

Consumer Socialization of Children: A Retrospective Look at Twenty-Five Years of Research

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Twenty-five years of consumer socialization research have yielded an impressive set of findings. The purpose of our article is to review these findings and assess what we know about children's development as consumers. Our focus is on the developmental sequence characterizing the growth of consumer knowledge, skills, and values as children mature throughout childhood and adolescence. In doing so, we present a conceptual framework for understanding consumer socialization as a series of stages, with transitions between stages occurring as children grow older and mature in cognitive and social terms. We then review empirical findings illustrating these stages, including children's knowledge of products, brands, advertising, shopping, pricing, decision-making strategies, parental influence strategies, and consumption motives and values. Based on the evidence reviewed, implications are drawn for future theoretical and empirical development in the field of consumer socialization.

Scholarly research examining children's consumer behavior dates back to the 1950s with the publication of a few isolated studies on topics such as brand loyalty (Guest 1955) and conspicuous consumption (Reisman and Roseborough 1955). Further recognition of children as a consumer market followed in the 1960s, as researchers expanded their scope of inquiry to include children's understanding of marketing and retail functions (McNeal 1964), influence on parents in purchasing decisions (Berey and Pollay 1968; Wells and LoSciuto 1966), and relative influence of parents and peers on consumption patterns (Cateora 1963). Though few in number, these papers were extremely important in terms of introducing the topic of children's consumer behavior to a marketing audience, presenting empirical methods and data pertaining to children, and communicating results in mainstream marketing journals.

Clearly, the pioneering work of researchers in the 1960s had set the stage for more widespread and programmatic research on children. But it was not until the mid-1970s that research on children as consumers blossomed and gained visibility in the marketing community. This turn of events was based largely on public policy concerns about marketing and advertising to children, which emerged as consumer activist groups such as Action for Children's Television

(ACT) and government bodies such as the Federal Trade Commission became vocal in their criticisms of advertising to young children.

About this time, a further impetus to development of the field occurred with the publication of a *Journal of Consumer Research* article entitled "Consumer Socialization," which argued forcefully for studying children and their socialization into the consumer role. The author, Scott Ward, defined consumer socialization as "processes by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace" (Ward 1974, p. 2). This definition gave focus to a new generation of researchers and an emerging field of study pertaining to children as consumers.

Twenty-five years later, an impressive body of research has accumulated on the topic of consumer socialization. Researchers have explored a wide range of topics reflecting children's growing sophistication as consumers, including their knowledge of products, brands, advertising, shopping, pricing, decision-making strategies, and parental influence and negotiation approaches. Also examined have been the social aspects of the consumer role, exploring the development of consumption symbolism, social motives for consumption, and materialism. Clearly, we have amassed a great deal of information regarding what children know about the marketplace and their roles as consumers.

The purpose of this article is to merge findings from the last 25 years of research into a unified story of the way consumer socialization proceeds as children mature throughout childhood and adolescence. Integration of find-

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ings, both within and across topic areas, has seldom been attempted due to the vast body of heterogeneous literature that exists on children as consumers (for examples, see Moschis 1987; Young 1990). To provide an organizing theme, we focus on age-related developments in consumer socialization, with the objective of characterizing what children know and how they think as consumers at different ages. We develop a conceptual framework that identifies age-related patterns across areas, describes major characteristics of knowledge and reasoning at those ages, and identifies developmental mechanisms behind these changes.

The review focuses on research reported by consumer researchers published in marketing and communication journals covering the period from 1974 to 1998. In effect, this excludes consideration of research by economists and psychologists pertaining to children's economic concepts (e.g., money values, saving, resource scarcity) and research by public health and medical researchers pertaining to children's consumption of products such as cigarettes, alcohol, and illegal drugs. Findings from research in other areas, or from studies prior to 1974, are included on occasion only to provide context or corroboration for more recent work by consumer researchers. We also exclude consideration of consumer research pertaining to children that is outside the realm of consumer socialization. In effect, this excludes: (1) studies of the effects of advertising strategies, such as host selling or repetition, on children's responses to advertising (for a review, see Adler et al. 1980); (2) content analyses of television commercials aimed at children; (3) surveys of parental responses to children's purchase requests and parental views about advertising and marketing to children; and (4) discussions of specific public policy issues and regulatory debates.

This article is divided into three parts. First, we provide a conceptual overview of consumer socialization, summarizing important theoretical views on cognitive and social development and developing a conceptual framework that describes stages of consumer socialization. These stage descriptions identify general characteristics of children's knowledge, skills, and reasoning and specify ages at which these stages are likely to occur. In the second part, we present five sections that review research pertaining to the development of consumer knowledge, skills, and motives in children and tie these findings to our conceptual framework. Reviewed are findings about children's advertising knowledge, transaction knowledge (products, brands, shopping, and pricing), decision-making skills and strategies, purchase request and negotiation strategies, and consumption motives and values. In the final part, implications are drawn for future theoretical and empirical development in the field of consumer socialization.

A CONCEPTUAL FRAMEWORK FOR CONSUMER SOCIALIZATION

The period from birth to adolescence contains dramatic developments in cognitive functioning and social maturation. Children develop abilities to go beyond perceptual

appearances to think more abstractly about their environment, acquire information processing skills to more readily organize and use what they learn about their environment, and develop a deeper understanding of interpersonal situations, which allows them to see their world through multiple perspectives.

Cognitive and social development during this period provides a backdrop for the growing sophistication children exhibit in understanding and performing in the consumer role. Age-related improvements in cognitive abilities contribute to the development of consumer knowledge and decision-making skills. For example, well-developed cognitive abilities facilitate the process of evaluating products, comparing them against other alternatives, and purchasing the chosen item from a store. Age-related improvements in social development are similarly helpful. Many consumer situations involve interpersonal understanding, from impressions children form about people who use certain products or brands to negotiation sessions with parents in an attempt to influence the purchase of desired items.

In this section, we describe several conceptual frameworks covering aspects of cognitive and social development. Selected for discussion are frameworks deemed most relevant for understanding aspects of consumer socialization and most important for understanding major changes that occur from preschool to adolescence. Common to these frameworks is a focus on successive stages of development, with each stage characterizing children's thinking, reasoning, and processing at particular ages. Next, we integrate these views to develop a conceptual framework for consumer socialization. Using the notion of stages, we propose that consumer socialization be viewed as progressing in a series of three stages, which capture major shifts from the preschool years through adolescence. We describe the characteristics of children's consumer knowledge, skills, and values at each stage and specify the approximate ages at which children move from one stage to the next.

Stages of Cognitive and Social Development

Cognitive Development. The most well-known framework for characterizing shifts in basic cognitive abilities is Piaget's theory of cognitive development, which proposes four main stages of cognitive development: sensorimotor (birth to two years), preoperational (two to seven years), concrete operational (seven to eleven years), and formal operational (eleven through adulthood; Ginsburg and Opper 1988). Vast differences exist in the cognitive abilities and resources available to children at these stages, including the preoperational, concrete operational, and formal operational stages of most interest to consumer researchers. The preoperational stage features children who are developing symbolic thought but are still very focused on perceptual properties of stimuli. Preoperational children tend to be "perceptually bound" to the readily observable aspects of their environment, unlike concrete operational children, who do not accept perception as reality but can think about stimuli in their environment in a more thoughtful way.

Preoperational children are also characterized by “centration,” the tendency to focus on a single dimension. In contrast, the concrete operational child can consider several dimensions of a stimulus at a time and relate the dimensions in a thoughtful and relatively abstract way. Finally, in the formal operational stage, children progress to more adult-like thought patterns, capable of even more complex thought about concrete and hypothetical objects and situations.

Beyond Piaget’s approach, information processing theories of child development provide additional explanatory power for the types of cognitive abilities evidenced by children as they mature. Several formulations of information processing theory exist, but all share a focus on children’s developing skills in the areas of acquisition, encoding, organization, and retrieval of information. In the consumer behavior literature, children have been characterized as belonging to one of three segments—strategic processors, cued processors, and limited processors—based on information processing skills they possess (Roedder 1981). Strategic processors (age 12 and older) use a variety of strategies for storing and retrieving information, such as verbal labeling, rehearsal, and use of retrieval cues to guide memory search. Cued processors, ranging in age from 7 to 11 years, are able to use a similar set of strategies to enhance information storage and retrieval, but typically need to be aided by explicit prompts or cues. Cued processors exhibit production deficiencies, referring to the fact that they have the ability to use processing strategies but do not spontaneously produce these strategies when needed. Finally, most children under the age of seven are limited processors, with processing skills that are not yet fully developed or successfully utilized in learning situations. These children are characterized as having mediational deficiencies, referring to the fact that they often have difficulty using storage and retrieval strategies even when prompted to do so.

The cognitive orientations described by these stages provide a basis for explaining the emergence of a variety of socialization outcomes, which will become evident as our review unfolds. To illustrate, consider for a moment the evidence about children’s growing abilities to understand advertising as a persuasive medium distinct from television programming. As we will soon describe, younger children (preschoolers) distinguish commercials from programming on the basis of perceptual features (e.g., ads are shorter) instead of motive and intent (e.g., ads are intended to sell products). This result fits nicely with the notion of perceptual boundness in preoperational children. By the time children reach eight years of age (concrete operational stage), they possess quite a bit of knowledge about advertising’s persuasive intent and bias. Yet, this knowledge is not necessarily accessed and used in evaluating advertising messages. Information processing views provide a ready explanation for this finding in terms of children’s abilities at this age to retrieve and use information. Although 8–11-year-olds (cued processors) have a good deal of knowledge about advertising, their ability to retrieve and use this knowledge is still developing.

Social Development. The area of social development includes a wide variety of topics, such as moral development, altruism and prosocial development, impression formation, and social perspective taking. In terms of explaining aspects of consumer socialization, we consider social perspective taking and impression formation to be the most directly relevant for our consideration. Social perspective taking, involving the ability to see perspectives beyond one’s own, is strongly related to purchase influence and negotiation skills, for example. Impression formation, involving the ability to make social comparisons, is strongly related to understanding the social aspects of products and consumption.

Developments in social perspective taking are addressed by Selman (1980), who provides a particularly apt description of how children’s abilities to understand different perspectives progress through a series of stages. In the preschool and kindergarten years, the egocentric stage (ages 3–6), children are unaware of any perspective other than their own. As they enter the next phase, the social informational role taking stage (ages 6–8), children become aware that others may have different opinions or motives, but believe that this is due to having different information rather than a different perspective on the situation. Thus, children in this stage do not exhibit the ability to actually think from another person’s perspective. This ability surfaces in the self-reflective role taking stage (ages 8–10) as children not only understand that others may have different opinions or motives, even if they have the same information, but can actually consider another person’s viewpoint. However, the ability to simultaneously consider another person’s viewpoint at the same time as one’s own does not emerge until the fourth stage of mutual role taking (ages 10–12). This is a most important juncture as much social interaction, such as persuasion and negotiation, requires dual consideration of both parties’ perspectives. The final stage, social and conventional system role taking (ages 12–15 and older), features an additional development, the ability to understand another person’s perspective as it relates to the social group to which he (other person) belongs or the social system in which he (other person) operates.

Impression formation undergoes a similar transformation as children learn to make social comparisons on a more sophisticated level. Barenboim (1981) provides a cogent description of the developmental sequence that takes place from 6 to 12 years of age. Before the age of six, children describe other people in concrete or absolute terms, often mentioning physical appearances (e.g., “Nathaniel is tall”) or overt behaviors (e.g., “Elizabeth likes to play softball”). However, these descriptions do not incorporate comparisons with other people. In Barenboim’s first stage, the behavioral comparisons phase (ages 6–8), children do incorporate comparisons as a basis of their impressions, but the comparisons continue to be based on concrete attributes or behaviors (e.g., “Matthew runs faster than Joey”). In the second stage, which Barenboim calls the psychological constructs phase (ages 8–10), impressions are based on psychological or abstract attributes (e.g., “Christopher is

TABLE 1
CONSUMER SOCIALIZATION STAGES

Characteristics	Perceptual stage, 3-7 years	Analytical stage, 7-11 years	Reflective stage, 11-16 years
Knowledge structures:			
Orientation	Concrete	Abstract	Abstract
Focus	Perceptual features	Functional/underlying features	Functional/underlying Features
Complexity	Unidimensional	Two or more dimensions	Multidimensional
Perspective	Simple	Contingent ("if-then")	Contingent ("if-then")
	Egocentric (own perspective)	Dual perspectives (own + others)	Dual perspectives in social context
Decision-making and influence strategies:			
Orientation	Expedient	Thoughtful	Strategic
Focus	Perceptual features	Functional/underlying features	Functional/underlying features
	Salient features	Relevant features	Relevant features
Complexity	Single attributes	Two or more attributes	Multiple attributes
	Limited repertoire of strategies	Expanded repertoire of strategies	Complete repertoire of strategies
Adaptivity	Emerging	Moderate	Fully developed
Perspective	Egocentric	Dual perspectives	Dual perspectives in social context

friendly"), but do not include comparisons to others. Comparisons based on psychological or abstract attributes do not emerge until the psychological comparisons phase (11 or 12 years of age and older), which features more adult-like impressions of people (e.g., "Sara is more outgoing than Angela").

The usefulness of these frameworks for understanding aspects of consumer socialization can be illustrated by continuing our analysis of why younger children do not understand advertising's persuasive intent until they reach elementary school. The ability to discern persuasive intent requires one to view advertising from the advertiser's perspective. According to Selman's stages, this does not typically occur until children are 8-10 years of age. The ability to reason about advertisers' motives for specific advertising tactics and techniques, such as celebrity endorsers and humor, requires even more detailed thinking. Not only is there consideration of dual viewpoints (advertisers and viewers), but also reasoning about what techniques would be effective for what types of situations. Consistent with abilities characterized by Selman's last stage, we see knowledge of advertising tactics and appeals emerging in early adolescence and developing thereafter.

Stages of Consumer Socialization

Consumer socialization occurs in the context of dramatic cognitive and social developments, which are often viewed as taking place in a series of stages as children mature throughout childhood. We propose that consumer socialization also be viewed as a developmental process that proceeds through a series of stages as children mature into adult consumers. Integrating the stage theories of cognitive and social development reviewed earlier, a clear picture emerges of the changes that take place as children become socialized into their roles as consumers. These changes occur as chil-

dren move through three stages of consumer socialization—which we have named the perceptual stage, the analytical stage, and the reflective stage (see Table 1).

These stages are characterized along a number of dimensions that capture important shifts in knowledge development, decision-making skills, and purchase influence strategies. In terms of knowledge development, the movement from the perceptual to the reflective stage is marked by shifts from concrete to abstract representations, from perceptual to underlying features of objects and events, from simple to more complex representations with multiple dimensions and contingencies, and from an egocentric to a socially aware perspective. Changes in decision-making and influence strategies are characterized by similar dimensions, moving from an expedient to strategic orientation, from an emphasis on perceptually salient features to more relevant underlying features, from a limited repertoire to a more complete repertoire of strategies capable of handling multiple attributes, and from limited to more fully developed abilities to adapt strategies to tasks and situations.

Each stage is described in more detail below. The perceptual stage derives its name from the overwhelming emphasis that children in this stage place on perceptual as opposed to abstract or symbolic thought. The analytical stage is named for the vast improvements we see at this stage in children's abilities to approach matters in more detailed and analytical ways. Finally, the reflective stage derives its name from the emphasis that children in this stage place on understanding the complex social contexts and meanings related to consumption.

Perceptual Stage. The perceptual stage (ages 3-7) is characterized by a general orientation toward the immediate and readily observable perceptual features of the marketplace. Piaget's notion of "perceptual boundness" describes these children well, as does his idea of "centration" on

single dimensions of objects and events. Children's consumer knowledge is characterized by perceptual features and distinctions, often based on a single dimension or attribute, and represented in terms of concrete details from their own observations. These children exhibit familiarity with concepts in the marketplace, such as brands or retail stores, but rarely understand them beyond a surface level. Due to constraints in encoding and organizing information, individual objects or experiences are rarely integrated into more generalized knowledge structures with multiple dimensions, perspectives, and contingencies (e.g., if-then rules).

Many of these same characteristics hold true for consumer decision-making skills and influence strategies at the perceptual stage. The orientation here can best be described as simple, expedient, and egocentric. Decisions are often made on the basis of very limited information, usually a single perceptual dimension. For example, children in this stage can be expected to make choices based on a single, perceptually salient attribute such as size. This type of strategy is rarely modified or adapted based on different choice tasks or situations. Limited adaptivity is also a feature of children's influence strategies. Children approach these situations with an egocentric perspective, unable to take into account the other person's perspective in modifying the strategy used to influence or negotiate for desired items. Although they may be aware that parents or friends have other views, children at this age have difficulty thinking about their own perspective and that of another person simultaneously.

