcasting claims contracts with 400 schools nationwide

(Consumers Union, 1995, p. 25). There are many other companies that provide direct advertising in schools (Consumers Union, 1995, pp. 24-26).

Indirect Advertising

Indirect advertising encompasses a range of activities. One of the most controversial forms of indirect advertising is corporate-sponsored educational materials (SEMS), which are materials donated by corporations to supplement the curriculum. These materials often relate to a given product within the sponsoring corporation (e.g., a food company with a unit on fruits and vegetables; an insurance company with a safety unit) or to an issue in which the sponsoring industry (e.g., an oil company distributing a curriculum on the environment) has a vested interest in the subject matter. Consumers Union (CU), in an evaluation of 77 SEMS, found nearly 80% to be either biased or topically incomplete (1995, p. 12). Other common forms of indirect advertising include corporate-sponsored contests or incentives (e.g., providing coupons for free pizza for reading a specified number of books), the inclusion of brand-name products as examples in textbooks, the provision of corporate-sponsored teacher training, or the donation of hardware for computer labs, cars for driver education classes, or free samples of candy, snack food, or personal hygiene products.

Product Sales

A wide range of products are marketed to and by students to gain revenue for schools or school systems. Among the most controversial of these practices are the exclusionary "pouring contracts" for soft drinks such as Coke or Pepsi. Most of these contracts are negotiated on a district-wide basis and offer the district a specified dollar figure for signing a multiyear contract, with additional monies tied to success in meeting specified sales quotas. The Center for Commercial-Free Public Education indicates that by the beginning of 2000, 150 school systems in 29 states had entered exclusive "pouring rights" agreements with cola companies. This figure is triple the number of contract agreements 1 year earlier (Kanner, 2000). Multimillion-dollar contracts have become commonplace. Despite Coca-Cola's announcement, in response to parent criticism, that it would ask local bottlers to stop signing exclusive contracts with secondary schools, Coke's largest bottler, Coca-Cola Enterprises, Inc., had signed 20 of these exclusive contracts by mid-2001 (McKay, 2001). Other contract arrangements are made with fast food companies (e.g., McDonald's, Taco Bell) to sell food on the school grounds or in the cafeteria.

Market Research

Market research pertains to all the avenues through which corporations and advertising firms use the schools to track students' consumer tastes, preferences, and lifestyle patterns. These typically occur through questionnaires, Internet-based surveys, and the tracking of student Internet use. A school might become the venue for a comparative-cola taste test, or students may participate

in focus groups that are held either in the school or online. The benefit for participating schools can be either thousands of dollars or computer equipment provided by research firms in exchange for the privilege of conducting market research in the school setting. Prevalence figures for these practices nationwide are not currently available. This lack of available data is due, in part, to the wide variety of ways in which market research is conducted and the absence of any centralized data source for documenting it. To compound the data availability issue, in some venues (e.g., hits on a given Web site and/or response to a few online questions) students are not aware that they are participating in market research. According to the National School Boards Association, more than 1,000 schools have been market research venues for Education Market Resources, a firm creating child-based Internet panels. In the data gathering for the GAO Report (2000, p. 31), none of the school officials interviewed considered schools an appropriate venue for market research, nor were these officials aware of any marketing research practices being conducted within their schools. Moreover, student participation in market research evokes psychologists' concern for the protection of human subjects.

General Social Concerns

The issue of advertising and commercialism in schools draws a broad range of advocates and critics. With the tax revenue base not keeping pace with inflation, and the general public's resistance to tax increases, schools have become strapped for funding. This scarcity of funds drives many school administrators to explore corporate avenues toward funding. For corporations, this equation provides an opportunity to reach their intended student-consumer group in a single setting and time frame rather than in several, scattered media contexts.

Proponents point out that advertising and commercialism already are so prevalent in children's lives that the school context is simply a natural and harmless extension of this presence. Moreover, they argue, students then have the opportunity to become more media literate about advertising, and consequently, it becomes a part of their socializing education (Consumers Union, 1995, p. 31).

Advocates of sponsored educational materials (SEMS) argue that they bring a timely and attractive set of curriculum units to schools and teachers who otherwise could not afford them. In the words of one Stamford, Connecticut, middle school teacher, "If it's free (and good) it's for me! Great, glossy, up to date, motivating materials...are a heck of a lot better than the [dated] textbooks that many teachers are refurbishing to pass out each September" (Consumers Union, 1995, p. 31). On the other side of this issue, many national organizations have been critical of in-school advertising and commercialism practices. Consumer groups such as Consumers Union (CU), the Center for the Analysis of Commercialism in Education (CACE), and the Center for Commercial-Free Public Education (CCFPE) take the position that in-school advertising challenges and undercuts the basic principles and values of public education. They see it as inappropriate for schools to advocate either

explicitly or implicitly a materialistic value system, unhealthy nutrition and consumption lifestyles, corporately biased classroom materials, and general interactive patterns that serve to undermine individual students' feelings of self-worth and a broader sense of interpersonal and community caring. Advertising and selling to a captive audience of students is seen as unethical by these groups. Schools are perceived as settings in which parents and students should be assured that learning, critical thinking, and the skills necessary to shape them will be centrally focused and valued.

