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Although the consumer behavior of young people has become of increasing interest to marketing practitioners and public policy makers, little empirical data are available to be used in effective decision making. This paper presents an analysis of adolescent consumer behavior and provides empirical data useful in understanding differences among teenage consumers.

AN ANALYSIS OF THE ADOLESCENT CONSUMER

INTEREST in the consumer behavior of young people is increasing among marketing practitioners and public policy makers. Marketers are interested for several reasons. Young people comprise a lucrative market for many goods and influence adult spending patterns (*Business Week* 1969). Their consumption experiences presumably affect their patterns of adult consumer behavior (Guest 1955). Also, marketers need to understand youthful consumers' behavior and how it is acquired in order to design effective consumer education programs which create more satisfied customers and reduce government interference with marketers' operations (Bloom and Silver 1976). Public policy makers are interested for two main reasons: officials in various regulatory offices need to effectively respond to criticisms by various consumer groups regarding the effects of marketing activities on young people (*Action for Children's Television* 1971) and government officials can use such information to develop programs to prepare young people for effective and efficient interaction with the marketplace (Ward 1974).

Although there is a growing interest in the consumer behavior of young people, empirical bases upon which to formulate effective government policy on consumer protection and education as well as marketing strategy are all too sparse. Most of the previous studies are either descriptive and do not report individual differences or have not adequately examined the various aspects of the young person's consumer behavior (e.g., Cateora 1963; James 1971; McNeal 1964; Phelan and Schvaneveldt 1969). Studies, for example, that examined developmental patterns of young people's responses to commercial stimuli (advertising in particular) concentrated almost exclusively on children and ignored teenagers who comprise an important segment of youth consumer behavior research (Adler 1977). Other research which focused on young people's purchasing processes concentrated on outside influences affecting purchase, and virtually excluded any examination of the motivations and other cognitive

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processes involved in their decision making process (Moschis, Moore, and Stephens 1977).

This study examines consumer behavior of young people from the perspective of "consumer role" enactment, a concept which includes what Ward (1974) describes as "the set of physical and mental activities specially involved in purchase decisions—shopping, talking to others about products and brands, and weighing purchase criteria," and examines relevant skills that motivate purchase and consumption, as well as socially desirable behaviors that may contribute to efficient utilization of economic resources for the satisfaction of the maximum number of society's members. Thus, consumer role is defined in line with Brim's (1966) broad conception of the person's "role" in society and includes a wide variety of consumer-related thoughts and actions (skills, knowledge, attitudes, predispositions, and behaviors).

Previous research suggests two conceptual frameworks for classifying consumer-related thoughts and actions that may comprise the consumer role. One framework distinguishes between direct and indirect consumer-related skills, knowledge, and attitudes. Direct skills include the behaviors and cognitions that are directly relevant to consumption behavior and the purchase transaction itself (e.g., skills at budgeting and pricing, attitudes toward marketing stimuli). Indirect consumer-related skills, knowledge, and attitudes, motivate purchase or consumption, but are not directly useful in the purchasing decision or transaction itself (e.g., motivations for consumption and materialistic attitudes) (Ward 1974).

The other framework classifies variables relating to consumer behavior of young people by levels of cognitive complexity. Wackman and associates (1971), for example, conceptualized materialism (i.e., orientations emphasizing possessions and money for personal happiness and social progress) and television advertising response (i.e., influence of commercials on purchase behavior) as complex learning skills. They considered advertising recall (i.e., aided recall of slogans and attitudes toward television advertising) as simple learning skills. Similarly, Moore and Stephens (1975) conceptualized price accuracy (i.e., ability to price selected products) and brand specification as complex skills, while they considered attitudes toward television advertising and slogan recall as simple learning skills.

A Model of Adolescent Consumer Behavior

The research reported here focuses on how the consumption-related activities of adolescents vary. The selection of specific activities, commonly referred to as "consumer skills," was guided by two main considerations: whether these skills can be incorporated into hypotheses as a result of previous theory and research, and their implications for corporate and public policy formulation (Ward 1974). The specific consumer mental activities examined are classified on the basis of their cognitive complexity (simple vs. complex) and their relevance to the consumption behavior or transaction (direct vs. indirect). These two dimensions provide a fourfold classification of consumer mental skills of interest in this research.