Analytical Stage. Enormous changes take place, both cognitively and socially, as children move into the analytical stage (ages 7–11). This period contains some of the most important developments in terms of consumer knowledge and skills. The shift from perceptual thought to more symbolic thought noted by Piaget, along with dramatic increases in information processing abilities, results in a more sophisticated understanding of the marketplace, a more complex set of knowledge about concepts such as advertising and brands, and a new perspective that goes beyond their own feelings and motives. Concepts such as product categories or prices are thought of in terms of functional or underlying dimensions, products and brands are analyzed and discriminated on the basis of more than one dimension or attribute, and generalizations are drawn from one's experiences. Reasoning proceeds at a more abstract level, setting the stage for knowledge structures that include information about abstract concepts such as advertiser's motives as well as the notion of contingencies (e.g., sweetness is an appealing attribute for candy but not soup).

The ability to analyze stimuli on multiple dimensions and the acknowledgment of contingencies brings about vast changes in children's consumer decision-making skills and strategies. Now, children exhibit more thoughtfulness in their choices, considering more than just a single perceptually salient attribute and employing a decision strategy that seems to make sense given the task environment. As a

result, children are more flexible in the approach they bring to making decisions, allowing them to be more adaptive and responsive. These tendencies also emerge in the way children try to influence and negotiate for desired items. The approach is more adaptive, based on their new-found ability to think from the perspective of a parent or friend and adapt their influence strategy accordingly.

Reflective Stage. The reflective stage (ages 11–16) is characterized by further development in several dimensions of cognitive and social development. Knowledge about marketplace concepts such as branding and pricing becomes even more nuanced and more complex as children develop more sophisticated information processing and social skills. Many of these changes are more a matter of degree than kind. More distinct is the shift in orientation to a more reflective way of thinking and reasoning, as children move into adolescence and become more focused on the social meanings and underpinnings of the consumer marketplace. A heightened awareness of other people's perspectives, along with a need to shape their own identity and conform to group expectations, results in more attention to the social aspects of being a consumer, making choices, and consuming brands. Consumer decisions are made in a more adaptive manner, depending on the situation and task. In a similar fashion, attempts to influence parents and friends reflect more social awareness as adolescents become more strategic, favoring strategies that they think will be better received than a simple direct approach.

Discussion. The consumer socialization stages being proposed here capture important changes in how children think, what they know, and how they express themselves as consumers. Consistent with our focus on age, we identify these stages with specific age ranges and describe the transition between stages as occurring primarily as a function of age. These stage descriptions, and the cognitive and social developments that support them, will be employed as explanatory devices in our review of empirical findings in consumer socialization, yet to come.

Before proceeding further, several observations regarding our stage descriptions are in order. First, the age ranges for each stage are approximations based on the general tendencies of children in that age group. To constrain the number of stages to a reasonable number, some degree of variance among children in an age range was tolerated. For example, children 7–11 years of age are identified with the analytical stage, even though differences in degree clearly exist between 8-year-olds and 10–11-year-olds. To deal with variations of this sort, we formulated our stage descriptions to be most representative of children in the middle to end of each age range and allowed the age ranges to overlap at transition points between stages. We also note that ages for each stage may be slightly different depending on the specific requirements of the consumer task or situation that children face. Tasks that are more complex, requiring consideration of more information or more in-depth knowledge,

can be expected to increase the age at which children appear to have mastered a particular concept.

Second, we acknowledge that important developments in consumer socialization do not emerge in a vacuum, but take place in a social context including the family, peers, mass media, and marketing institutions. Parents create direct opportunities by interacting with their children about purchase requests, giving them allowances, and taking them on shopping excursions (Ward, Wackman, and Wartella 1977). Peers are an additional source of influence, affecting consumer beliefs starting early in life (see Hawkins and Coney 1974) and continuing through adolescence (e.g., Moschis and Churchill 1978). Finally, mass media and advertising provide information about consumption and the value of material goods (e.g., Atkin 1975b; Gorn and Florsheim 1985; Martin and Gentry 1997; Robertson, Rossiter, and Gleason 1979). These influences are not incorporated into our framework, due to our primary focus on age, but will be noted as we review each area of empirical research.

We turn now to a review of empirical findings pertaining to consumer socialization. We begin our review by examining evidence about what children know and understand about advertising, one of the most important and contentious topics in the history of consumer socialization.

ADVERTISING AND PERSUASION KNOWLEDGE

Early interest in the area of consumer socialization was ignited, in large part, by questions about children's knowledge and understanding of advertising. Beginning in the early 1970s, arguments emerged that advertising to children was inherently unfair, based on theories developed by child psychologists and exploratory research conducted by consumer researchers that revealed young children to have little understanding of the persuasive intent of advertising, viewing it as informative, truthful, and entertaining (e.g., Blatt, Spencer, and Ward 1972; Ward, Reale, and Levinson 1972). A rancorous public policy debate ensued, culminating in a 1978 Federal Trade Commission proposal to ban television advertising to young children under the age of eight. Although this proposal was ultimately defeated, concern over what children know about advertising and whether advertisers have an unfair advantage in persuading children continues to this day.

Here, we review what is known about children's knowledge and understanding of advertising. Our discussion is structured around major steps or building blocks of advertising knowledge, such as the ability to distinguish commercials from programs and the ability to understand advertising's persuasive intent. These steps are discussed in the order in which they emerge in the developmental sequence from preschool to adolescence.

Distinguishing Commercials from Programs

As children move into the preschool years, they learn to identify television commercials and distinguish them from

other forms of programming. By the age of five, almost all children have acquired the ability to pick out commercials from regular television programming (Blosser and Roberts 1985; Butter et al. 1981; Levin, Petros, and Petrella 1982; Palmer and McDowell 1979; Stephens and Stutts 1982; Stutts, Vance, and Hudleson 1981). Even three- and four-year-olds have been shown to discriminate commercials above chance levels (Butter et al. 1981; Levin et al. 1982).

A study by Eliot Butter and his colleagues illustrates findings in this area. Preschool children were shown videotapes of the *Captain Kangaroo* program, edited to include four 30-second commercials between program segments. Separators were placed between the commercial and program segments, consisting, for example, of a voice saying that "the Captain will return after this message." While viewing the tape, children were instructed to tell the experimenter "when a commercial comes on." Children were also asked at approximately 10–15 seconds into each program segment, "Is this part of the *Captain Kangaroo* show?" In addition to these direct assessments, children were also asked open-ended questions such as "Why do they put commercials on television?" and "What is the difference between a commercial and the *Captain Kangaroo* show?"

Using this methodology, Butter et al. (1981) found that 70 percent of the four-year-olds and 90 percent of the five-year-olds identified all four commercials. Older children identified significantly more commercials, yet even four-year-olds were able to distinguish commercials from programs at an above-chance level. However, the ability to identify commercials did not necessarily translate into an understanding of the true difference between commercials and programs (i.e., entertainment vs. selling intent). For example, 90 percent of the younger children could not explain the difference between commercials and programs, even though discriminating the two was relatively easy. Other studies have reported similar findings, noting that children of this age and slightly older usually describe the difference between commercials and programs using simple perceptual cues, such as "commercials are short" (Palmer and McDowell 1979; Ward 1972). Thus, as Butter et al. (1981, p. 82) conclude, "young children may know they are watching something different than a program but do not know that the intent of what they are watching is to invite purchase of a product or service."

Understanding Advertising Intent

An understanding of advertising intent usually emerges by the time most children are seven to eight years old (Bever et al. 1975; Blosser and Roberts 1985; Robertson and Rossiter 1974; Rubin 1974; Ward et al. 1977). Prior to this, young children tend to view advertising as entertainment (e.g., "commercials are funny") or as a form of unbiased information (e.g., "commercials tell you about things you can buy"). Around the age of 7 or 8, children begin to see the persuasive intent of commercials, coming to terms with the fact that advertisers are "trying to get people to buy something."

These developmental patterns are well documented by Robertson and Rossiter (1974) in one of the earliest and most influential studies on the topic. First-, third-, and fifth-grade boys were interviewed and asked a series of open-ended questions to assess whether they recognized the assistive (informational) intent and persuasive (selling) intent of advertising. For example, children were asked questions such as "Why are commercials shown on television?" and "What do commercials try to get you to do?" The findings reveal age differences in persuasive intent but not assistive intent. Attributions of assistive intent remained constant across the three grade levels, with about half of the children mentioning the information function of advertising. Attributions of persuasive intent, however, increased dramatically from 52.7 percent of first graders (6–7-year-olds) to 87.1 percent of third graders (8–9-year-olds) to 99 percent of fifth graders (10–11-year-olds). These age trends parallel our description of children in the perceptual and analytical stages of consumer socialization. First graders, who are still in the perceptual stage, view the purpose of advertising from their own perspective as something that is informative or entertaining. Third and fifth graders, who are in the analytical stage, are now capable of viewing advertising from their own perspective (assistive intent) as well as from the advertiser's perspective (persuasive intent).

Similar age trends have been reported in much subsequent research, though additional factors have been identified that may moderate the specific age at which a child understands persuasive intent. Family environment, for example, plays a role. Children from black families exhibit lower levels of understanding of advertising's persuasive intent (Donohue, Meyer, and Henke 1978; Meyer, Donohue, and Henke 1978). Higher levels of understanding can be facilitated by parents with higher educational levels (Robertson and Rossiter 1974; Rossiter and Robertson 1976; Wiman 1983) and by parents who take a strong consumer education role with their children (Reid 1978). Common to both types of families is a greater degree of parent-child interaction about advertising, though the interaction must have an educational component to be effective.

In addition to background factors, features of the methodology used to measure children's understanding of persuasive intent have also come under scrutiny. Researchers have questioned whether measures of children's knowledge, using open-ended questions requiring abstract thinking and verbalization, result in an overly pessimistic view of what young children know about advertising intent. Employing nonverbal measures of advertising intent, Donohue, Henke, and Donohue (1980) reported high levels of understanding of commercial intent among 2–6-year-olds. In this study, children were shown a television commercial for Froot Loops cereal featuring an animated character called Toucan Sam. After viewing the ad, children were shown two pictures and asked to indicate which picture best indicated "What Toucan Sam wants you to do." The correct picture was one of a mother and child in a supermarket cereal aisle, with the child sitting in a pushcart seat and the mother standing with a box of Froot Loops in her hand, ready to put

it into the cart. The incorrect picture showed a child watching television. Children in the study selected the right picture 80 percent of the time, with even the youngest children (2–3-year-olds) selecting the right picture at above-chance levels (75 percent).

Replications of this study have produced results more in line with traditional verbal measures. Noting that the choice between the two pictures used in the Donohue et al. study was a rather easy one, which children could have successfully completed absent any knowledge of persuasive intent, Macklin (1985) replicated the Donohue et al. (1980) procedure using a set of four pictures. Two new pictures were added to the choice set, one depicting an activity portrayed by the characters in the commercial and another showing two children sharing the advertised product. The results were vastly different in this case, with 80 percent of the children (3–5 years of age) failing to select the correct picture. Further research by Macklin (1987), using similar nonverbal measures to assess children's understanding of the informational function of advertising, corroborates these findings. In sum, although nonverbal measures of persuasive intent may allow some children to express levels of understanding not uncovered with verbal measures, there is little reason to believe that the vast majority of children younger than seven or eight years of age have a command of advertising's persuasive intent.

Recognizing Bias and Deception in Advertising

By the time children reach their eighth birthday, they not only understand advertising's persuasive intent but also recognize the existence of bias and deception in advertising. Children aged eight and older no longer believe that "commercials always tell the truth" (Bever et al. 1975; Robertson and Rossiter 1974; Ward 1972; Ward et al. 1977), though children from black and lower-income families are less discerning (Bearden, Teel, and Wright 1979; Meyer et al. 1978). Beliefs about the truthfulness of advertising become even more negative as children move into adolescence (Bever et al. 1975; Robertson and Rossiter 1974; Rossiter and Robertson 1976; Ward 1972; Ward et al. 1977). For example, Ward et al. (1977) report that the percentage of kindergartners, third graders, and sixth graders believing that advertising never or only sometimes tells the truth increases from 50 percent to 88 percent to 97 percent, respectively. These percentage changes parallel those reported for understanding of persuasive intent for first, third, and fifth graders, illustrating once again the shifts that take place as children make the transition from the perceptual stage to the analytical stage.

Along with these more negative views comes a better understanding of why commercials are sometimes untruthful and how one can distinguish truthful from untruthful ads. For example, Ward et al. (1977) report that kindergartners often state no reason for why commercials lie (e.g., "They just lie") whereas older children (third and sixth graders) connect lying to persuasive intent (e.g., "They want to sell products to make money, so they have to make the product

look better than it is"). The ability to detect specific instances of bias and deception also increases with age. Bever et al. (1975) report that most of the 7–10-year-olds in their study could not detect misleading advertising and admitted to their difficulties: "[Advertisers] can fake well," they said, and "you don't really know what's true until you've tried the product" (p. 114). Eleven- to 12-year-olds were more discriminating, using nuances of voice, manner, and language to detect misleading advertising. These children used clues such as "overstatements and the way they [the actors] talk," "when they use visual tricks or fake things," and when the commercial "goes on and on in too much detail" (p. 119). Clearly, developments in perspective taking that occur as children enter adolescence and the reflective stage facilitate the ability to associate such nuances in advertising executions with deception or exaggeration.

The ability to recognize bias and deception in ads, coupled with an understanding of advertising's persuasive intent, results in less trust and less liking of commercials overall (Robertson and Rossiter 1974; Rossiter and Robertson 1976). Robertson and Rossiter (1974) found, for example, that the percentage of children liking all ads decreased dramatically from 68.5 percent for first graders to 55.9 percent for third graders to 25.3 percent for fifth graders. Similar studies have replicated this general pattern, noting downward trends in liking or overall attitudes toward advertising in children from the early elementary school grades to high school (Lindquist 1978; Moore and Stephens 1975).

Family environment, peers, and television exposure also contribute to the development of skeptical attitudes toward advertising. For young children, critical attitudes seem to be furthered by parental control over television viewing (Soley and Reid 1984) and less television viewing in general (Atkin 1975a; Rossiter and Robertson 1974). By the teenage years, skepticism toward advertising seems to be related more to the development of independent thinking and access to alternative information sources. For example, Mangleburg and Bristol (1998) report higher levels of advertising skepticism among high school students that have alternative sources of information (friends) and come from families that foster critical thinking (concept-oriented families), despite self-reports of heavier television viewing. Less skepticism was observed among students conforming to peer group norms, consistent with a pattern of less independent and critical thinking.

Using Cognitive Defenses against Advertising

The evidence just reviewed points to a dramatic shift in how children see advertising as they move from the preschool years to early adolescence. The preschooler who believes that commercials are entertaining and informative turns into a skeptical adolescent who knows that commercials are meant to persuade and believes them to be untruthful in general. The knowledge and skepticism about advertising that is typical of children 8 years of age or older is often viewed as a cognitive defense against advertising.

Armed with knowledge about advertising's persuasive intent and skepticism about the truthfulness of advertising claims, children of this age and above are often viewed as having the abilities to respond to advertising in a mature and informed manner. Younger children (under 8 years) without these cognitive defenses are seen as an at-risk population for being easily misled by advertising.

Although this scenario seems straightforward, evidence regarding the extent to which children's general attitudes and beliefs about advertising function as cognitive defenses against advertising is quite mixed. Early survey research was successful in finding moderate links between children's knowledge of advertising's persuasive intent and their desire for advertised products (Robertson and Rossiter 1974) and children's negative attitudes toward advertising and their desire for advertised products (McNeal 1964). More recent experimental research, however, finds that children's cognitive defenses have little or no effect on evaluations and preferences for advertised products (Christenson 1982; Ross et al. 1984). For example, Christenson (1982) found that an educational segment on commercials was successful in increasing the awareness of advertising's persuasive intent and decreasing the perceived truthfulness of advertising, yet had little effect on younger (first–second graders) or older (fifth–sixth graders) children's evaluations of a subsequently advertised product.

Several possibilities exist to explain why children's developing knowledge about advertising does not necessarily translate into more discerning responses to advertising. Perhaps the most obvious reason is that general knowledge and beliefs about advertising cannot be expected to dampen a child's enthusiasm for an enticing snack or toy. Clearly, adults with the same or higher level of cognitive defenses often want and purchase advertised products, even products with advertised claims that are just too good to be true. As Robertson and Rossiter (1974, p. 19) note: "Children's ability to recognize persuasive intent in commercials should not be taken as implying immunity to all commercials; clearly, individual commercials may be highly persuasive for children, just as for adults."

A second possibility is that children's advertising knowledge can serve as a cognitive defense only when that knowledge is accessed during commercial viewing. Given the difficulty that children experience in retrieving stored information of all kinds, even through the analytical stage, access to and use of their advertising knowledge may be more restricted than previously thought. Brucks, Armstrong, and Goldberg (1988) present evidence to this effect in an experimental study with 9–10-year-olds, an age at which children typically understand the persuasive intent of advertising and are relatively skeptical of advertising claims. Brucks and her colleagues created a high level of advertising knowledge in one-half of the children by showing and discussing two educational films about the persuasive nature of advertising, including information about specific advertising techniques and tricks. An irrelevant film was shown to the remaining children. Three days later, students were shown actual commercials for children's products, com-

pleted cognitive response measures, and answered questions about the perceived deceptiveness of the commercials. Immediately prior to commercial viewing, one-half of the children were given a short quiz measuring children's attitudes about advertising, which served as a cue to help children access their advertising knowledge.