Professional groups such as the American Academy of Pediatrics (AAP), the National Education Association (NEA), the National Parent Teacher Association (PTA), and the Association for Supervision and Curriculum Development (ASCD) also have been critical of in-school advertising. The AAP has expressed strong concerns about the potential of in-school advertising to develop and perpetuate unhealthy nutritional patterns with long-range implications for illness and disease (e.g., Type 2 diabetes, cardiovascular disease, osteoporosis)(Center for Science in the Public Interest, 1998; Mullen, 1983; U.S. Department of Health and Human Services, 2001; Wyshak, 1994). Both the NEA and PTA strongly oppose required viewing or classroom use of commercial materials. ASCD is generally opposed to all advertising/commercialism practices in schools (U.S. General Accounting Office, 2000, pp. 37, 39).

At the statewide level, groups such as the National Association of State Boards of Education (NASBE) have been more muted, saying only that corporate–school partnerships should not commercialize instructional time (Consumers Union, 1995, p. 34). A sprinkling of states themselves have taken legislative action in a spectrum that ranges from prohibiting school-based commercial activities (NY) to prohibiting SEMS (CA). While 18 states legislatively address direct advertising, only two have laws addressing indirect advertising, and none of the states addresses market research. Level of authority also varies widely among the states. For example, California and New York laws prohibit or restrict many types of commercial activities from the state level, while many states legislatively defer decision-making authority to the local level (U.S. General Accounting Office, 2000, p. 11).

Two of the most comprehensive recent initiatives, born of public concern and criticism, have been Consumers Union's 1995 publication entitled "Captive Kids: A Report on Commercial Pressures on Kids at School" and the U.S. General Accounting Office Report of September 2000 entitled "Public Education: Commercial Activities in School." CU took an in-depth look at the entire range of in-school advertising/marketing practices and their growth trends. The GAO Report stemmed from a request by Senator Christopher J. Dodd (D-CT) and Representative George Miller (D-CA) asking that in-school commercialism activities and their extensiveness be investigated, and laws, regulations, and policies be identified.

Critics also believe that the psychological effects of advertising in the broader societal context (cited in our other report) carry over and—given the tacit school/teacher endorsement—may be more concentrated and compelling in the school context. These critics make the case that "happiness and

fun" product appeals (Atkin & Heald, 1977; Barcus, 1980; Kunkel & Gantz, 1992), saturated-fat/heavily sugared product commercials (Gussow, 1976) and their psychological impacts and health-related effects are not barred from reaching inside the schoolhouse. In the broader context, concern has been expressed that the notion that personal worth is based on the acquisition of consumer products carries negative psychological impact (Baran, Mok, Land, & Kang, 1989; Beutel & Marini, 1995).

Some observers also charge that advertising effects and materialism emphases lead to major and sometimes deadly consequences in schools serving children from low-income families and children of color. First, critics note that schools in economically depressed areas are more likely than their middle- or upper-class counterparts to welcome cola contracts or other commercial incentives as a source of funding (Fege & Hagelshaw, 2000). Comparatively, these youth have more health problems (e.g., obesity) that stem, in part, from the fact that colas and other junk foods are readily accessible in and near their schools (Johnston, 2001; Sawicky & Molnar, 1998). They also argue that the target marketing of expensive clothing items to minorities (including in-school advertising) intensifies within-school pressures to acquire the latest fashion items and that a student's path to obtaining them may lead to burglary, drug dealing, assault, or homicide (Garbarino, 1995; Holloman, LaPoint, Alleyne, Palmer, & Sanders-Phillips, 1996; Pan, 1995; Telander, 1995). While the target marketing of expensive dress items occurs among all youth, they argue that there are unique target marketing issues relating to ethnic minority group youth, such as the use of cultural expression and minority group models and celebrities (Holloman, LaPoint, Alleyne, Palmer, & Sanders-Phillips, 1996). Further, they argue that low-income families often lack the community-based resources that could help inform, prepare, and protect them as they are targeted by advertisers and marketers. This situation has resulted in some schools, with student and family participation, implementing dress codes and uniforms to reduce and prevent dress-related challenges often based on in-school observations and reports (Holloman et al., 1996). In summary, they argue that the limitation of resources in economically strapped schools has served to further exacerbate the problems economically disadvantaged and minority youth face (Fege & Hagelshaw, 2000).

The Psychological Impact of In-School Advertising

Surprisingly little quantitative research has been published on the psychological impact of commercialism specifically when it occurs in schools. However, the advertising on Channel One has been studied both in a content analysis and in a "natural" experiment. Wulfemeyer and Mueller (1992) analyzed the content of 99 commercials appearing in five randomly selected Channel One programs over a 5-week period. They reported that 86% of the ads were for products, and 14% were public service announcements. The products advertised dealt almost exclusively with clothing, food, and physical attractiveness concerns. (In descending order of frequency, the advertised items were jeans,

candy, shampoo, makeup, gum, razor blades, breath mints, acne cream, deodorant, athletic shoes, corn chips, catsup, movies, and cough drops). The researchers' analysis reported that the dominant themes and values in the commercials were having fun, being popular, and being attractive. Greenberg and Brand (1993; also Brand & Greenberg, 1994) compared the attitudes of children in two high schools that received Channel One to those of students in two high schools that did not (the control group), but that were matched with the Channel One schools on several factors, including income, racial composition, and standardized test scores. Students' attitudes were assessed regarding five products that were heavily advertised on the channel during the 4 weeks preceding the assessment. These products were Fritos BBQ Chips, Skittles, M&M's, Gatorade, and Nike Air Jordan sneakers.