The *direct-simple* category of consumer learning skills includes cognitive and affective orientations toward marketing variables—attitudes toward advertisements, salespeople, prices, and brands and stores. The *indirect-simple* skills include knowledge about one's legal rights in the marketplace and knowledge of basic economic and business concepts. The *direct-complex* skills include the ability to filter puffery in advertisements, cognitively differentiate advertising stimuli, seek information, and manage consumer finances. Finally, the *indirect-complex* skills include two kinds of predispositions or motives: materialism and consumption (buying). The specific consumption motives examined were economic and social.

Studies of consumer behavior of children and adolescents typically attempt to explain behavior either on the basis of environmental influences or the youth's characteristics (e.g., intrapersonal, psychological processes) (Ward 1974; Ward, Wackman, and Wartella 1977).

The first approach focuses upon variables defining the person's *social environment* that may influence his or her behavior. One such important variable appears to be social class. From a learning theory point of view, Ward (1974) argues that because adolescents from low-income homes have less experience with money, and may be less aware of the range of consumer goods, their learning of some aspects of the consumer role should be inadequate compared to adolescents from upper-income homes who have more opportunities for consumption. Similarly, Riesman and his associates (1956) speculated that in the more affluent families, children acquire some understanding of money and purchasing processes at a relatively early age. Williams (1970) presents empirical findings that appear to support this speculation. Her research shows that knowledge of economic concepts was greater among children from higher socioeconomic family backgrounds than among children from lower socioeconomic backgrounds. Other studies also report relationships between social class and other aspects of the consumer role, such as brand and store preferences (Guest 1942); cognitive defenses toward persuasive marketing

TABLE 1
Description of the Variables

Construct	Operational Definition	Measure	Number of Items	Reliability Coefficient Alpha
A. Direct-Simple Skills				
1. Attitudes toward Advertising	Cognitive and affective orientations concerning liking of and belief in advertising; efficacy and purpose of advertising and liking of advertising in various media.	5-point agree-disagree scales. Items such as: "Most television commercials are fun to watch."	10	.54
2. Attitudes toward Brands	Affective and cognitive orientations toward familiar brand names of products, and brand names as indicators of product quality and performance.	5-point agree-disagree scales. Items such as: "I prefer a certain brand of most products I buy."	5	.50
3. Attitudes toward Stores	Affective orientations toward stores and cognitive orientations concerning the name of the store as indicator of product quality and performance.	5-point agree-disagree scales. Items such as "Well known stores never sell poor quality products."	4	.52
4. Attitudes toward Prices	Cognitive and affective orientations toward price-product relationship concerning prices as indicators of product quality and performance.	5-point agree-disagree scales. Items such as: "Many products are not worth the price you pay for them."	4	.28
5. Attitudes toward Salespeople	Affective and cognitive orientations concerning the integrity, friendliness of salespeople; and belief in and helpfulness of salespeople.	5-point agree-disagree scales. Items such as: "Salespeople are dishonest."	5	.56
B. Indirect-Simple Skills				
1. Consumer Affairs Knowledge	Cognitions held with respect to basic terms in economics, insurance, finance, real estate and marketing; knowledge of consumer legislation in the areas of unit pricing, bait advertising, code dating, and remedies available to consumers.	0- to 11-point accuracy index representing correct answers to statements such as "When you buy stock you own part of a company," with respondents checking "True-False-Don't Know" response alternatives.	11	.57
C. Direct Complex Skills				
1. Cognitive Differentiation	Ability to identify products claimed to be different on specific attributes.	0- to 12-point accuracy index representing correct identification of product names on the basis of incomplete product-attribute descriptions made on TV commercials. Items such as: "———makes 0 to 50 miles in 8.2 seconds."	12	.86
2. Puffery Filtering	Ability to discriminate facts from exaggerations in advertising.	12- to 36-point accuracy index representing correct responses to advertising claim measured on "believe it is completely true-partly true-not true at all" scales. Items contained various amounts of puffery as determined in a pretest example: "Bayer works wonders" (Puffery).	12	.25
3. Consumer Finance Management	Ability to correctly estimate amount of average family's monthly budget ($1,000) going for food, clothes, home expenses, automobile expenses, other expenses, and savings.	6- to 30- point accuracy index representing the degree of accuracy for each of the six items on a 5-point scale.	6	.61
4. Information Seeking	Expressed need to consult various sources of consumer information prior to hypothetical purchases.	5- to 30-point index representing the need to consult six sources of consumer information (friends, TV ads, print ads, parents, *Consumer Reports,* and salespeople) prior to purchasing five products.	30	.37