The most important, and interesting, findings relate to the number of counterarguments children raised after viewing each commercial. Over 70 percent of the counterarguments occurred in the high knowledge-cue present condition, in which children had been shown educational films and had received a cue encouraging them to access this knowledge prior to commercial viewing. Students in the high knowledge-cue absent condition generated advertising counterarguments for one commercial, which used techniques very similar to those critiqued in the educational films, but failed overall to use what they had learned about advertising at the time of commercial viewing. Children in the low knowledge condition failed to generate advertising counterarguments for any of the commercials, regardless of whether a cue for advertising knowledge was present or absent. These results support the idea that access to advertising knowledge is a bottleneck preventing children from using what they know as a cognitive defense against advertising. Equally important, however, the findings suggest that general advertising knowledge and beliefs are not sufficient defenses. As Brucks et al. (1988, pp. 480-481) conclude, "Children (at least 9 to 10-year-olds) need more than just a skeptical or critical attitude toward advertising. They also need a more detailed knowledge about the nature of advertising and how it works."

Knowledge of Advertising Tactics and Appeals

What do children of different ages know about specific advertising tactics and appeals? Surprisingly, we have very few answers to this question, probably because most researchers have focused on advertising knowledge and beliefs possessed by children during their elementary school years (ages 5-11). Advertising knowledge of a more specific form, involving an understanding of what tactics and appeals are used by advertisers and why they are used, emerges much later in the developmental sequence as children approach early adolescence (11-14 years of age; Boush, Friestad, and Rose 1994; Friestad and Wright 1994; Paget, Kritt, and Bergemann 1984). This developmental path is consistent with our characterization of children in the reflective stage, who possess substantial perspective-taking skills that allow them to reason about different perspectives (advertiser and viewer) across different contexts or situations.

An illustration of this developmental juncture is provided by Moore-Shay and Lutz (1997) in their research involving in-depth interviews with second graders (ages 7-8) and fifth graders (ages 10-11). These researchers found that younger children related to advertisements primarily as a conduit of product information, evaluating specific commercials based upon their liking of the advertised product. In contrast, older

children viewed advertisements in a more analytical nature, often focusing on creative content and execution, as illustrated in this commentary by a fifth-grade boy: "They show the shape of the cereal a lot of times. When they show the box a lot of times, they show the name a lot of times. Make sure you remember it. Or sometimes they have a song, and it's like when you get songs in your head and you can't get them out" (p. 35).

Knowledge of this nature continues to develop during adolescence, as documented by Boush et al. (1994). Sixth through eighth graders were asked a series of questions about what advertisers are trying to accomplish when they use particular tactics, such as humor, celebrity endorsers, and product comparisons. Students were asked to rate eight possible effects (e.g., "grab your attention" and "help you learn about the product") for each tactic, responding to the question, "When TV ads [insert tactic], how hard is the advertiser trying to [insert list of effects]?" Ratings for each effect were obtained on a scale from "not trying hard at all" to "trying very hard." These ratings were compared to those from an adult sample to derive an overall knowledge score. In addition, skepticism toward advertising was assessed by a series of questions relating to understanding of advertising intent and beliefs about the truthfulness of ad claims.

The results indicate that knowledge about specific advertising techniques increases during the period from sixth to eighth grade, consistent with what we would expect for young consumers moving into the reflective stage (ages 11-16). Interestingly, skepticism about advertising was high among all students and did not vary across grades. Boush and his colleagues conclude (p. 172): "The current results suggest that negative or mistrustful predispositions toward advertising are well established as early as grade 6. This pattern of development, where skeptical attitudes precede more sophisticated knowledge structures, suggests that adolescent schemer schemas about advertisers' persuasive attempts start with general attitudes and then are filled in with more specific beliefs."

A Final Note

As they mature, children make a transition from viewers who see advertising as purely informative, entertaining, and trustworthy to ones who view advertising in a more skeptical, analytical, and discerning fashion. In light of these trends, it might be tempting to conclude that the end result of this socialization process is a widespread skepticism and dislike of advertising by older children and adolescents.

Of course, this is hardly the case. Although older children and adolescents are quite savvy about advertising, and often voice negative attitudes about advertising in general, they also are discriminating consumers of advertising who find many commercials to be entertaining, interesting, and socially relevant. By virtue of their growing sophistication, older children and adolescents find entertainment in analyzing the creative strategy of many commercials and constructing theories for why certain elements are persuasive (Moore-Shay and Lutz 1997). Advertisements are also val-

ued as a device for social interaction, serving as a focus of conversations with peers, a means of belonging and group membership, and a conduit for transferring and conveying meaning in their daily lives (Ritson and Elliott 1999, in this issue). Advertising serves important functions in the lives of adolescent consumers, as illustrated in this comment from a subject in Ritson and Elliott's study of high school students in England: "If you're sitting there and someone starts talking about adverts [advertisements] and you haven't got a clue what they're going on about, you feel dead left out . . . and you can't, you know. . . . You say, 'Oh, I didn't see that' and then they just carry on talking around you. But if you've seen it, you can join in and you know what they're going on about so it makes you feel . . . like . . . more in with the group . . . part of it more" (p. 266).

TRANSACTION KNOWLEDGE

Advertising plays an early role in the consumer socialization of children, but so do other consumer experiences such as shopping. For most children, their exposure to the marketplace comes as soon as they can be accommodated as a passenger in a shopping cart at the grocery store. From this vantage point, infants and toddlers are exposed to a variety of stimuli and experiences, including aisles of products, shoppers reading labels and making decisions, and the exchange of money and goods at the checkout counter. These experiences, aided by developing cognitive abilities that allow them to interpret and organize their experiences, result in an understanding of marketplace transactions. Children learn about the places where transactions take place (stores), the objects of transactions (products and brands), the procedures for enacting transactions (shopping scripts), and the value obtained in exchanging money for products (shopping skills and pricing). This set of knowledge and skills, which we refer to here as transaction knowledge, is explored in detail below.

Product and Brand Knowledge

To children, products and brands are probably the most salient aspects of the marketplace. Products and brands are advertised on television, displayed in stores, and found all around one's home. Even before they are able to read, children as young as two or three years of age can recognize familiar packages in the store and familiar characters on products such as toys and clothing (Derscheid, Kwon, and Fang 1996; Haynes et al. 1993). By preschool, children begin to recall brand names from seeing them advertised on television or featured on product packages, especially if the brand names are associated with salient visual cues such as colors, pictures, or cartoon characters (Macklin 1996). By kindergarten and first grade, children begin to read and spell brand names, which opens up even more opportunities for children to add to their knowledge base. By the time children reach middle childhood, they can name multiple brands in most child-oriented product categories such as

cereal, snacks, and toys (McNeal 1992; Otnes, Kim, and Kim 1994; Rossiter 1976; Rubin 1974; Ward et al. 1977).

As they mature, several trends in children's brand awareness are evident. First, as suggested above, children's awareness and recall of brand names increases with age, from early to middle childhood (Rossiter 1976; Rubin 1972; Ward et al. 1977) and from middle childhood through adolescence (Keiser 1975). An illustrative set of findings is reported by Ward et al. (1977) who asked children from kindergarten to sixth grade to name as many brands as possible in four different product categories (soft drinks, gum, gasoline, and cameras). For soft drinks, for example, the average number of brands names increased from 1.2 to 2.4 to 3.3 brands for kindergartners, third graders, and sixth graders, respectively. Second, brand awareness develops first for child-oriented product categories, such as cereal, snacks, and toys. In a clever study analyzing children's letters to Santa, Otnes et al. (1994) found that about 50 percent of children's gift requests were for specific branded (toy and game) items, with the vast majority of children (85 percent) mentioning at least one brand name in their letters to Santa. Brand awareness for more adult-oriented product categories develops later as these products become more salient or more relevant to older children. In the Ward et al. (1977) study, for example, only the older children (third and sixth graders) were able to name at least one brand of gasoline and cameras, with sixth graders naming more brands on average than third graders.

These developments in brand awareness foster a greater understanding of brands and product categories. Children begin to discern similarities and differences among brands, learning the structural aspects of how brands are positioned within a product category. Children also learn about product categories themselves, developing a greater understanding of how product types are grouped together and distinguished from one another. We refer to this type of knowledge about product categories and brands as structural knowledge. Young consumers also begin to understand the symbolic meaning and status accorded to certain types of products and brand names. We refer to this type of knowledge as symbolic knowledge. Both types of knowledge development are reviewed below.

Structural Knowledge. Between early and middle childhood, children learn a great deal about the underlying structure of product categories. Although children learn to group or categorize items at a very early age, they shift from highly visible perceptual cues to more important underlying cues as a basis for categorizing and judging similarity among objects as they grow older (Denney 1974; Markman 1980; Markman and Callahan 1983; Whitney and Kunen 1983). By third or fourth grade, children are learning to group objects according to attributes that suggest taxonomic relationships (e.g., belts and socks share the same attribute of being items of clothing), attributes that indicate the relationship of categories to one another (e.g., fruit juices and soft drinks differ on the attribute of naturalness), and attributes inherent to the core concept of categories (e.g.,

taste, more than color, is central to the category of soft drinks). These are termed underlying, deep structure, or even functional attributes because they convey the true meaning of a category or the function a category might serve. Prior to the use of attributes such as these, young children typically rely on perceptual attributes that are visually dominant, such as shape, size, or color.

These tendencies are clearly in evidence with regard to the way children categorize products and discriminate brands (John and Suján 1990a; John and Lakshmi-Ratan 1992; Klees, Olson, and Wilson 1988). A study by John and Suján (1990a) illustrates this point. In this study, children from 4 to 10 years of age were shown triads of products from the cereal or beverage category. One of the items was identified as a target, with the other two items in the triad sharing perceptual and/or underlying features with the target. For example, one beverage triad featured a can of 7-Up (target product), a can of Orange Crush that was similar to the target on the basis of a perceptual cue (both in cans), and a large liter bottle of Sprite soda that was similar to the target on the basis of an underlying cue (both lemon-lime taste). For all triads, children were asked to identify which of the two items was "most like" the target and why. In response, older children (ages 9–10) used underlying cues in a ratio of about 2:1, whereas the very youngest children (ages 4–5) used perceptual cues in a ratio of about 2:1 relative to underlying cues.

It would be a mistake, however, to label the use of perceptual cues as a totally ineffective strategy, devoid of any diagnostic value. Perceptual features and underlying attributes are correlated in many product categories, especially at the basic category level. Perceptual features that are highly correlated with underlying attributes can be quite diagnostic in determining category membership, leading even adults and older children to use perceptual cues to quickly and accurately categorize items. Younger children show emerging abilities to use perceptual cues in a similar fashion, favoring perceptual cues that are diagnostic over those that are undiagnostic of category membership (John and Suján 1990b). What appears to develop over time is an appreciation for which perceptual cues are diagnostic, and therefore useful, and which perceptual cues are not diagnostic and should, therefore, be ignored in favor of underlying attributes or features.

These findings are consistent with our characterization of children in the perceptual and analytical stages of consumer socialization. The focus on perceptual categorization cues exhibited by 4–5-year-olds is a vivid illustration of the orientation of children in the perceptual stage. Similarly, the shift to functional or underlying categorization cues around 9–10 years of age is consistent with the movement toward symbolic thinking that characterizes children in the analytical stage.

Symbolic Knowledge. Middle to late childhood is also a time of greater understanding of the symbolic meanings and status accorded to certain types of products and brand names. During this time, children develop a preference for

particular brands, even when the physical composition of the products are quite similar in nature. For example, children begin to express a preference for familiar branded items over generic offerings in the preschool years (Hite and Hite 1995), with preference for branded items escalating even further as children enter and move through elementary school (Ward et al. 1977). By the time they reach early adolescence, children are expressing strong preferences for some brand names over others, based on a relatively sophisticated understanding of their brand concepts and images (Achenreiner 1995).

Nowhere is children's increasing understanding of the social significance of goods more in evidence than in studies of consumption symbolism conducted by Belk and his colleagues (Belk, Bahn, and Mayer 1982; Belk, Mayer, and Driscoll 1984; Mayer and Belk 1982). To illustrate, in the Belk, Bahn, and Mayer (1982) study, children in preschool through elementary school and adults were shown pairs of pictures of automobiles or houses, which varied in size, age, or market value. For example, one pair included a Caprice (a large, traditional car) and a Chevette (a small economy car). Subjects were asked which of the cars would most likely be owned by a different type of people (e.g., a doctor, a grandfather) to assess whether consumption stereotypes exist for each age group tested. Responses to these questions revealed that inferences based on ownership were minimal among preschoolers, emerging and evident among second graders, and almost fully developed by sixth grade. Thus, sometime between preschool and second grade, children begin to make inferences about people based on the *products* they use (Belk et al. 1982; Mayer and Belk 1982).

Inferences about people based on the *brands* they use also develop during childhood, albeit somewhat later than for the general types of products described above. A lag of this sort seems reasonable based on the fact that inferences about product types are often based on salient perceptual cues (e.g., small vs. large car), which are easily noticed by younger children in the perceptual stage, whereas inferences about brand names are based on more abstract conceptual notions about what is popular, new, more costly, or exclusive. Evidence to this effect is reported by Achenreiner (1995) in a study with children in second grade, sixth grade, and high school. Subjects were shown ads for jeans or athletic shoes, which included a picture of the product with a prominent brand name that was either a preferred (e.g., Nike) or nonpreferred (e.g., Kmart) one. For example, one group of subjects saw an ad for athletic shoes with a Nike brand name; a different group of subjects saw the same ad for the same athletic shoes with a Kmart brand name. Participants were asked to give their impressions of someone who would own the advertised product on several dimensions, such as "cool" or "popular." Responses from second graders showed no difference in their impressions of owners of the preferred versus nonpreferred brand name. In contrast, impressions about the owners of the two brands were different for children in the sixth grade and for high schoolers. These findings are consistent with those of Belk et al. (1984), who found stronger inferences about consump-

tion-based stereotypes among sixth graders (vs. fourth graders) for stimuli containing brand names.

Thus, by sixth grade, children have developed a very keen sense of the social meaning and prestige associated with certain types of products and brand names. Further, these items not only confer status to their owners, but also begin to symbolize group identity and a sense of belonging to certain groups. Product categories such as clothing are particularly notable in this regard, as reported by Jamison (1996) in a study with sixth graders. Sixth graders comment on clothes as a means of fitting in and as a way to identify membership in a particular subgroup, such as the "preppies," "deadheads," and "hip-hops." A quote from an 11-year-old boy sums it up well: "I wear what I wear because it is in style . . . it also makes me feel real cool. Some of the kinds of clothes I like are Nike, Guess, Levi's and Reebok. When I wear my clothes it makes me feel real cool. I also blend in with all the other people at school and everywhere else I go" (p. 23).

These developments in symbolic knowledge are consistent with our stage framework for consumer socialization. Beginning in the analytical stage (ages 7–11), the seeds are sown by children's increasing abilities to think abstractly and reason about perspectives other than their own. By the time children reach the reflective stage (ages 11–16), they possess a more sophisticated approach to impression formation based on social comparisons of factors such as personality, social standing, and possessions. Perspective-taking skills also now incorporate group norms or points of view, consistent with findings of consumption symbolism related to group identity at this age.

Shopping Knowledge and Skills

Early work in this area focused on children's knowledge of money as a medium of exchange (e.g., Marshall 1964; Marshall and MacGruder 1960; Strauss 1952). Research in this vein identified early childhood as a period of rapid development in abilities to understand where money comes from and its role in marketplace transactions, to identify specific coin and bill values, and to carry out transactions with money involving simple addition and subtraction. Significant jumps in knowledge were reported between preschool and first or second grade, with most second graders having acquired many of the basic concepts for understanding the exchange of money for goods and services.

Yet, a complete set of shopping knowledge and skills goes beyond understanding money and its role in the exchange process. One must understand shopping procedures and scripts, learn how to compare prices and quantities, understand pricing as a mechanism for relaying value, and become aware of the retail establishments where most shopping activity takes place. Below, we summarize existing research on each of these topics.

Retail Store Knowledge. Children are frequent visitors to retail stores at a young age. Convenience stores, discount stores, and supermarkets are the favorites of younger chil-

dren (5–9 years), while specialty stores, such as toy or sporting good stores, are favorites with older children (10–12 years; McNeal and McDaniel 1981). By the time a child reaches middle childhood, s/he is visiting and making purchases in an average of 5.2 stores per week, or over 270 shopping visits per year (McNeal 1992).