The results revealed that students in Channel One schools reported significantly more favorable attitudes toward these products than did the students in the control group. In addition, when asked to name the brand of product they would purchase in each of eight product categories, Channel One students named significantly more brands that had been advertised on Channel One than did control students. Finally, students' materialistic attitudes were measured in their level of agreement with a five-item scale, including such statements as "Most people who have a lot of money are happier than most people who have only a little money." Channel One students scored significantly higher than control students on this scale. The results may be considered largely correlational because students were not randomly assigned to conditions. However, they suggest that even though students are exposed to much advertising outside school, advertising in school seems to have a further effect on attitudes toward the advertised products and may influence overall materialistic attitudes as well.

Conclusion

Commercialism in schools has become increasingly prevalent. As this report documents, the commercialism trend is growing and becoming more diverse. Also growing is the breadth of public, professional, and organizational concern. In the midst of this growing concern, psychology as a discipline faces the challenge of selecting the avenues through which it can most meaningfully contribute. Two logical avenues include its role as a research-based behavioral science and its expertise in areas pertaining to child development and the creation of educational curricula.

Although very little quantitative research has been published on the impact of advertising in schools, the research on the impact of Channel One, together with other research on the impact of advertising on youth outside of schools, raises serious concerns about potential harms to students when commercialism invades the schoolhouse. Although future research is needed to explore the extent to which different school-based commercial practices have their impact, there is no logical basis to suppose that effects observed outside of the school would not generalize to school settings.

For this reason, it is important for psychologists to be engaged in this issue by expanding our research base and by advocating school-commercialism policies and practices that are in the best interests of the health and well-being of children and adolescents.

Valuable research might answer the following questions:

What is the impact of "pouring contracts" on students' attitudes toward sugared soft drinks, on their nutritional habits, and on their dental health? To what degree are these effects due to the simple availability of these products during the school day? To what extent are they a function of the implied or explicit endorsement by the school of the drinking of such beverages?

To what extent are children's attitudes toward relevant public policy issues (e.g., global warming, the environment, et al.) different in classes in which learning occurs through sponsored educational materials vs. through traditional sources? To what degree does the presence of brand-name items in textbooks affect students' attitudes toward the products and desires to purchase them? What is the impact of incidental exposure to advertising placed on school grounds and on school equipment? Are desires for specific products stimulated? Are attitudes regarding the importance of material goods changed as a function of exposure? Are disadvantaged and minority youth more vulnerable to the impact of such advertising, and, if so, does such vulnerability contribute to interpersonal hostilities or criminal theft? Do advertisements on school property change students' attitudes toward learning? Do advertisements embedded in computer software interfere with or distract from student learning?

These are but a few of the many questions to be researched and empirically examined within the school environment. The need to know is both critical and timely.

Equally critical is the need to explore the models of noncommercial corporate partnerships that have been established within some school settings. Notable examples of such partnerships include corporations providing employee time and incentive to tutor and mentor students in schools, opportunities for students to shadow professionals in their desired vocational field, grant and scholarship awards to schools, and wings or labs that are provided with noncommercial attribution.

The Edible Schoolyard and The Algebra Project serve as model curriculum partnership initiatives effectively serving basic educational goals. Restaurant owner and chef Alice Waters launched The Edible Schoolyard in Berkeley, California's Martin Luther King, Jr., Middle School to teach "transformative values of nourishment, community, and stewardship of the land." The students participate in the entire food production cycle, from planting through cultivating to harvesting.

Civil rights leader Robert Moses spearheaded The Algebra Project to develop science/mathematics abilities among middle school students. This experiential-based project now reaches 40,000 students in 22 underserved urban and rural schools across the country. A national evaluation by the MacArthur and Lilly foundations reported the notable success of this project in improving mathematics skills and incorporating innovative teaching methods. The project is supported by more than 50 corporate sponsors, none of whom requests any advertising or marketing in return

(Center for Commercial-Free Public Education, no date [post 1998], p. 9). Both The Edible Schoolyard and The Algebra Project are exemplary models upon which to build future corporate partnerships.

In both the research and the educational/curriculum realm, psychologists have a major contribution to make to our schools and to our children. We need to support and conduct research that explores the impact of current practices on the health and well-being of youth. Moreover, we need to employ our psychological expertise to help our schools implement responsible corporate/school partnerships and minimize commercial practices that undermine children's emotional and physical health. Finally, psychological research should be employed to help develop effective media/advertising literacy curricula that promote both healthful consumption lifestyles and well-developed potentials for critical thinking.

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