TABLE 1 (con't)

Construct	Operational Definition	Measure	Number of Items	Reliability Coefficient Alpha
D. Indirect-Complex Skills				
1. Materialism	Orientations emphasizing possessions and money for personal happiness and social progress.	5-point agree-disagree scales. Items such as: "It is really true that money can buy happiness."	6	.60
2. Social Motivations	Cognitive orientations concerning the importance of conspicuous consumption; and self-expression via conspicuous consumption.	0- to 5-point scales measuring degree of importance of knowing specific product information prior to purchasing five products. Items of information such as: "What kinds of people buy certain brands of products."	4	.85
3. Economic Motivations	Cognitive orientations concerning the importance of product functional and economic features; orientations toward comparison shopping and significant discriminatory attributes.	0- to 5-point scales measuring degree of importance of knowing specific product information prior to purchasing five products. Items of information such as: "Guarantees on different brands."	5	.69
E. Consumer Activism	Self-reported consumer activities relating to effective (socially desirable) consumer behaviors.	5-point "Very Often-Don't know" scales. Items such as: "I keep track of the money I spend and save."	7	.64

stimuli, such as attitudes toward salespeople (Cateora 1963) and advertising (Ward and Robertson 1971); consumer affairs knowledge (Horn and Miller 1955); and information seeking (Ward, Wackman, and Wartella 1977).

The second approach focuses on the youth's *characteristics* which affect his or her behavior. A common perspective here is the cognitive development theory. According to this theory, the youth's consumer skills (e.g., ability to evaluate marketing stimuli) depend upon his/her cognitive stage which are described in terms of changes or qualitative differences in cognitive organizations occurring between infancy and adulthood. According to Piaget (1970), children (ages 5 to 12) fall into two stages of cognitive development: the preoperational stage (age 2 to 7) and the concrete operations stage (age 7 to 11). Younger adolescents are at the last formal operations stage of cognitive development (age 11 to 14), whereas older adolescents are expected to have developed their cognitive skills. Previous theory and research also suggest that the sex of the adolescent may affect his/her consumer behavior (Moschis, Moore, and Stephens 1977). Differences in consumer behavior as a result of sex characteristics may be either due to the child's psychological characteristics (Maccoby and Jacklin 1974) or environmental influences (e.g., family members' roles in decision making) (Bayer 1975; Osmond and Martin 1975).

The preceding discussion suggests the following research hypotheses:

H_1: It is expected that middle-class adolescents, compared to their lower-class counterparts, would score higher on most consumption-related variables examined in this research.[1]

H_2: On the basis of cognitive development theory, it is expected that there would be significant differences between younger and older adolescents, with older adolescents scoring significantly higher on the role variables used in this research.

H_3: There would be significant differences on consumer skills between male and female adolescents.

Thus, the primary concern in this research is the investigation of the extent to which the selected consumer skills vary by age, social class, and sex characteristics of the teenage consumer. Information on how different segments of this youth market, for example, respond to marketing variables would be useful to mar-

[1]For specific hypotheses regarding relationships between social class and dependent variables, see Moschis (1976).

TABLE 2
Significant Main and Interaction Effects

Variable	Effect of:	F-Value[a]	ω^2 Value
Attitudes Toward Advertising	Age	8.108	.0085
	Sex	9.195	.0098
	SES-Age	4.947	.0047
Attitudes Toward Stores	Sex	8.588	.0093
Attitudes Toward Prices	Age	7.974	.0086
Consumer Affairs Knowledge	Age	73.941	.0809
	Sex	7.999	.0077
Cognitive Differentiation	Age	15.767	.0175
	Sex	20.532	.0231
	SES-Sex	5.745	.0056
Puffery Filtering	SES	5.063	.0050
Consumer Finance Management	Age	5.177	.0118
	SES	10.656	.0051
Information Seeking	Age	4.942	.0005
	Sex	5.572	.0056
Materialism	Sex	16.396	.0185
	SES-Age	7.929	.0083
Social Motivations	Sex	9.204	.0101
Economic Motivations	SES	5.048	.0050
Consumer Activism	Age	8.168	.0088

[a]Significant at .05 level

keters in placing differential emphasis upon their marketing activities; such information would be useful also to policy makers in understanding the extent to which various segments are susceptible to these activities.