These shopping experiences, coupled with developments in cognitive and social reasoning, lead to an understanding of retail institutions. In one of the few and earliest studies on this topic, McNeal (1964) reports interesting developments between the ages of 5 and 9 years of age. At age 5, children see stores as a source for snacks and sweets, but are unsure of why stores exist except to fulfill their own needs for these products. By the time children reach the age of 7, shopping is seen as "necessary and exciting." At age 9, shopping is seen as a "necessary part of life," accompanied by a much greater understanding that retail stores are owned by people to sell goods at a profit. Thus, there is a considerable shift in understanding the purpose of retail establishments from the preschool years (an egocentric view of stores as fulfilling my wants) to the early elementary school years (a dual view of stores as profit centers that fulfill consumer wants). This shift is consistent with our view of the transition from the perceptual stage, where children have an egocentric perspective, to the analytical stage, where children have the ability to reason from another person's perspective, such as retailers who have a profit motive.

Detailed knowledge about retail stores also expands during this age period. In a recent study, McNeal (1992) asked children in second, third, and fourth grade to draw pictures of "what comes to mind when you think about going shopping." Findings from a content analysis of the pictures supports the fact that older children understand the process and purpose of shopping and include a variety of retailers (supermarkets, specialty stores, discount and department stores) in their depictions. Children's drawings reveal that their shopping experiences have resulted in a good deal of knowledge about aspects of store layouts, product offerings, brands, and the like. As McNeal concludes (p. 13): "By the time children are in the third and fourth grades, they can provide detailed descriptions of a Kmart or Kroger store, including store layouts, product and brand offerings of items for children and their households, and names and characteristics of some people who work in stores."

Shopping Scripts. Understanding the sequence of events involved in shopping is clearly one of the most important aspects of transaction knowledge. As noted earlier, children acquire a vast amount of experience as an observer or participant in the shopping process at very early ages. But exposure to the shopping process does not necessarily result in an understanding of the basic sequence of events involved in shopping until children reach the preschool or kindergarten years (Berti and Bombi 1988; Karsten 1996).

An illustration of this point is provided by Karsten (1996) in a study conducted with children in kindergarten through fourth grade who were asked to participate in a shopping

game. Each child was shown a small toy with a price tag on it (e.g., a toy dinosaur for 17 cents) and told that they had been given money (e.g., a quarter) by their mother to buy the item at the store. A store area was set up nearby with a small cash register, containing visible amounts of coins and bills. Children were asked to show the interviewer/cashier how they would buy the toy in the store. Although the results reveal age differences in terms of understanding the need for change and calculating change amounts, the basic shopping script was enacted by even the youngest children in the study. As Karsten concludes (p. 109): "Even the youngest subjects in the study understood that one selected their item, checked their money, decided what to purchase and placed it on the cashier's counter, waited for the cashier to check and record the price and perhaps offer change—they even reminded the interviewer to hand them a pretend receipt."

Shopping scripts undergo further development as children accumulate more experience and acquire the cognitive abilities needed to transform individual shopping experiences into more abstract and complex scripts. The role of experience and age-related cognitive abilities in script formation is illustrated by John and Whitney (1986) in a study with children from 4 to 10 years of age. The shopping script studied here was returning or exchanging an item at a store. The study was conducted in a rural area, where local stores were limited to gas stations and a small grocery store, with a larger retail area located about an hour away. Such a setting was chosen to minimize the amount of experience that children would have with returning items to the store, since the rural location made returns to the larger retail area quite inconvenient and infrequent. In order to study how scripts develop with experience, children in each of three age groups (4–5 years, 6–7 years, 9–10 years) were read different stories about a boy or girl exchanging or returning a faulty product to a store. The amount of experience was varied by the number of stories read, resulting in low (one story), medium (three stories), or high (five stories) levels of experience about product exchanges and returns. After hearing the assigned number of stories, children were asked to describe, in their own words, how one would go about returning or exchanging a product.

The findings reveal that older children, with more substantial cognitive abilities, have an advantage in transforming individual episodic experiences into more abstract script representations. As more information became available via new stores, the 9–10-year-olds produced scripts that were generally more abstract and more complex in terms of conditional events (if *X* happens, then do *Y*). For example, these children were able to pick up information about differences in return and exchange policies from the different stories and incorporate these contingencies into their scripts. The 6–7-year-olds also produced more sophisticated scripts as more information became available, although this effect was limited to differences between the low and moderate levels of experience (one vs. three stories). In contrast, the scripts produced by 4–5-year-olds were similar across ex-

perience levels, with a relatively high percentage of episodic details and no conditional events.

Follow-up studies, utilizing a similar methodology, have provided further understanding of the specific types of age-related cognitive abilities that have an impact on script acquisition (Peracchio 1992, 1993). One explanation examined in these studies is that younger children have more difficulty encoding the individual central events that eventually need to be represented in the script. In particular, it appears that young children have two different types of encoding problems, one involving elaboration of single central events and one involving the organization of multiple central events into a scriptlike format. For example, young children (5–6 years) are less able to recall or recognize central events than are older children (7–8 years) unless the presentation format facilitates encoding of these events, such as multiple exposures to the same set of events presented in an audiovisual format (Peracchio 1992, experiment 1) or massed repetitions of the same set of events presented in an audio format (Peracchio 1993, experiment 1). When young children are exposed to slightly different variations of a script enactment, additional problems with discerning the event structure of the script and organizing the individual events into a whole may surface. In this case, it may be necessary to provide cues about the structure and goals of the script to provide the internal organization that younger children are less able to generate on their own (Peracchio 1992, experiment 2).

A second explanation for age differences involves the existence of retrieval difficulties once central events are encoded in memory. In contrast to older children, younger children may need more external prompts and retrieval cues to access whatever script knowledge they possess. Evidence to this effect can be found in the Peracchio studies cited above. Children's script knowledge was assessed using several response formats, which varied in terms of how much contextual support and how many retrieval cues were provided. For example, the least retrieval support mirrored the response format used by John and Whitney (1986): "How do you return something from the store?" More retrieval support was incorporated into two alternative response formats, one asking the basic script question in a more concrete form ("What would you do if I gave you this [broken toy] for your birthday?") and one assessing script knowledge by a recognition task rather than recall (children were given 12 pictures representing central events and asked to tell a story). Across studies, young children were able to access a greater number of central events in correct order with response formats featuring more retrieval support.

Overall, these findings are consistent with our stage view of consumer socialization. Children in the perceptual stage (3–7 years) understand the basic shopping script, which consists of a concrete set of events that unfold in a stable order. What develops as children move into the analytical stage (7–11 years) is an ability to transform concrete details into more abstract events and to formulate contingent events that may or may not happen in any particular shopping experience. These developments can be traced to the en-

hanced information-processing skills that children in the analytical stage come to possess.

Shopping Skills. We use the term "shopping skills" to refer to wide array of abilities used for comparing product value prior to purchase. Although one might expect to see a considerable amount of research in this area, the only existing study is reported by Turner and Brandt (1978). Preschool (age 4) and elementary school (ages 10–11) children were given several shopping tasks, one involving a comparison of product packages and quantity and one involving a comparison of product prices and quantity. For the first, children were shown two packages containing the same product, with one containing many individually wrapped pieces of candy and the other containing the same candy in one large size. The child was asked to compare the two packages and determine which contained more of the product. The correct answer was identified by looking at net weight on the packages. For the second task, children were shown three different sizes and shapes of packages containing the same product and asked to determine which one would give the most product for the money. The correct answer was determined by comparing unit prices per package. Responses to both tasks revealed that older children were more accurate in their comparisons as were children who were given more opportunities at home to manage money and participate in consumer decision making with other members of the family.

Pricing Knowledge. Despite the fact that children have substantial shopping skills by middle childhood, they pay relatively little attention to prices as an aspect of the marketplace. By the time children are 8 or 9 years old, they know that products have prices, know where to look for price information, and know that there are price variations among products and stores (McNeal and McDaniel 1981). Despite this, very few children know the prices for frequently purchased items (Stephens and Moore 1975), and very few ask about price when listing the type of information they would want to know about a new product prior to purchase (Ward et al. 1977). Other cues, such as brand names, are far more salient and important to children. For example, in McNeal's (1992) study, in which children from the second, third, and fourth grades were asked to draw pictures about shopping, about 40 percent of the drawings pictured products with brand names, whereas only 10 percent of the drawings showed actual price information (e.g., \$3.99).

Perhaps part of the reason children pay little attention to pricing is that they have relatively undeveloped notions about how prices reflect the valuation of goods and services. Adults, for example, see prices as a reflection of the utility or function of the item to the consumer, the costs of inputs incurred by the manufacturer to make the item, and the relative scarcity of the item in the marketplace (Fox and Kehret-Ward 1985). Not until early adolescence do children perceive this full range of connections between price and value, with younger children viewing price simply in terms

of concrete physical features of products (Berti and Bombi 1988; Fox and Kehret-Ward 1985, 1990).

A study by Fox and Kehret-Ward (1990) illustrates how notions of price and value develop from the preschool years to adolescence to adulthood. Subjects were told a story about a group of friends who decided to open a bicycle shop and needed to set a price for each bicycle; each of the friends had a different idea about how to price the bicycles, such as price based on physical size (larger bikes should cost more), amount of labor required for manufacturing, or preference (bikes people like best should cost more). After presenting these suggestions, children and adults were asked whether the pricing scheme was a good idea and why. The responses were informative in identifying what criterion the child sees as a basis for retail prices and the source of value connected to that criterion. Preschoolers pointed to a product's perceptual features, especially size, as the basis for pricing, but articulated no theory for why these features provide more value. Ten-year-olds also linked price to perceptual features (size or fancy features), but reasoned that a higher price would be forthcoming due to the amount of production inputs required. Thirteen-year-olds exhibited a more abstract level of reasoning, viewing prices as a function of the quality of the product's inputs and the preferences of potential buyers. Adults voiced similar opinions, also adding notions about supply and demand to the mixture of factors contributing to value.

These age differences provide a vivid illustration of children's reasoning skills at different stages of consumer socialization. Children in the perceptual stage (ages 3–7) focus on perceptual features, but without abstract reasoning that connects these features to prices. Although children in the analytical stage (ages 7–11) also mentioned perceptual features, they related these features to functional reasons why the product should cost more. Adolescents in the reflective stage (ages 11–16) also considered the preferences of potential buyers, which reflects an enhanced understanding of other people's perspectives and opinions.

DECISION-MAKING SKILLS AND ABILITIES

Children assume the role of consumer decision makers at a young age. Children as young as 2 years of age are commonly allowed to select treats at the grocery store, express desires for fast food, and indicate preferences for toys on visits to Santa. As they grow older, children develop more sophisticated decision-making skills and abilities. They become more aware of different information sources, seek out information about important functional aspects of products, utilize more attribute information in evaluating products, and adapt their decision strategies to the nature of the choice environment they face. These developments are reviewed in more detail below.

Information Search

Awareness and Use of Information Sources. As children grow older, they develop a greater awareness of different information sources and deploy these sources in a more flexible manner depending on need (Moore and Stephens 1975; Moschis and Moore 1979a; Stephens and Moore 1975; Ward et al. 1977). Much of the developing awareness of information sources takes place during early and middle childhood. To illustrate, Ward et al. (1977) asked kindergartners, third graders, and sixth graders where they could find out about three kinds of new products: toys, snack foods, and clothing. The average number of information sources increased with age, from a low of 3.66 sources for kindergartners to a high of 6.68 for sixth graders. Kindergartners relied most on in-store experiences, whereas third and sixth graders added mass media advertising and interpersonal sources to their lists.

During the adolescent years, further developments take place in the use and preference for information sources. Older adolescents seek out more sources of information as a prelude to purchasing (Moore and Stephens 1975; Moschis and Moore 1979a; Stephens and Moore 1975). More importantly, adolescents develop preferences for specific information sources, favoring peers and friends over parents and mass media as they mature (Moore and Stephens 1975; Moschis and Moore 1979a; Stephens and Moore 1975; Tootelian and Gaedeke 1992). However, adolescents also become more flexible in using different sources, favoring peers and friends for some types of products and parents for others. For example, Moschis and Moore (1979a) asked middle and high school students to identify the sources they would rely on most before buying eight different products. Friends were relied on most for products where peer acceptance is an important consideration (e.g., sunglasses), whereas parents were a favored source for products with a higher perceived risk in terms of price and performance (e.g., hair dryer). In addition, parents were more influential at the information-gathering stage than at the product evaluation stage (see also Moschis and Moore 1983). Mass media appears to play a relatively small role as an information source, perhaps either because adolescents have learned to be skeptical of advertising or because adolescents watch less television than their younger counterparts (Moschis and Moore 1979a).

Apart from aging, preferences for information sources can also be affected by family environment. Moore and Moschis (1978, cited in Moschis 1985) provide an example of how family communication patterns affect adolescent preferences for several sources of information, including parents, peers, and mass media. Four types of family communication patterns were studied: *laissez-faire*, protective, pluralistic, and consensual families. *Laissez-faire* families are characterized by little parent-child communication; protective families stress obedience and social harmony, with little consideration given to developing the child's own opinions; pluralistic families encourage the child to develop new ideas and promote open communication without requir-

ing obedience to authority; consensual families combine the idea of children developing their own views with the need for social harmony and family cohesiveness (see Moschis 1985 for a more detailed description). Moore and Moschis (1978) found that adolescents from pluralistic families prefer information from a variety of sources, with a higher preference for parental advice than adolescents from other family types. In contrast, adolescents from protective families are highly receptive to peers, and to a lesser extent, television advertising. *Laissez-faire* children, too, rely less on parental advice, but are also less likely to rely on peers, implicating the use of fewer information sources overall.

Type of Information Sought. As children mature, they learn to rely on different types of information. Perhaps the most important development is a change from reliance on perceptual product attributes to a more detailed consideration of functional and product performance attributes. This trend is illustrated nicely by Ward et al. (1977) in their study with kindergartners, third graders, and sixth graders. Children were asked the following question: "Suppose you wanted to buy a new television set. What would you want to know about it?" Children of all ages inquired about perceptual attributes (e.g., color vs. black-and-white), though mentions of this sort were lower among sixth graders. With increasing age, however, mentions of performance attributes (e.g., easy to operate), functional attributes (e.g., quality), and price became more common.

Similar findings have been reported with adolescents. In the Moschis and Moore (1979a) study described earlier, middle and high school students were asked to indicate which of the following types of information could tell them the best product to buy: "one that is on sale," "one that is advertised a lot," "one with a well-known brand name," "one that my parents like," or "one sold by a well-known store." Certain types of information were more valued than others, with adolescents favoring products on sale and with a well-known brand name. The focus on price and brand name (as a surrogate for functional attributes) is consistent across product categories, as is the limited value placed on signals such as high levels of advertising or placement in a well-known store.

Adapting to Search Costs and Benefits. One of the hallmarks of a mature decision maker is the ability to adjust one's information search to the costs and benefits of gathering information. More information is gathered in situations where the benefits of doing so are greater; less information is gathered in situations where the costs of doing so are greater. Mature decision makers consider the trade-off between cost and benefits as they consider collecting more information about a product category, seeking more information about different brands in a product category, and making more visits to different retail outlets.

Children learn to adjust their information search efforts in line with cost and benefit considerations as they grow older. Many of the basic mechanisms develop during the period from preschool to the early elementary school years. Early

in this developmental period, children show an ability to adjust their information search efforts to at least one of the two cues. Davidson and Hudson (1988, experiment 1) report that even preschoolers modify their search behavior in view of the benefits of searching more information prior to choice. Preschoolers in this study spent more time searching through a set of alternatives when they were told that their final choice would be irreversible rather than reversible at a later date.

The next step, adjusting information search in line with both costs and benefits, emerges in the early elementary school years. An illustration of this development is provided in a study by Gregan-Paxton and John (1995). Four- to 7-year-olds were asked to play a game called "house of prizes." The game involved making a choice between two cardboard boxes decorated to look like houses, with a prize hidden behind each of four windows of the house. Children were allowed to search windows to uncover the prizes prior to making a choice, with differing costs and benefits of doing so. In the low benefit condition, all four windows within a house contained the same prize; in the high benefit condition, every window in each house had a different prize. In the low cost condition, children could uncover as many prizes as they wished prior to making a choice, with the only cost of doing so being minimal effort and additional time in making a choice; in the high cost condition, children were given several pieces of candy prior to the start of the game and had to give up one piece of candy for each prize they wanted to uncover. In all cases, the number of prizes uncovered was used as a measure of the amount of information search.

Older children modified their search behavior more in line with appropriate cost-benefit trade-offs than did the 4-5-year-olds. The 6-7-year-olds gathered the least information in the condition with the least favorable cost-benefit profile (high cost, low benefit) and the most information in the condition with the most favorable cost-benefit profile (low cost, high benefit). Younger children were less discerning, gathering the most information for one of the conditions warranting a very modest degree of search (low cost, low benefit) and much less information for one of the conditions warranting the most extensive information search (low cost, high benefit). These children exhibited a limited ability to adapt to cost-benefit trade-offs, reducing the extent of their information search in the low benefit condition when search costs were increased from low to high. The same abilities, however, were not in evidence in the high benefit condition when search costs were similarly increased. In contrast, older children modified their search behavior across all conditions, demonstrating a greater degree of differentiation in search activity and strategies.

These developments pertaining to information search are consistent with our description of consumer socialization stages. Young children in the perceptual stage (ages 3-7) tend to gather information from a small number of sources, focus on a small amount of information that is often perceptual in nature, and are just beginning to adapt their search strategy to the task at hand. Children in the analytical

(ages 7-11) and reflective (ages 11-16) stages cast a wider net in searching for information, making use of additional information and information sources when needed. They approach the search process in a more strategic way, going beyond simple perceptual features of products as well as adapting their search strategies and sources to the situation they face.

Product Evaluation and Comparison

Children become more informed consumers with age, using the information they have gathered to evaluate and compare product offerings. With increasing age, children focus more on important and relevant attribute information (Davidson 1991b; Wartella et al. 1979), use more attributes and dimensions in forming preferences (Bahn 1986; Capon and Kuhn 1980; Ward et al. 1977), more carefully consider these preferences in making choices (Roedder, Sternthal, and Calder 1983), and are more successful in comparing brands on dimensions such as price and quality (Turner and Brandt 1978). Several of these developments are described in more detail below.

Use of Attribute Information. The most consistent finding here is that younger children use fewer attributes or dimensions in forming preferences and comparing products. Researchers have demonstrated an increase in the use of attributes and dimensions as children move from preschool to early elementary school (Bahn 1986; Capon and Kuhn 1980; Ward et al. 1977) and from early elementary school to middle school and late adolescence (Capon and Kuhn 1980).

Capon and Kuhn (1980, experiment 1) provide a good example of this trend in a study with kindergartners, fourth graders, eighth graders, and college students. Subjects were shown notebooks that varied on four dimensions: color (red or green), surface (dull or shiny), shape (long/thin or short/wide), and fastening (side or top). Participants viewed each notebook individually and were asked to indicate how much they liked it on a nine-point scale. After rating all notebooks, subjects were asked to evaluate each notebook dimension, indicating how much more they liked one level than another (e.g., how much they preferred red over green notebooks or vice versa) on a similar nine-point scale. Comparing the dimension ratings with overall notebook preferences, the authors found that kindergartners had a difficult time incorporating preferences for even one dimension into their overall ratings, though more of these children were able to do so in a follow-up study with less complex stimuli (see experiment 2). Older children tended to use one single dimension, with integration of two or more dimensions becoming more common in late adolescence.

Use of Relevant Attribute Information. The ability to focus on relevant attribute information also emerges as children move through the early elementary school years. Kindergarten children are often attracted to perceptually salient information, which may or may not be relevant (Wartella et al. 1979). The ability to ignore irrelevant in-

formation, in favor of more relevant or important information, progresses as children move from kindergarten into the early elementary school grades (Wartella et al. 1979) and onward through early adolescence (Davidson 1991b).

An interesting example of this trend is offered by Wartella and her colleagues (1979) in a study conducted with kindergartners and third graders. Children were shown a series of cards, with each card containing a drawing of two or more hypothetical candies. These candies varied by the type of ingredient (chocolate, caramel, raisins, peanuts, and licorice) and the amount of each ingredient (five pieces or two pieces). For example, one card showed "Candy E" with lots of chocolate (five pieces) and "Candy F" with a little chocolate (two pieces), lots of raisins (five pieces), and lots of peanuts (five pieces). Children were told to imagine that they were choosing a present for a friend who likes some ingredients more than others (e.g., a friend who likes chocolate very much and raisins and peanuts less). The cards and attribute importance information were designed in such a way that the child's strategy for comparing and choosing items was revealed by the set of choices made.

Kindergartners focused their comparisons on the total amount of candy ingredients shown on the card, regardless of the attribute preferences of their friend. Over two-thirds of these children simply selected the candy with the most ingredients. In contrast, almost two-thirds of the third graders used the attribute importance information, comparing the different candies on the basis of at least one relevant ingredient. These data are consistent with our characterization of younger children in the perceptual stage (ages 3–7), where perceptual features are dominant in reasoning and information processing capabilities limit the amount of information that can be processed. As children move into the analytical stage (ages 7–11), one sees a shift in thinking from a perceptual to a more abstract (functional) orientation and the adoption of a more thoughtful evaluation process that results in a focus on relevant information and a broader consideration of more than one attribute.

Decision-Making Strategies

Emergence of Decision-Making Strategies. Important developments in the emergence of decision-making strategies occur as children acquire the ability to selectively attend to and process more information prior to choice. Because many decision strategies require attention to multiple attributes, accompanied by a focus on the most important or relevant ones, these types of abilities must be in place before children can implement a number of compensatory and noncompensatory strategies.

Although research examining the emergence of specific strategies is sparse, the study by Wartella and her colleagues (1979) described earlier provides an interesting glimpse into this area of development. Recall that children were asked to make hypothetical choices among candies that varied in terms of the number of different ingredients (e.g., chocolate, raisins). Attribute importance information was supplied by describing the ingredient preferences of a friend who would

receive the chosen candy as a gift. Given the particular set of choice alternatives and attribute (ingredient) preferences, the researchers were able to discern whether or not children were using a number of different strategies: best single attribute (choice based only on the amount of the single most important ingredient contained in the candy), variety of attributes (choice based on the number of different ingredients contained in the candy), lexicographic strategy (choice based on the amount of the most important ingredient and, in the case of a tie, on the amount of the second most important ingredient), and a weighted adding strategy (choice based on the sum of the products of the important weights and amount of all ingredients contained in each candy).

The favorite strategy of kindergartners was to choose the option with the most ingredients, regardless of importance weights, consistent with what we would expect for children in the perceptual stage (ages 3–7). Third graders used a variety of strategies, split between the single best attribute, variety of attributes, and lexicographic strategies. The weighted adding strategy, which is compensatory in nature, was used by only a small percentage of the older children. These trends, especially the use of the single best attribute and lexicographic strategies by older children, signal the emergence of noncompensatory strategies in children by the time they reach middle childhood. Indeed, in subsequent studies described below, the use of noncompensatory strategies appears quite ingrained by the time children reach early adolescence (Klayman 1985; Nakajima and Hotta 1989).

Adaptive Use of Decision-Making Strategies. With age, children not only develop a repertoire of decision strategies, but also learn how to use this repertoire in a flexible and effective manner. Perhaps the most important development is the ability to adapt strategies to the demands of the decision environment. Evidence to this effect is provided by research that examines how children respond to increasingly complex decision environments that are characterized by more choice alternatives and more information per choice alternative.

Mature decision makers adapt to more complex environments in several ways. As the number of alternatives and attributes increases, they restrict their search to a smaller proportion of the total information available, focus their search on more promising alternatives, and switch from using highly demanding compensatory choice strategies to less cognitively demanding noncompensatory ones (see Payne, Bettman, and Johnson 1993). Similar abilities to adapt develop in children as they move from middle childhood to early adolescence, being consistently exhibited by the time children reach 11 or 12 years of age (Davidson 1991a, 1991b; Gregan-Paxton and John 1997; Klayman 1985). Children's abilities undergo further refinement as they move into late adolescence, using a wider array of simplifying strategies in a more systematic manner (Nakajima and Hotta 1989).

An illustration of these developments is provided by

Davidson (1991a) in her study conducted with second, fifth, and eighth graders. Children made choices from sets of alternatives (such as bicycles) shown on information boards, which varied in terms of the number of alternatives and dimensions listed. Four information boards varying in complexity were shown: 3 (alternatives) \times 3 (dimensions), 3 \times 6, 6 \times 3, and 6 \times 6. For example, one of the 3 \times 3 boards listed three alternatives on the left-hand side (Bike S, Bike T, Bike W) and three dimensions across the top (size of bike, price of bike, number of friends that have bike). Information about each alternative on these dimensions was hidden from view by a card, but children were allowed to uncover as much information as they wanted prior to choice.

Age differences were apparent in the way children adapted to increasingly complex information boards. With increasing age, children were more efficient in gathering information prior to choice, searching less exhaustively and accessing a smaller proportion of available information as complexity increased. Related to this was the fact that older children (fifth and eighth graders) exhibited search patterns indicative of a greater use of noncompensatory strategies, eliminating some alternatives quickly and moving onto more promising ones. In particular, these children appeared to be using conjunctive decision rules, consistent with Klayman's (1985) findings. In contrast, younger children (second graders) responded to increasing complexity by making smaller adjustments in their search strategies without using a consistent simplifying strategy such as the conjunctive rule.

What accounts for these age differences? Although a full accounting is not yet available, there is evidence that two important skills contribute to children's growing abilities as adaptive decision makers. First, Davidson (1991b) notes that selective attention is an important component of many simplifying decision rules, as children must learn to focus their attention on more relevant information and ignore information about poor alternatives in the process of making a choice. As we have seen, selective attention to relevant choice information appears to be a stumbling block for younger children. Second, Gregan-Paxton and John (1997) suggest sensitivity to the costs of processing large amounts of information as an important component of adaptive decision making. In complex decision environments, children need to recognize that exhaustive decision-making strategies are very costly in terms of time and effort and that simplifying strategies yield a more effective balance of effort and accuracy. Young children pay less attention to these costs and, therefore, have less incentive to change their strategies, aside from a few minor adjustments that are relatively ineffective.

Both of these mechanisms relate to cognitive abilities and are consistent with our characterization of young children in the perceptual stage (ages 3–7). Older children in the analytical stage (ages 7–11) exhibit a more thoughtful and adaptive approach to decision making. However, our stage descriptions also suggest that social development may play a role, specifically the emergence of more mature perspective-taking skills. Children in the analytical stage begin to

see their environment from multiple perspectives, understanding that a stimulus or situation can be viewed in different ways. This way of thinking may carry over to the decision-making realm, as children become more accustomed to seeing more than one perspective or way of doing things, leading the way for adaptivity to occur.

PURCHASE INFLUENCE AND NEGOTIATION STRATEGIES

Children exert substantial influence on family purchases in several ways. Purchase requests are the most overt of all influence attempts, with children asking for a wide array of products such as toys, candy, clothing, sporting goods, and other products for their own use. Over time, children influence purchases for many of these items in a more passive way due to the fact that parents know what their children like and make purchases accordingly. But the extent of influence does not stop with frequently purchased consumer package goods, toys, and athletic equipment. Children also exert some degree of influence in family decision making regarding items such as cars, vacations, computers, and home furnishings. In this role, they might initiate the purchase, collect information about alternatives, suggest retail outlets, and have a say in the final decision.

The extent to which children influence purchases within the family depends on several factors. Older children exert more influence than younger children, a pattern that holds true across a wide age range from kindergarten to high school (Atkin 1978; Darley and Lim 1986; Jenkins 1979; Moschis and Mitchell 1986; Nelson 1979; Rust 1993; Ward and Wackman 1972; Swinyard and Sim 1987; Ward et al. 1977). Children have the most influence over purchases of child-relevant items (e.g., cereal, toys, clothes), a moderate degree of influence for family activities (e.g., vacations, restaurants), and the least influence for purchases of consumer durables and expensive items (Belch, Belch, and Ceresino 1985; Corfman and Harlam 1997; Foxman and Tansuhaj 1988; Foxman et al. 1989; Isler, Popper, and Ward 1987; Swinyard and Sim 1987). In these later categories, children's influence is greatest in the early stages of family decision making (e.g., problem recognition, information search) and declines as final decisions are made (Belch et al. 1985; Filiatraut and Ritchie 1980; Hempel 1974; Nelson 1979; Swinyard and Sim 1987; Szybillo and Sosanie 1977). And, finally, children tend to exert more influence in higher-income families (Jenkins 1979; Nelson 1978), larger families (Jenkins 1979; Nelson 1979), and families with a less restrictive, less authoritarian, and more concept-oriented communication style (Burns and Gillett 1987; Jenkins 1979; Moschis and Mitchell 1986; Szybillo, Sosanie, and Tenenbein 1977; Ward and Wackman 1972). These trends clearly point to purchase influence as an important part of children's developing role as a consumer.

More interesting, from a socialization perspective, is the fact that children learn ways to become successful as influence agents through the use of increasingly sophisticated influence and negotiation strategies. Toddlers and preschool

children exert their influence in a very direct way, often pointing to products and occasionally grabbing them off store shelves for deposit inside their parent's shopping cart (Rust 1993). As children become more verbal in their requests, they ask for products by name, sometimes begging, screaming, and whining to get what they want (McNeal 1992). For frequently purchased items, such as snack food and cereal, children are often able to exert their influence simply by asking (Isler et al. 1987), due to parents who become more accepting of children's preferences for such items and more comfortable with the idea of occasionally yielding to those preferences.

Bargaining, compromise, and persuasion enter the picture as children make their way through elementary school. Instead of simple requests for products, which parents then accept or reject, interactions between parents and children of this age feature more mutual discussion and compromise (Rust 1993). Discussion of this sort is made possible by the fact that children are developing greater abilities to see situations from more than their own point of view, eventually being able to see multiple viewpoints, such as theirs as well as their parents, simultaneously. As we have noted, this dual perspective is characteristic of older children in the analytical stage (ages 7–11) of consumer socialization. Children are also primed to assume a more active role in purchase discussions after years of listening to their parents describe why certain requests can or cannot be honored (Palan and Wilkes 1997; Popper 1979), in effect learning to reason, persuade, and negotiate for what they want. Finally, it is also the case that extended discussions become more necessary as children shift purchase requests from inexpensive items such as candy and cereal to more expensive items, including sporting goods, clothes, and electronic goods (McNeal 1992).

By the time they reach early adolescence, and move into the reflective stage (ages 11–16), children have an entire repertoire of influence strategies available to them (Kim, Lee, and Hall 1991; Manchanda and Moore-Shay 1996; Palan and Wilkes 1997). These strategies are more sophisticated, appealing to parents in seemingly rational ways, and are used in a flexible manner to suit the situation or answer the objection of a parent. A good illustration of this sophistication is provided by Palan and Wilkes (1997) in a study of influence strategies conducted with 12–15-year-olds and their parents. Using depth interviews, the authors identified a large and diverse set of purchase influence strategies used by adolescents: (1) bargaining strategies, including reasoning and offers to pay for part of the purchase; (2) persuasion strategies, including expressions of opinions, persistent requesting, and begging; (3) request strategies, including straightforward requests and expressions of needs or wants; and (4) emotional strategies, including anger, pouting, guilt trips, and sweet talk.

Bargaining and persuasion were favorites among the group of adolescents, with emotional strategies favored least. Variations in frequency appear to be driven, in part, by which strategies adolescents perceive to be the most effective in obtaining desired items. Strategies such as reasoning

and offers to pay for part of an item are seen as very effective; strategies such as begging and getting angry are seen as least effective. The sophistication of this group is revealed in the following excerpts from depth interviews, as the first subject (male, age 13) describes the use of a bargaining strategy and the second subject (male, age 15) describes the use of a persuasion strategy:

When I got my Super Nintendo, at first it was really kind of hopeless. I said, "Dad, can I get a Super Nintendo?" even though I already had a Nintendo and a computer. He said it would depend on how I paid him back, so we have a bargain going on paying him back about \$20 a month. . . . Things that are pretty expensive that you can pay back over a period of time, those are things I negotiate deals for. (P. 161)

With my parents, if I just keep at it, I usually get it. Like with this computer. . . . I dreamed up the idea and got my parents to agree to get the computer for a family Christmas gift. I've been at it for four months now, and it's come to the point where my dad is about to pick one out. Persistence. You have to keep at it. (P. 163)

The growing sophistication of influence strategies among adolescents is consistent with our characterization of children as they move into the reflective stage. Also consistent are findings related to the way adolescents employ these influence techniques, adapting their strategies depending on what they view as most effective in influencing their parents. One way of doing so is by duplicating the strategies used by their parents for responding to their purchase requests. In the Palan and Wilkes's (1997) study, adolescents perceived reasoning as the most effective influence strategy when they came from families where parents reported the frequent use of reasoning strategies. Also perceived as effective were influence strategies that had a logical connection with the objections parents raised to a purchase request. For example, in families where parents often refused purchase requests by stating the family could not afford the item, adolescents knew it was effective to use strategies that reduced the monetary outlay, such as offers to pay for part of the item. Finally, some preliminary evidence suggests that adolescents also make adjustments in their use of influence strategies depending upon parental styles. For example, simple request strategies are used more frequently with authoritative and permissive fathers, who score high in warmth, and are used least with neglecting and authoritarian fathers, who score lower in warmth (Palan 1997).

CONSUMPTION MOTIVES AND VALUES

Consumer socialization involves more than the acquisition of knowledge and skills related to the consumer role. It also includes the learning and adoption of motives and values pertaining to consumption activities. Though a variety of motives and values might be transmitted, the focus of consumer researchers has been on undesirable outcomes of the socialization process, including orientations toward conspicuous consumption, materialism, and nonrational impulse-oriented consumption.