The Study

The sample consisted of 806 adolescents from 13 schools in seven towns and cities in urban, suburban, semi-rural, and rural Wisconsin. Questionnaires were completed by respondents in middle schools and senior high schools. Attempts were made to include in the final sample adolescents representing a balanced number of both sexes, age groups (12-to-18-year-olds), geographical locations, and social classes.

The operationalization of each of the criterion variables is described briefly in Table 1. Each of these variables was constructed by summing appropriate items, using item-to-total correlations to "purify" the measure, and then using coefficient alpha to assess the resultant reliability of the scales.[2] Status (class) was measured using Duncan's (1961) SES index. Respondents were asked to state their father's and mother's occupations and place of work. Open-ended responses for father's occupation were used to construct the social class measure. Since the majority of respondents were either of middle- or lower-class background, the sample was grouped into "middle class" and "lower class" on the basis of Warner's (1972) classification.[3] Age was used similarly as a discrete variable to classify respondents into younger adolescents (under 15) and older adolescents (15 and over), in line with Piaget's (1970) theory.

Results

Of main interest in this research was the examination of differences in teenagers' consumer skills as a function of the individual's socioeconomic, age, and sex characteristics. To investigate the independent effects of each of these factors, a three-way analysis of variance was performed with eight possible treatment groups defined by sex (2) × age (2) × SES (2). Table 2 shows F-ratios highlighting the significant main and interaction effects.

The results of the analysis of the main effects of social class in Table 2 appear to partly confirm the first

[2]For more specific details on variable operational definitions, measurement, and reliability, see Moschis (1976).

[3]Using Duncan's two-digit occupational percentile code, the lower-social class category consisted of adolescents whose father's occupation fell in the lowest 50% of the percentile scale (10% for lower-lower and 40% for lower upper-lower—see Warner 1972), whereas the remaining respondents who fell within the next 45% of the occupational characteristics were treated as middle class. Since none of the respondents fell in the upper 3% of the code, no upper-class category was constructed.

research hypothesis concerning the influence of social class. When the effects of sex and age were controlled, middle-class adolescents were better able to manage consumer finances (estimate the average family's monthly expenditures on major classes of products), filter puffery in advertising, and had stronger economic motivations for consumption than their lower-class counterparts.

The data in Table 2 appear to support partially the second research hypothesis concerning the effects of the adolescent's cognitive development on his consumer behavior. When the effects of sex and social class were taken into account, significant differences emerged for one-half of the variables examined between the two age groups. Specifically, older adolescents had greater amounts of consumer affairs knowledge, were better able to cognitively differentiate product attribute information in advertisements, manage consumer finances, and seek information from a variety of sources prior to decision making, and were more likely to perform "socially desirable consumer behaviors" than their younger counterparts. Younger adolescents, on the other hand, had more favorable attitudes toward advertising and prices than older adolescents. These findings suggest that with increasing age, adolescents tend to: (1) develop greater resistance to persuasive advertising, (2) understand better marketing strategies relating to the pricing of products, and (3) generally become more sophisticated consumers. The results may further suggest the development of general discontent toward marketing stimuli and practices as young people acquire more experience with the marketplace.

The third concern in this research was the impact of sex differences on adolescent consumer skills. Significant differences between the two groups emerged for one-half of the dependent variables (Table 2). Male adolescents had more favorable attitudes toward stores, greater consumer affairs knowledge, greater materialistic values, and stronger social motivations for consumption than female adolescents. Females on the other hand, showed more favorable attitudes toward advertising and scored significantly higher on the information seeking and cognitive differentiation measures. The latter finding appears to support the contention that females have a better memory than males (Alexander 1947). It also is possible that females may possess the ability to discriminate among messages to a significantly greater extent or are more attuned to advertising than are male adolescents (Janis and Field 1955).

Three significant interaction effects were found (Table 2). First, the interaction of socioeconomic status with age appears to affect the adolescent's attitudes toward advertising. The cell means of the scores on this variable are graphically shown in Figure 1. The figure shows that there is a cross-over interaction between the variables. Younger, lower-class adolescents hold more favorable attitudes toward advertising than their middle-class counterparts. They hold less favorable attitudes though when they are older. While the attitudes of middle-class adolescents towards advertising remain relatively stable as they age, those of lower-class adolescents tend to decline.

Second, there was a significant ordinally invariant interaction between sex and social class with regard to the child's ability to cognitively discriminate and retain advertising information.[4] Females are better able to do this. Further, while this ability remains fairly stable for males across social class, middle-class females are better able to cognitively differentiate and retain information from television commercials than their lower-class counterparts (Figure 2).