Materialism

One of the most enduring concerns about consumer socialization is that our culture encourages children to focus on material goods as a means of achieving personal happiness, success, and self-fulfillment. Concerns of this nature have escalated as evidence has become available pointing to a heightened level of materialism among children. Direct expenditures and purchase influence for children 4–12 years of age have virtually doubled in the last 10 years, as have marketing efforts to this age group (McNeal 1998). Media reports of assaults and thefts of items such as Nike athletic shoes and Starter athletic jackets have provided vivid portrayals of materialism among youth (Diaz 1992). Finally, longitudinal studies of materialistic values have shown a dramatic shift in focus toward materialistic life goals among high school seniors from the early 1970s through the 1980s (Easterlin and Crimmins 1991).

Understanding when and how such materialistic values form has been the central focus of consumer socialization research. Research suggests that children clearly value the possession of material goods from a very young age, sometimes favoring them above all else. A case in point is provided by Goldberg and Gorn (1978) in a study with 4–5-year-old boys. Children were divided into three groups. The first two groups saw an ad for a new toy ("Ruckus Raisers"), with the first group seeing the ad twice in one showing and the second group seeing the ad once each day for two days. A third group did not see any advertising for the new toy and served as a control group. After viewing the ad, children were given a choice between two hypothetical playmates: one described as "very nice" that did not own the new toy and one described as "not so nice" but owning the new toy. About a third of the control group selected the boy with the new toy, but 43–65 percent of the group seeing the ad for the new toy selected this playmate. Children were also asked to choose between two hypothetical play situations: playing alone with the new toy or playing in a sandbox with friends (without the toy). Again, about a third of the control group selected the new toy; but in both the experimental groups, a majority of children selected the play situation with the new toy.

Desires for material goods become more nuanced as children progress through elementary school, with material goods becoming aligned with social status, happiness, and personal fulfillment. Fueled by a greater understanding of the social significance of goods, consumption symbolism, and interpersonal relationships, materialistic values crystallize by the time children reach fifth or sixth grade (see Goldberg et al. 1997). An interesting example of this development is reported by Baker and Gentry (1996) in their study of collecting as a hobby among first and fifth graders. Though children across grades collected similar types of items—such as sports cards, dolls, and rocks—they did so for different reasons. First graders often compared their possessions to those of others in terms of quantity. Collecting appeared to be simply a way of getting more than someone else. Among fifth graders, however, the motiva-

tions for collecting had more social connotations. For example, one boy appreciated collecting as a way of making himself unique: "You have stuff that maybe nobody else does" (Jeremy, p. 136). A second boy exhibited an even greater sense of personal achievement through his collecting: "It makes me feel good about myself that I got some baseball cards that some other people don't have" (Mark, p. 136).

These differences in motives between first and fifth graders illustrate the types of changes that occur as children move from the perceptual stage (ages 3–7) to the analytical stage (ages 7–11). First graders, who are in the perceptual stage, base the value of material goods on a perceptual dimension (quantity). Fifth graders, who have moved through the analytical stage, see things quite differently by virtue of their social comparison skills. At this age, children are beginning to place value on material possessions based on their ability to elevate one's status above others or to fit into the expectations of a social group. Shifts in social development, including impression formation and social perspective-taking, set the stage for the valuation of material goods in terms of personal fulfillment and social status.

Once the stage is set for the adoption of materialistic values, the extent to which adolescents exhibit these orientations depends on several factors in their environment, such as family communication, peer communication, and television exposure. One of the most interesting sets of findings links materialism and family communication structure. Children in families with a socio-oriented communication structure, which stresses deference and harmony among families members while avoiding controversy, exhibit higher levels of materialism (Moschis and Moore 1979b). This is even the case with consensual families who balance socio-oriented communication with concept-oriented communication, which encourages children to develop their own views and think through controversies (Moore and Moschis 1981). Families high in concept-orientation, such as pluralistics, produce children with much lower levels of materialism (Moore and Moschis 1981).

Exposure to communication outside the family is also influential. In particular, materialism is higher in children who more frequently communicate with peers (Churchill and Moschis 1979; Moschis and Churchill 1978) and are more susceptible to their influence (Achenreiner 1997). Exposure to television advertising and programming has a similar effect, with higher levels of materialism reported for adolescents who watch more television (Churchill and Moschis 1979; Moschis and Moore 1982) and watch television for social utility reasons to learn about lifestyles and behaviors associated with consumer goods (Moschis and Churchill 1978; Ward and Wackman 1971). The causal direction remains unclear, however, as exposure to peers and television might encourage materialism or materialism might encourage a search for information about valued goods from sources such as peers and television advertising. Whatever the case, correlations between the amount of television viewing and materialism become insignificant in the long run when prior levels of materialism are partialled

out (Moschis and Moore 1982). Correlations between television viewing and materialism are also insignificant in the long run for families with high levels of communication about consumer matters (Moschis and Moore 1982).

In contrast to these findings, the search for demographic and socioeconomic influences on materialism has been less fruitful. Age, socioeconomic status, and birth order, among others, have been included as factors in several studies but have produced mixed results. Perhaps the only consistent findings are with regard to gender, with males reporting higher levels of materialism than females (Achenreiner 1997; Churchill and Moschis 1979).

Social and Economic Consumption Motives

Another facet of consumer socialization is the learning and subsequent adoption of motives for evaluating and selecting goods and services. In research to date, two contrasting motives for consumption have been examined: social motivations and economic motivations. Social motivations for consumption emphasize conspicuous consumption and social expression (e.g., peer approval), whereas economic motivations for consumption focus on functional and economic features of products (e.g., prices and guarantees). On a normative level, social motivations are often viewed as undesirable, with economic motivations typically viewed as more desirable socialization outcomes.

The findings regarding social consumption motives are virtually identical to those for materialism reviewed above. Stronger social motivations for consumption are positively associated with socio-oriented family communication (Moschis and Moore 1979c), higher levels of peer communication about consumption (Churchill and Moschis 1979; Moschis and Churchill 1978), greater exposure to television (Churchill and Moschis 1979; Moschis and Churchill 1978), and social utility reasons for watching television advertisements (Moschis and Churchill 1978). Social consumption motives are also reported to be higher in male than in female adolescents (Churchill and Moschis 1979).

Economic motives for consumption are influenced by many of the same factors, albeit in an opposite direction. Stronger economic motivations are negatively associated with socio-oriented family communication (Moschis and Moore 1979c), greater exposure to television (Moschis and Churchill 1978), and social utility reasons for watching television advertisements (Moschis and Churchill 1978). In contrast, economic motivations are encouraged by more frequent family communication about consumption matters (Churchill and Moschis 1979; Moschis and Churchill 1978) as well as increasing age and maturity (Churchill and Moschis 1979).

GOING FORWARD: THOUGHTS FOR FUTURE SOCIALIZATION RESEARCH

We have proposed a framework for viewing consumer socialization as progressing in a series of three stages—perceptual, analytical, and reflective—capturing major

shifts from preschool through adolescence. These stages have been characterized along a number of dimensions that characterize children's knowledge, skills, and values during childhood and adolescence (see Table 1). We have also reviewed empirical evidence consistent with these stages, documenting children's growing sophistication about products, brands, advertising, shopping, pricing, decision-making strategies, and influence approaches (see Table 2).

Clearly, we have learned a great deal about how consumer knowledge, skills, and values develop as children mature. It is also the case, however, that significant gaps remain in our understanding of consumer socialization. Going forward, significant contributions can be made by focusing our efforts in several areas related to the outcomes and influences in the socialization process, which we describe in detail below.

Socialization Outcomes

Our review of the consumer socialization literature covered five major topic areas: advertising and persuasion knowledge, transaction knowledge, decision-making skills and abilities, purchase influence and negotiation strategies, and consumption motives and values. These areas represent the outcomes of the socialization process, involving a variety of consumer knowledge, skills, and values. Going forward, opportunities exist in each area for expanding our knowledge of how consumer socialization progresses.

Advertising and Persuasion Knowledge. Despite the attention this topic has received to date, we still have much to learn about development in the period from early adolescence to adulthood. Most investigators have focused their inquiry on children under the age of 12, capturing important developments in the understanding of persuasive intent, commercial bias and deception, and attitudes toward advertising in general. Yet, the few studies examining adolescents suggest that important developments occur during this period, including an enhanced understanding of specific advertising tactics, types of bias, and social context. Further examination of these topics would contribute to our understanding of how persuasion knowledge develops, as well as providing insight for public policy concerns about adolescent response to advertising for products such as cigarettes and alcoholic beverages.

Further research would also be welcome to explore how advertising and persuasion knowledge is utilized in children's responses to persuasive communications. Existing research focuses on what children know or believe about advertising, assuming that once advertising knowledge is acquired, it will be used as a cognitive filter or defense when children are exposed to persuasive messages. Yet, the few studies that examine how advertising knowledge is actually used by children in viewing situations suggests that more attention should be paid to understanding when such knowledge is accessed and used (see Linn, Benedictis, and Delucchi 1982). The evidence to date suggests that cognitive filters and defenses against advertising may emerge during

compensatory strategies and how these strategies emerge over time. Existing research provides some clues, but empirical data are particularly limited for younger children.

Also important would be research exploring the goals children of different ages have for consumer decision making. To date, research has proceeded as if children shared the same decision-making goals as adults, such as buying the best product or making a good decision with the least cognitive effort. It may well be that young children have quite different goals in mind, such as choosing a novel product, being surprised, or having fun. This may, in fact, provide a richer explanation for some of the findings regarding age differences in decision-making skills and behavior. Evidence regarding children's goals as consumers would provide much needed insight into the decision-making process as children grow older.

Purchase Influence and Negotiation Strategies. Investigations using in-depth interviews have provided vivid examples of the growing sophistication of older children and adolescents. Observational research, often conducted in grocery stores, has provided a picture of influence attempts for very young children accompanying their parents to the store. What is missing is research focused on children between these age groups, primarily children between the ages of 6 and 11. As we have seen, much social development occurs during this period, and it would be useful to track how changes in areas such as social perspective-taking facilitate the development of purchase influence and negotiation strategies.

Also useful would be research looking at the connection between influence and negotiation strategies and other aspects of children's consumer knowledge and behavior. One example would be the relationship between purchase influence strategies and advertising knowledge. Although these areas have existed independently, it would appear that both deal with persuasion, either how to persuade someone else or how someone tries to persuade you. Another example would be the relationship between purchase influence and negotiation strategies and parent-child conflict, sometimes viewed as a negative effect of advertising to children (Atkin 1975a; Goldberg and Gorn 1978; Sheikh and Moleski 1977).

Consumption Motives and Values. The vast majority of work done in this area has been conducted with adolescents. Virtually no studies exist with younger children on the topic of social and economic motives for consumption, and only one or two studies with younger children directly address the issue of materialism. Unlike many of the other topics, the gap is in research with younger kids, not the other way around. As noted before, studies with younger children, especially those in the crucial 7–11 age period, would be useful in understanding the relationship between social and cognitive development and aspects of consumer socialization.

Also of note here is the finding of gender differences. This is perhaps the only area included in our review where

consistent gender differences have been found, with males reporting more materialistic values than females. Little attention has been directed toward the issue of gender differences in consumer socialization, resulting in a lack of conceptualization about what the differences might be in related areas such as consumption symbolism, persuasion knowledge, and the like. These differences, whatever their form, are quite likely to be more salient as children enter adolescence and are likely to have an impact on social consumption and norms more so than many of the basic types of consumer knowledge (e.g., understanding advertising intent, knowledge of multiple information sources) we have reviewed here.

Socialization Influences

Our stage view of consumer socialization focuses on age as the primary factor driving the transition from one stage to the next. Considering the vast amount of research detailing the cognitive and social development that occurs with advancing age, as well as the dominant focus on age in the consumer socialization literature, there can be little argument that age is an important factor in the socialization of children into the consumer role.

However, there can also be little argument that other factors play an important role as well. Chief among them is the social environment in which children learn to become consumers, including family, peers, culture, and mass media. Most researchers acknowledge that these types of factors contribute to a child's socialization, and, as we have seen, a number of studies include one or more of these factors. Despite this, we continue to have significant gaps in our conceptualization and understanding of exactly what role social environment and experiences play in consumer socialization.

Perhaps part of the problem is due to the accessibility of theories for understanding the role of social environment in child development. Theories certainly do exist, but are less accessible than those documenting age as a driver in cognitive and social development. Piaget, for example, included social influences as one of four major factors in cognitive development in his earlier writings, stressing the role that social interactions with peers and others had on transitions between stages. Vygotsky, a Soviet psychologist, represents an even stronger position, arguing that learning takes place only in the midst of social interaction with others within a culture (for a review, see Azmitia and Perlmutter 1989). These theoretical views, as well as newer research on contextual views of cognitive development, could provide a basis for understanding several important aspects of the social environment in which consumer socialization takes place.

In doing so, our review suggests several factors that would benefit from further examination. Going forward, we see significant opportunities to contribute to our understanding of the role that social environment plays by focusing more attention on family, peers, culture, and mass media. We consider each of these factors below.

Family. Family influences on consumer socialization seem to proceed more through subtle social interaction than purposive educational efforts by parents (Ward 1974). Parents appear to have few educational goals in mind and make limited attempts to teach consumer skills (Moschis, Moore, and Smith 1984; Ward et al. 1977). Given the more subtle nature of family influences, researchers have turned their attention to general patterns of family communication as a way to understand how the family influences the development of consumer knowledge, skills, and values. Most influential has been the typology of family communication patterns—including *laissez-faire*, protective, pluralistic, and consensual families—studied extensively by Moschis and his colleagues (e.g., Moore and Moschis 1981; Moschis and Moore 1979b; Moschis, Prahasto, and Mitchell 1986). A similar typology of parental socialization types—including authoritarian, rigid controlling, organized effective, indulgent, and neglecting parents—has been identified by Carlson and his colleagues (Carlson and Grossbart 1988; Carlson, Grossbart, and Stuenkel 1992) and has just begun to be incorporated into empirical research (Palan 1997; Palan and Laczniak 1997).

Although these typologies have provided a useful overview of the family, it would also be useful to examine the family unit at a more disaggregate level. As we have seen, it is rare for consumer researchers to break down the family communication variable into more discrete units, such as father-son or father-daughter communication. There is every reason to believe that these individual relationships have as much, if not more, influence on consumer socialization than general family characteristics. Recent demographic trends toward one-parent families make this need to disaggregate family relationships even more important.

Additionally, there is a need to examine sibling relationships as an important context for consumer socialization. Although variables such as the number of siblings or birth order have been included in a few studies to date, significant findings have yet to emerge. Again, there is a need to look at these relationships at a more detailed level, perhaps incorporating the age differences and genders of siblings and the extent of their interaction. It may be that siblings that are far apart in age or of a different gender have little influence, or that siblings exert influence in some areas of socialization but not others. For example, it is unlikely that a 9-year-old child with an older sibling will exhibit any different understanding of advertising intent than a 9-year-old child without an older sibling. But, it seems highly likely that the presence of an older sibling would accelerate the 9-year-old's knowledge of popular brand names, understanding of consumption symbolism, and maybe even materialistic attitudes.

Efforts of this nature are important for at least two reasons. First, the role of the family in socialization across a variety of domains suggests that it is more important in the area of consumer socialization than the evidence to date would suggest. Much of the existing research on family communication structure focuses on adolescents, and one would expect the family influence to be even greater with

younger children. Second, the limited evidence to date suggests that the family serves as an important buffer against undesirable media influences. For example, in the Moschis and Moore (1982) study of materialism, television exposure was positively related to materialistic values except in those families with strong communication patterns. Much of the criticism of advertising and marketing to children might be informed by a better understanding of how these influences operate and are mediated by the family environment.

Peers. Although it seems clear that peers are an important socializing influence, increasing with age as parental influence wanes (Moschis and Churchill 1978; Ward 1974), a surprisingly small amount of research exists on the topic. Most of the studies that include peer relationships have been conducted with adolescents by Moschis and his colleagues (e.g., Churchill and Moschis 1979; Moschis and Moore 1982). One of the main findings has been that peer influence operates most strongly in situations with weak family communication, socio-oriented family communication patterns, and unstable family environments.

More research on peer influence, especially with younger children, would be welcome. Both Piaget and Vygotsky, whose theories were mentioned earlier, place major emphasis on interaction with peers as an important facilitator of learning and socialization. In the consumer context, one can imagine that many aspects of socialization, including an understanding of consumption symbolism and materialism, arise from peer interaction. For example, in one of the few studies of peer group influence, Bachmann and her colleagues (Bachmann, John, and Rao 1993) found that such influence affects some types of products (public luxuries) but not others (private necessities), implicating a peer-driven influence on children's understanding of consumption symbolism. In further research, Achenreiner (1997) found that susceptibility to peer group influence was positively related to materialistic attitudes. Research along these lines could be furthered by breaking down peer relationships into factors such as frequency of interaction or age and gender parity.

Culture. A small body of literature is beginning to emerge on consumer socialization in other cultures and countries, such as China (McNeal and Yeh 1990; McNeal and Ji 1998; Williams and Veeck 1998), India (Dholakia 1984; Misra 1990), Mexico (Keillor, Parker, and Schaefer 1996), and New Zealand (McNeal, Viswanathan, and Yeh 1993). Findings from these studies have been historically descriptive in nature, but are evolving into more general pictures of socialization as the number of studies steadily increases. Many of these studies concentrate on data from only one country, but cross-cultural research is also emerging and becoming more important.

Clearly, cross-cultural research affords an opportunity to better understand differences between cultures as they relate to the influence of certain factors, such as family structure or peer relationships, in the socialization pro-

cess. For example, the influence of family structure might be investigated by comparing children from urban cities in China, where parents are allowed to have only one child, with children from countries without such restrictions or children from rural China, where the one-child policy is not as strictly enforced. Also interesting would be a comparison of only children from China, often referred to as "little emperors" due to the doting attention received from parents (Goll 1995), with only children from other countries such as the United States.

Mass Media and Marketing. No environmental factor has received more attention than advertising. The evidence to date provides strong support for the influence of television advertising on children's product preferences and choices (e.g., Atkin 1981; Galst and White 1976; Goldberg 1990; Goldberg and Gorn 1974; Goldberg, Gorn, and Gibson 1978; Gorn and Goldberg 1982; Roedder et al. 1983). Less unequivocal are the findings pertaining to the cumulative effects of advertising on children's consumption behavior, although the data support at least some modest role for advertising in children's perceptions and usage of products such as cigarettes, alcohol, and heavily sugared non-nutritious foods. Advertising fosters favorable perceptions of cigarette smoking and contributes (along with factors such as peer and family smoking behavior) to the initiation and use of cigarettes (Andrews and Franke 1991; Botvin et al. 1993; Sargent et al. 1997; U.S. Department of Health and Human Services 1994). Advertising has also been linked to demand for alcoholic beverages (Smart 1988), as well as to preferences and beliefs about heavily sugared foods (Atkin 1975b; Clancy-Hepburn, Hickey, and Neville 1974; Goldberg et al. 1978; Wiman and Newman 1989).

Despite the obvious importance of advertising as a socialization force, much could be learned by examining other aspects of mass media and marketing. In the realm of mass media, efforts to understand the influence of television program content, in addition to television advertising, would be welcome. Television programming portrays messages about the way products are used, the types of people who use them, and the social context of consumption (Wells 1997). More attention could be devoted to these subtle messages that television delivers and their effects on young consumers. In the same vein, movies deserve more attention. Movie studios and executives have, in fact, come under much recent criticism regarding cigarette smoking portrayed in many popular movies aimed at teenage audiences.

Beyond mass media, socialization research should be broadened to include other aspects of marketing programs and promotions. Free t-shirts and backpacks offered by cigarette companies as part of their loyalty programs are but one example of marketing programs that support advertising efforts and carry their own potential for influencing consumption (Sargent et al. 1997). Beach parties and contests sponsored by alcoholic beverage manufacturers are additional examples of such promotional efforts. Added to these potential influences

are the products themselves, as product development efforts and launches in categories such as alcohol and tobacco would attest. For example, the introduction and success of wine coolers, with a sweeter taste that masks the bitter undertones of alcohol, has been argued as an important gateway for teenage consumption of alcoholic beverages (Goldberg, Gorn, and Lavack 1994). Similar critiques could be leveled at new product entries such as flavored alcoholic drink mixes, flavored chewing tobacco, and light beer. The extent to which these types of products socialize adolescents into consumption of adult-oriented products has received little empirical scrutiny to date.

CONCLUSION

Twenty-five years of consumer socialization research have yielded an impressive set of findings. Based on our review of these findings, there can be no doubt that children are avid consumers and become socialized into this role from an early age. Throughout childhood, children develop the knowledge, skills, and values they will use in making and influencing purchases now and in the future.

Understanding consumer socialization will continue to be important for at least three reasons. From a theoretical perspective, it informs our ideas about consumer learning, development, and change. No other area of consumer behavior research is so focused on the process and outcomes of consumer learning that evolve over time. From a managerial perspective, consumer socialization research provides unique insight into the beliefs and behavior of an important consumer segment. Children 4–12 years of age spend over \$24 billion in direct purchases and influence another \$188 billion in family household purchases (McNeal 1998). Finally, from a public policy and societal perspective, there is probably no other topic in consumer research that holds more interest than socialization and the consumption of products such as alcohol, tobacco, and illegal drugs. Government agencies and consumer groups have had an uneven history of aggressively pursuing consumer protection for children and adolescents in these areas, but the current climate suggests that concerns and research in this area are not likely to abate anytime in the near future.

Much has been learned about the antecedents, influences, and outcomes of the consumer socialization process. Yet, much remains to be learned and the field is ripe with opportunities to conduct meaningful theoretical and applied research. Cultural changes, such as the growth of single-parent families, and technological changes, such as the Internet, suggest the need to revisit existing findings about socialization and address new concerns. It is our hope that the next 25 years of consumer socialization research are as productive as the past.

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REFERENCES

- Achenreiner, Gwen Bachmann (1995), "Children's Reliance on Brand Name Heuristics: A Developmental Investigation," unpublished dissertation, Department of Marketing and Logistics Management, University of Minnesota, Minneapolis, MN 55455.
- (1997), "Materialistic Values and Susceptibility to Influence in Children," in *Advances in Consumer Research*, Vol. 24, ed. Merrie Brucks and Deborah J. MacInnis, Provo, UT: Association for Consumer Research, 82–88.
- Adler, Richard P., Gerald S. Lesser, Lawrence Meringoff, Thomas S. Robertson, John R. Rossiter, and Scott Ward (1980), *Research on the Effects of Television Advertising on Children*, Lexington, MA: Lexington Books.
- Andrews, Rick L. and George R. Franke (1991), "The Determinants of Cigarette Consumption: A Meta-Analysis," *Journal of Public Policy and Marketing*, 10 (Spring), 81–100.
- Atkin, Charles K. (1975a), *Effects of Television Advertising on Children: First Year Experimental Evidence, Report No. 1*, East Lansing: Michigan State University, Department of Communication.
- (1975b), *Effects of Television Advertising on Children's and Mothers' Responses to Television Commercials, Report No. 8*, East Lansing: Michigan State University, Department of Communication.
- (1978), "Observation of Parent-Child Interaction in Supermarket Decision-Making," *Journal of Marketing*, 42 (October), 41–45.
- (1981), "Effects of Television Advertising on Children," in *Children and the Faces of Television: Teaching, Violence, Selling*, ed. Edward L. Palmer and Aimee Dorr, New York: Academic Press, 287–304.
- Azmitia, Margarita and Marion Perlmutter (1989), "Social Influences on Children's Cognition: State of the Art and Future Directions," in *Advances in Child Development and Behavior*, Vol. 22, ed. Hayne W. Reese, San Diego, CA: Academic Press, 89–144.
- Bachmann, Gwen Rae, Deborah Roedder John, and Akshay R. Rao (1993), "Children's Susceptibility to Peer Group Purchase Influence: An Exploratory Investigation," in *Advances in Consumer Research*, Vol. 20, ed. Leigh McAlister and Michael L. Rothschild, Provo, UT: Association for Consumer Research, 463–468.
- Bahn, Kenneth D. (1986), "How and When Do Brand Perceptions and Preferences First Form? A Cognitive Developmental Investigation," *Journal of Consumer Research*, 13 (December), 382–393.
- Baker, Stacey Menzel and James W. Gentry (1996), "Kids as Collectors: A Phenomenological Study of First and Fifth Graders," in *Advances in Consumer Research*, Vol. 23, ed. Kim P. Corfman and John G. Lynch, Jr., Provo, UT: Association for Consumer Research, 132–137.
- Barenboim, Carl (1981), "The Development of Person Perception in Childhood and Adolescence: From Behavioral Comparisons to Psychological Constructs to Psychological Comparisons," *Child Development*, 52 (March), 129–144.
- Bearden, William O., Jesse E. Teel, and Robert R. Wright (1979), "Family Income Effects on Measurement of Children's Attitudes toward Television Commercials," *Journal of Consumer Research*, 6 (December), 308–311.
- Belch, George, Michael A. Belch, and Gayle Ceresino (1985), "Parental and Teenage Influences in Family Decision Making," *Journal of Business Research*, 13 (April), 163–176.
- Belk, Russell W., Kenneth D. Bahn, and Robert N. Mayer (1982), "Developmental Recognition of Consumption Symbolism," *Journal of Consumer Research*, 9 (June), 4–17.
- , Robert Mayer, and Amy Driscoll (1984), "Children's Recognition of Consumption Symbolism in Children's Products," *Journal of Consumer Research*, 10 (March), 386–397.
- Berey, Lewis A. and Richard W. Pollay (1968), "The Influencing Role of the Child in Family Decision Making," *Journal of Marketing Research*, 5 (February), 70–72.
- Berti, Anna and Anna Bombi (1988), *The Child's Construction of Economics*, New York: Cambridge University Press.
- Bever, Thomas G., Martin L. Smith, Barbara Bengen, and Thomas G. Johnson (1975), "Young Viewers' Troubling Response to TV Ads," *Harvard Business Review*, 53 (November–December), 109–120.
- Blatt, Joan, Lyle Spencer, and Scott Ward (1972), "A Cognitive Developmental Study of Children's Reactions to Television Advertising," in *Television and Social Behavior*, Vol. 4, *Television in Day-to-Day Life: Patterns of Use*, ed. Eli A. Rubinstein et al., Washington, DC: U.S. Department of Health, Education, and Welfare, 452–467.
- Blosser, Betsy J. and Donald F. Roberts (1985), "Age Differences in Children's Perceptions of Message Intent: Responses to TV News, Commercials, Educational Spots, and Public Service Announcements," *Communication Research*, 12 (October), 455–484.
- Botvin, Gilbert J., Catherine J. Goldberg, Elizabeth M. Botvin, and Linda Dusenbury (1993), "Smoking Behavior of Adolescents Exposed to Cigarette Advertising," *Public Health Reports*, 108 (2), 217–224.
- Boush, David M., Marian Friestad, and Gregory M. Rose (1994), "Adolescent Skepticism toward TV Advertising and Knowledge of Advertiser Tactics," *Journal of Consumer Research*, 21 (June), 165–175.
- Brucks, Merrie, Gary M. Armstrong, and Marvin E. Goldberg (1988), "Children's Use of Cognitive Defenses against Television Advertising: A Cognitive Response Approach," *Journal of Consumer Research*, 14 (March), 471–482.
- Burns, Alvin C. and Peter L. Gillett (1987), "Antecedents and Outcomes of the Family Purchase Socialization Process for a Child's Toys and Games," in *1987 AMA Educators' Proceedings*, ed. Susan P. Douglas et al., Chicago: American Marketing Association, 15–20.
- Butter, Eliot J., Paula M. Popovich, Robert H. Stackhouse, and Roger K. Garner (1981), "Discrimination of Television Programs and Commercials by Preschool Children," *Journal of Advertising Research*, 21 (April), 53–56.
- Capon, Noel and Deanna Kuhn (1980), "A Developmental Study of Consumer Information-Processing Strategies," *Journal of Consumer Research*, 7 (December), 225–233.
- Carlson, Les and Sanford Grossbart (1988), "Parental Style and Consumer Socialization of Children," *Journal of Consumer Research*, 15 (June), 77–94.
- , Sanford Grossbart, and J. Kathleen Stuenkel (1992), "The Role of Parental Socialization Types on Differential Family Communication Patterns regarding Consumption," *Journal of Consumer Psychology*, 1 (1), 31–52.
- Cateora, Phillip R. (1963), *An Analysis of the Teenage Market*, Austin: University of Texas Bureau of Business Research.
- Christenson, Peter Gilbert (1982), "Children's Perceptions of TV Commercials and Products: The Effects of PSAs," *Communication Research*, 9 (October), 491–524.
- Churchill, Gilbert A. and George P. Moschis (1979), "Television

- and Interpersonal Influences on Adolescent Consumer Learning." *Journal of Consumer Research*, 6 (June), 23-35.
- Clancy-Hepburn, Katherine, Anthony A. Hickey, and Gayle Nevill (1974), "Children's Behavior Responses to TV Food Advertisements," *Journal of Nutrition Education*, 6 (July-September), 93-96.
- Corfman, Kim and Bari Harlam (1997), "Relative Influence of Parent and Child in the Purchase of Products for Children," working paper, Marketing Department, New York University, New York, 10012.
- Darley, William F. and Jeen-Su Lim (1986), "Family Decision Making in Leisure-Time Activities: An Exploratory Analysis of the Impact of Locus of Control, Child Age Influence Factor and Parental Type on Perceived Child Influence," in *Advances in Consumer Research*, Vol. 13, ed. Richard J. Lutz, Provo, UT: Association for Consumer Research, 370-374.
- Davidson, Denise (1991a), "Children's Decision-Making Examined with an Information-Board Procedure," *Cognitive Development*, 6 (January/March), 77-90.
- (1991b), "Developmental Differences in Children's Search of Predecisional Information," *Journal of Experimental Child Psychology*, 52 (October), 239-255.
- and Judith Hudson (1988), "The Effects of Decision Reversibility and Decision Importance on Children's Decision Making," *Journal of Experimental Child Psychology*, 46 (August), 35-40.
- Denney, Nancy Wadsworth (1974), "Evidence for Developmental Changes in Categorization Criteria for Children and Adults," *Human Development*, 17 (1), 41-53.
- Derscheid, Linda E., Yoon-Hee Kwon, and Shi-Ruei Fang (1996), "Preschoolers' Socialization as Consumers of Clothing and Recognition of Symbolism," *Perceptual and Motor Skills*, 82 (June), 1171-1181.
- Dholakia, Ruby Roy (1984), "Intergenerational Differences in Consumer Behavior: Some Evidence from a Developing Country," *Journal of Business Research*, 12 (March), 19-34.
- Diaz, Kevin (1992), "Symbol of Status, Target of Violence: Jackets May Put Teens in Danger," *Minneapolis Star and Tribune*, April 22.
- Donohue, Thomas R., Lucy L. Henke, and William A. Donohue (1980), "Do Kids Know What TV Commercials Intend?" *Journal of Advertising Research*, 20 (October), 51-57.
- , Timothy P. Meyer, and Lucy L. Henke (1978), "Black and White Children: Perceptions of TV Commercials," *Journal of Marketing*, 42 (October), 34-40.
- Easterlin, Richard and Eileen Crimmins (1991), "Private Materialism, Personal Self-Fulfillment, Family Life, and Public Interest: The Nature, Effects, and Causes of Recent Changes in the Values of American Youth," *Public Opinion Quarterly*, 55 (Winter), 499-533.
- Filiatrault, Pierre and J. R. Brent Ritchie (1980), "Joint Purchasing Decisions: A Comparison of Influence Structure in Family and Couple Decision-Making Units," *Journal of Consumer Research*, 7 (September), 131-140.
- Fox, Karen F. A. and Trudy Kehret-Ward (1985), "Theories of Value and Understanding of Price: A Developmental Perspective," in *Advances in Consumer Research*, Vol. 12, ed. Elizabeth C. Hirschman and Morris B. Holbrook, Provo, UT: Association for Consumer Research, 79-84.
- and Trudy Kehret-Ward (1990), "Naive Theories of Price: A Developmental Model," *Psychology and Marketing*, 7 (Winter), 311-329.
- Foxman, Ellen R. and Patriya S. Tansuhaj (1988), "Adolescents' and Mothers' Perceptions of Relative Influence in Family Purchase Decisions: Patterns of Agreement and Disagreement," in *Advances in Consumer Research*, Vol. 15, ed. Michael J. Houston, Provo, UT: Association for Consumer Research, 449-453.
- , Patriya S. Tansuhaj, and Karin Ekstrom (1989), "Family Members' Perceptions of Adolescents' Influence in Family Decision Making," *Journal of Consumer Research*, 15 (March), 482-491.
- Friestad, Marian and Peter Wright (1994), "The Persuasion Knowledge Model: How People Cope with Persuasion Attempts," *Journal of Consumer Research*, 21 (June), 1-31.
- Galst, Joann Paley and Mary Alice White (1976), "The Unhealthy Persuader: The Reinforcing Value of Television and Children's Purchase-Influencing Attempts at the Supermarket," *Child Development*, 47 (December), 1089-1096.
- Ginsburg, Herbert P. and Sylvia Opper (1988), *Piaget's Theory of Intellectual Development*, Englewood Cliffs, NJ: Prentice-Hall.
- Goldberg, Marvin E. (1990), "A Quasi-Experiment Assessing the Effectiveness of TV Advertising Directed to Children," *Journal of Marketing Research*, 27 (November), 445-454.
- and Gerald J. Gorn (1974), "Children's Reactions to Television Advertising: An Experimental Approach," *Journal of Consumer Research*, 1 (September), 69-75.
- and Gerald J. Gorn (1978), "Some Unintended Consequences of TV Advertising to Children," *Journal of Consumer Research*, 5 (June), 22-29.
- , Gerald J. Gorn, and Wendy Gibson (1978), "TV Messages for Snack and Breakfast Foods: Do They Influence Children's Preferences?" *Journal of Consumer Research*, 5 (September), 73-81.
- , Gerald J. Gorn, and Anne M. Lavack (1994), "Product Innovation and Teenage Alcohol Consumption: The Case of Wine Coolers," *Journal of Public Policy and Marketing*, 13 (Fall), 218-227.
- , Laura A. Peracchio, Gerald J. Gorn, and Gary J. Bamossy (1997), "A Scale to Measure Children's Materialism," working paper, Marketing Department, Pennsylvania State University, University Park, 16802.
- Goll, Sally D. (1995), "China's (Only) Children Get the Royal Treatment," *Wall Street Journal*, February 8, B1 and B9.
- Gorn, Gerald J. and Marvin E. Goldberg (1982), "Behavioral Evidence of the Effects of Televised Food Messages on Children," *Journal of Consumer Research*, 9 (September), 200-205.
- and Renee Florsheim (1985), "The Effects of Commercials for Adult Products on Children," *Journal of Consumer Research*, 11 (March), 962-967.
- Gregan-Paxton, Jennifer and Deborah Roedder John (1995), "Are Young Children Adaptive Decision Makers? A Study of Age Differences in Information Search Behavior," *Journal of Consumer Research*, 21 (March), 567-580.
- and Deborah Roedder John (1997), "The Emergence of Adaptive Decision Making in Children," *Journal of Consumer Research*, 24 (June), 43-56.
- Guest, Lester P. (1955), "Brand Loyalty—Twelve Years Later," *Journal of Applied Psychology*, 39 (December), 405-408.
- Hawkins, Del I. and Kenneth A. Coney (1974), "Peer Influences on Children's Product Preferences," *Journal of the Academy of Marketing Science*, 2 (Spring), 322-331.
- Haynes, Janice, Diane C. Burts, Alice Dukes, and Rinn Cloud (1993), "Consumer Socialization of Preschoolers and Kinder-