The third interaction concerned the combined effects of age and social class on the respondent's materialistic values (Table 2). While each of the two variables by itself appears to have little influence on teenagers' materialistic orientations, Figure 3 shows that there is a cross-over interaction between age and social class. In particular, lower-class teenagers are likely to develop less favorable materialistic attitudes as they age while youth from middle classes are likely to develop stronger materialistic orientations.

Implications

Although the findings of this study appear to support the general expectations with respect to the influence of social class, age, and sex on teenagers' consumer-related skills, proper caution should be exercised when incorporating them into decision making. First, one has to keep in mind that the study was done only in 13 schools in seven Wisconsin towns. Perhaps adolescents in other schools or other parts of the country are dif-

[4]The distinction between cross-over and ordinally-invarient interaction is important because as Yntema and Torgerson (1961) point out, models including only main effects can often provide good approximations to interactive models so long as the interaction plots do not show cross-over effects.

FIGURE 1
Cell Means of Attitudes Toward Advertising Measure

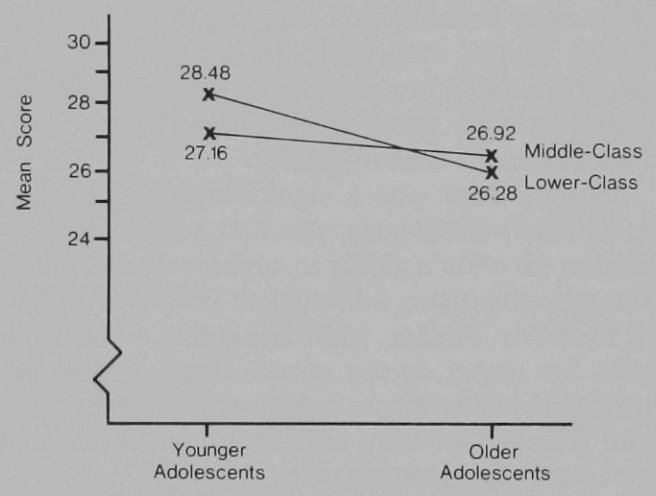
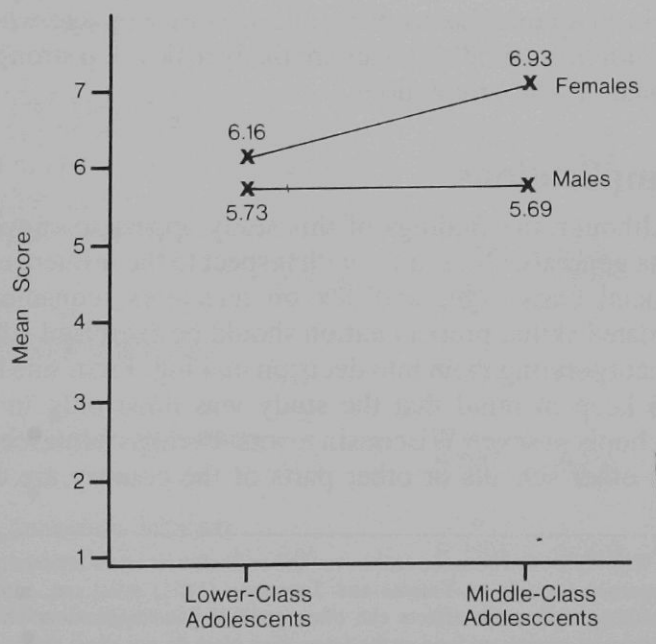
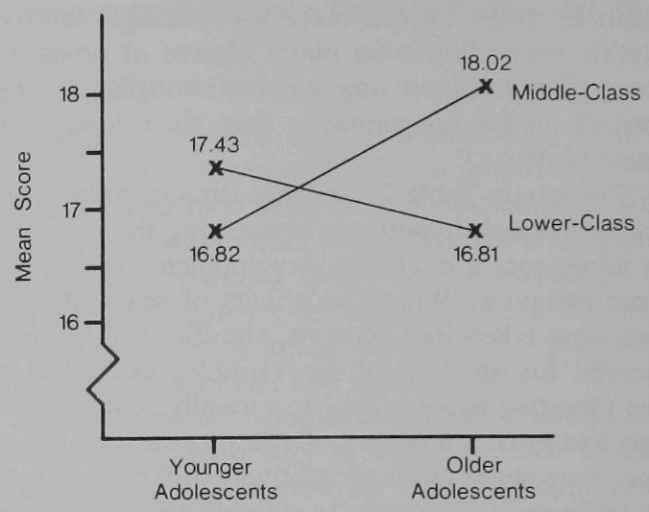


FIGURE 2
Cell Means of Cognitive Differentiation Measure



ferent. Second, several of the variables had low reliability coefficients, specifically attitudes toward prices, puffery, filtering, and information seeking. Perhaps the measures are simply not adequate for assessing these variables, particularly since the alpha coefficients for the other variables are all beyond the level recommended in early stages of research. Third, while many of the differences were statistically significant, they also accounted for only a relatively small amount

FIGURE 3
Cell Means of Materialism Measure



of variation in the dependent variables, as measured by ω^2 (Table 2). This suggests that consumer behavior of adolescents is influenced by other factors besides social class, age, and sex, as might be expected and these other factors also should be reflected when formulating strategy. The situation here is very much like early studies of adult consumer behavior where demographic differences were found. While these studies similarly explained only a small proportion of total variance, they did prove somewhat useful in formulating marketing strategy (Frank, Massy, and Wind 1972; Engel, Blackwell, and Kollat 1978). By the same token, the differences in teenagers' consumer skills that seem to exist across teenagers from different socioeconomic and demographic backgrounds do not seem to account for large amounts of variance, but they do provide some information useful in understanding consumer behavior among young people.

Implications for Marketers

This study found that adolescents in higher social classes had significantly greater economic motivations for consumption. Thus, marketing communications stressing the economic or functional aspects of the product may be relatively more effective when directed at adolescents in middle social classes than at those in lower social classes. Furthermore, the combined effects of social class and age on the teenager's materialistic orientations suggest that message content emphasizing the expressive aspects of consumption may be relatively more appealing to younger, lower-class and older, middle-class teenagers than to younger, middle-class and older, lower-class adolescents.

The effectiveness of marketing communications may differ according to the age of the adolescent con-

sumer. For example, comparative advertising directed at young people may be relatively more effective among older adolescents than younger adolescents, since the older group was better able to cognitively differentiate and retain such advertising content.

The findings also suggest that the importance of product attributes considered in decision making may vary with age. For example, younger adolescents had more favorable attitudes toward product attributes such as price than their older counterparts. Consequently, marketers might benefit by isolating by age group the significant product attributes used in young people's consumer decision making processes and adjusting their marketing and promotional mixes accordingly.

Furthermore, adolescents appear to resist advertising more with age. This resistance may take the form of greater cognitive and attitudinal defenses (e.g., less favorable attitudes toward advertising and its purposes) making communication through advertising difficult. Similarly, the older child seems to be a more sophisticated consumer and more inclined to consult several sources of consumer information prior to decision making, a finding which emphasizes the need to evaluate alternative messages and sources of communications on the basis of the age(s) of the target market(s).

The seller of adolescent consumer products should be aware of some sex differences and perhaps evaluate his marketing mix in light of the sex of the target market. The findings here suggest that females, especially those of middle class, may be more susceptible to advertising than male adolescents while males may have more favorable orientations toward stores than their female counterparts. Similarly, the content of the message could reflect the sex composition of the market. Expressive aspects of consumption, for example, appear to be more relevant to male than to female adolescents. Also, female adolescents appear to retain product attribute information to a greater extent than do their male counterparts, and they might be more receptive to comparative advertising.

Implications for Public Policy Makers

Policy makers who are concerned with the effects of advertising on youths should know that young people may be susceptible to advertising not only during childhood but also throughout adolescence. The findings showed that lower-class adolescents had lesser ability to filter puffery in advertising than higher social class adolescents, a finding which suggests the possible need for protecting lower-class youngsters from persuasive communications to a greater extent than higher-class adolescents.

Government officials in various regulatory and consumer agencies who are concerned with preparing young people for effective interaction with the marketplace should know that adolescents in various segments of society may differ in terms of the extent to which they possess, and therefore the extent to which they need preparation for acquiring, certain consumer competencies. Such differences further suggest that it may be necessary to differentially allocate resources and efforts to various segments of society. For example, young people in lower social classes, as compared to their higher-class counterparts, may lack skills to be effective consumers in the marketplace, and therefore they may need more education and preparation for the consumer role.

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