- gartners as Related to Clothing Consumption," *Psychology and Marketing*, 10 (March/April), 151-166.
- Hempel, Donald J. (1974), "Family Buying Decisions: A Cross Cultural Perspective," *Journal of Marketing Research*, 11 (August), 295-302.
- Hite, Cynthia Fraser and Robert E. Hite (1995), "Reliance on Brand by Young Children," *Journal of the Market Research Society*, 37 (April), 185-193.
- Isler, Leslie, Edward T. Popper, and Scott Ward (1987), "Children's Purchase Requests and Parental Responses: Results from a Diary Study," *Journal of Advertising Research*, 27 (October/November), 28-39.
- Jamison, David J. (1996), "Idols of the Tribe: Brand Veneration and Group Identity among Pre-Adolescent Consumers," working paper, Department of Marketing, University of Florida, Gainesville, 32611.
- Jenkins, Roger L. (1979), "The Influence of Children in Family Decision-Making: Parents' Perceptions," in *Advances in Consumer Research*, Vol. 6, ed. William L. Wilkie, Ann Arbor, MI: Association for Consumer Research, 413-418.
- John, Deborah Roedder and Ramnath Lakshmi-Ratan (1992), "Age Differences in Children's Choice Behavior: The Impact of Available Alternatives," *Journal of Marketing Research*, 29 (May), 216-226.
- and Mita Sujun (1990a), "Age Differences in Product Categorization," *Journal of Consumer Research*, 16 (March), 452-460.
- and Mita Sujun (1990b), "Children's Use of Perceptual Cues in Product Categorization," *Psychology and Marketing*, 7 (Winter), 277-294.
- and John C. Whitney, Jr. (1986), "The Development of Consumer Knowledge in Children: A Cognitive Structure Approach," *Journal of Consumer Research*, 12 (March), 406-417.
- Karsten, Yvonne Marie Cariveau (1996), "A Dynamic Systems Approach to the Development of Consumer Knowledge: Children's Understanding of Monetary Knowledge," unpublished dissertation, Department of Marketing and Logistics Management, University of Minnesota, Minneapolis, 55455.
- Keillor, Bruce D., R. Stephen Parker, and Allen Schaefer (1996), "Influences on Adolescent Brand Preferences in the United States and Mexico," *Journal of Advertising Research*, 36 (May/June), 47-56.
- Keiser, Stephen K. (1975), "Awareness of Brands and Slogans," *Journal of Advertising Research*, 15 (August), 37-43.
- Kim, Chankon, Hanjoon Lee, and Katherine Hall (1991), "A Study of Adolescents' Power, Influence Strategy, and Influence on Family Purchase Decisions," in *1991 AMA Winter Educators' Conference Proceedings*, ed. Terry L. Childers, Chicago: American Marketing Association, 37-45.
- Klayman, Joshua (1985), "Children's Decision Strategies and Their Adaptation to Task Characteristics," *Organizational Behavior and Human Decision Processes*, 35 (April), 179-201.
- Klees, Donna M., Jerry Olson, and R. Dale Wilson (1988), "An Analysis of the Content and Organization of Children's Knowledge Structures," in *Advances in Consumer Research*, Vol. 15, ed. Michael J. Houston, Provo, UT: Association for Consumer Research, 153-157.
- Levin, Stephen R., Thomas V. Petros, and Florence W. Petrella (1982), "Preschoolers' Awareness of Television Advertising," *Child Development*, 53 (August), 933-937.
- Lindquist, Jay D. (1978), "Children's Attitudes toward Advertising on Television and Radio and in Children's Magazines and Comic Books," in *Advances in Consumer Research*, Vol. 6, ed. William L. Wilkie, Ann Arbor, MI: Association for Consumer Research, 407-412.
- Linn, Marcia C., Tina de Benedictis, and Kevin Delucchi (1982), "Adolescent Reasoning about Advertisements: Preliminary Investigations," *Child Development*, 53, 1599-1613.
- Macklin, M. Carole (1985), "Do Young Children Understand the Selling Intent of Commercials?" *Journal of Consumer Affairs*, 19 (Winter), 293-304.
- (1987), "Preschoolers' Understanding of the Informational Function of Television Advertising," *Journal of Consumer Research*, 14 (September), 229-239.
- (1996), "Preschoolers' Learning of Brand Names from Visual Cues," *Journal of Consumer Research*, 23 (December), 251-261.
- Manchanda, Rajesh V. and Elizabeth S. Moore-Shay (1996), "Mom, I Want That! The Effects of Parental Style, Gender and Materialism on Children's Choice of Influence Strategy," in *1996 AMA Winter Educators' Conference Proceedings*, ed. Edward A. Blair and Wagner A. Kamakura, Chicago: American Marketing Association, 81-90.
- Mangleburg, Tamara F. and Terry Bristol (1998), "Socialization and Adolescents' Skepticism toward Advertising," working paper, College of Business, Florida Atlantic University, Fort Lauderdale, 33301.
- Markman, Ellen M. (1980), "The Acquisition and Hierarchical Organization of Categories by Children," in *Theoretical Issues in Reading Comprehension*, ed. Rand Spiro et al., Hillsdale, NJ: Erlbaum, 371-406.
- and Maureen A. Callahan (1983), "An Analysis of Hierarchical Classification," in *Advances in the Psychology of Human Intelligence*, Vol. 2, ed. Robert Sternberg, Hillsdale, NJ: Erlbaum, 325-365.
- Marshall, Helen R. (1964), "The Relation of Giving Children an Allowance to Children's Money Knowledge and Responsibility and to Other Practices of Parents," *Journal of Genetic Psychology*, 104 (March), 35-51.
- and Lucille MacGruder (1960), "Relations between Parent Money Education Practices and Children's Knowledge and Use of Money," *Child Development*, 31 (June), 253-284.
- Martin, Mary C. and James W. Gentry (1997), "Stuck in the Model Trap: The Effects of Beautiful Models in Ads on Female Pre-Adolescents and Adolescents," *Journal of Advertising*, 26 (Summer), 19-33.
- Mayer, Robert N. and Russell Belk (1982), "Acquisition of Consumption Stereotypes by Children," *Journal of Consumer Affairs*, 16 (Winter), 307-321.
- McNeal, James U. (1964), *Children as Consumers*, Austin: Bureau of Business Research, University of Texas at Austin.
- (1992), *Kids as Customers*, New York: Lexington Books.
- (1998), "Tapping the Three Kids' Markets," *American Demographics*, 20 (April), 37-41.
- and Mindy F. Ji (1998), "The Role of Mass Media in the Consumer Socialization of Chinese Children," paper presented at the Association for Consumer Research Asia-Pacific Conference, Hong Kong, June.
- and Stephen W. McDaniel (1981), "Children's Perceptions of Retail Stores: An Exploratory Study," *Akron Business and Economics Review*, 12 (Fall), 39-42.
- , Vish R. Viswanathan, and Chyon-Hwa Yeh (1993), "A Cross-Cultural Study of Children's Consumer Socialization in Hong Kong, New Zealand, Taiwan, and the United States."

- Asia Pacific Journal of Marketing and Logistics*, 5 (3), 56–69.
- and Chyon-Hwa Yeh (1990), "Taiwanese Children as Consumers," *Asia-Pacific International Journal of Marketing*, 2 (2), 32–43.
- Meyer, Timothy P., Thomas R. Donohue, and Lucy L. Henke (1978), "How Black Kids See TV Commercials," *Journal of Advertising Research*, 18 (October), 51–58.
- Misra, Pranesh (1990), "Indian Children: An Emerging Consumer Segment," *Journal of the Market Research Society*, 32 (2), 217–225.
- Moore, Roy L. and George P. Moschis (1978), "Family Communication Patterns and Consumer Socialization," paper presented at the Mass Communication and Society Division, Association for Education in Journalism Annual Convention, Seattle, WA, August.
- and George P. Moschis (1981), "The Role of Family Communication in Consumer Learning," *Journal of Communications*, 31 (Autumn), 42–51.
- and Lowndes F. Stephens (1975), "Some Communication and Demographic Determinants of Adolescent Consumer Learning," *Journal of Consumer Research*, 2 (September), 80–92.
- Moore-Shay, Elizabeth S. and Richard J. Lutz (1997), "Kids' Consumption: How Do Children Perceive the Relationships between Advertisements and Products?" working paper, Office of Research, College of Commerce and Business Administration, University of Illinois, Urbana-Champaign, 61820.
- Moschis, George P. (1985), "The Role of Family Communication in Consumer Socialization of Children and Adolescents," *Journal of Consumer Research*, 11 (March), 898–913.
- (1987), *Consumer Socialization: A Life-Cycle Perspective*, Lexington, MA: Lexington Books.
- and Gilbert A. Churchill, Jr. (1978), "Consumer Socialization: A Theoretical and Empirical Analysis," *Journal of Marketing Research*, 15 (November), 599–609.
- and Linda G. Mitchell (1986), "Television Advertising and Interpersonal Influences on Teenagers' Participation in Family Consumer Decisions," in *Advances in Consumer Research*, Vol. 13, ed. Richard J. Lutz, Provo, UT: Association for Consumer Research, 181–186.
- and Roy L. Moore (1979a), "Decision Making among the Young: A Socialization Perspective," *Journal of Consumer Research*, 6 (September), 101–112.
- and Roy L. Moore (1979b), "Family Communication and Consumer Socialization," in *Advances in Consumer Research*, Vol. 6, ed. William L. Wilkie, Ann Arbor, MI: Association for Consumer Research, 359–363.
- and Roy L. Moore (1979c), "Family Communication Patterns and Consumer Socialization," in *1979 AMA Educators' Conference Proceedings*, ed. Neil Beckwith et al., Chicago: American Marketing Association, 226–230.
- and Roy L. Moore (1982), "A Longitudinal Study of Television Advertising Effects," *Journal of Consumer Research*, 9 (December), 279–286.
- and Roy L. Moore (1983), "A Longitudinal Study of the Development of Purchasing Patterns," in *1983 AMA Educators' Proceedings*, ed. Patrick E. Murphy et al., Chicago: American Marketing Association, 114–117.
- , Roy L. Moore, and Ruth B. Smith (1984), "The Impact of Family Communication on Adolescent Consumer Socialization," in *Advances in Consumer Research*, Vol. 11, ed. Thomas C. Kinnear, Provo, UT: Association for Consumer Research, 314–319.
- , Andjali E. Prahasto, and Linda G. Mitchell (1986), "Family Communication Influences on the Development of Consumer Behavior: Some Additional Findings," in *Advances in Consumer Research*, Vol. 13, ed. Richard J. Lutz, Provo, UT: Association for Consumer Research, 365–369.
- Nakajima, Yoshiaki and Miho Hotta (1989), "A Developmental Study of Cognitive Processes in Decision Making: Information Searching as a Function of Task Complexity," *Psychological Reports*, 64 (February), 67–79.
- Nelson, James E. (1979), "Children as Information Sources in Family Decision to Eat Out," in *Advances in Consumer Research*, Vol. 6, ed. William L. Wilkie, Ann Arbor, MI: Association for Consumer Research, 419–423.
- Otnes, Cele, Young Chan Kim, and Kyungseung Kim (1994), "All I Want for Christmas: An Analysis of Children's Brand Requests to Santa Claus," *Journal of Popular Culture*, 27 (Spring), 183–194.
- Paget, K. Frome, D. Krittr, and L. Bergemann (1984), "Understanding Strategic Interactions in Television Commercials: A Developmental Study," *Journal of Applied Developmental Psychology*, 5 (April–June), 145–161.
- Palan, Kay M. (1997), "The Role of Parental Style on Adolescent-Parent Interactions in Family Decision Making," working paper, Marketing Department, Iowa State University, Ames, 50011.
- and Russell N. Laczniak (1997), "The Relationship between Advertising Exposure and Children's Influence Strategies While Shopping: A Conceptualized Model," working paper, Marketing Department, Iowa State University, Ames, 50011.
- and Robert E. Wilkes (1997), "Adolescent-Parent Interaction in Family Decision Making," *Journal of Consumer Research*, 24 (September), 159–169.
- Palmer, Edward L. and Cynthia N. McDowell (1979), "Program/Commercial Separators in Children's Television Programming," *Journal of Communication*, 29 (Summer), 197–201.
- Payne, John, James R. Bettman, and Eric J. Johnson (1993), *The Adaptive Decision Maker*, Cambridge: Cambridge University Press.
- Peracchio, Laura A. (1992), "How Do Young Children Learn to Be Consumers? A Script-Processing Approach," *Journal of Consumer Research*, 18 (March), 425–440.
- (1993), "Young Children's Processing of a Televised Narrative: Is a Picture Really Worth a Thousand Words?" *Journal of Consumer Research*, 20 (September), 281–293.
- Popper, Edward T. (1979), "Mothers Mediation of Children's Purchase Requests," in *1979 AMA Educators' Proceedings*, ed. Neil Beckwith et al., Chicago: American Marketing Association, 645–648.
- Reid, Leonard N. (1978), "The Impact of Family Group Interaction on Children's Understanding of Television Advertising," *Journal of Advertising*, 8 (Summer), 13–19.
- Reisman, David and Howard Roseborough (1955), "Careers and Consumer Behavior," in *Consumer Behavior*, Vol. 2, *The Life Cycle and Consumer Behavior*, ed. Lincoln Clark, New York: New York University Press, 1–18.
- Ritson, Mark and Richard Elliott (1999), "The Social Uses of Advertising: An Ethnographic Study of Adolescent Advertising Audiences," *Journal of Consumer Research*, 26 (December), 260–277.
- Robertson, Thomas S. and John R. Rossiter (1974), "Children and

- Commercial Persuasion: An Attribution Theory Analysis," *Journal of Consumer Research*, 1 (June), 13-20.
- , John R. Rossiter, and Terry C. Gleason (1979), "Children's Receptivity to Proprietary Medicine Advertising," *Journal of Consumer Research*, 6 (December), 247-255.
- Roedder, Deborah L. (1981), "Age Differences in Children's Responses to Television Advertising: An Information Processing Approach," *Journal of Consumer Research*, 8 (September), 144-153.
- , Brian Sternthal, and Bobby J. Calder (1983), "Attitude-Behavior Consistency in Children's Responses to Television Advertising," *Journal of Marketing Research*, 20 (November), 337-349.
- Ross, Rhonda P., Toni Campbell, John C. Wright, Aletha C. Huston, Mabel L. Rice, and Peter Turk (1984), "When Celebrities Talk, Children Listen: An Experimental Analysis of Children's Responses to TV Ads with Celebrity Endorsement," *Journal of Applied Developmental Psychology*, 5 (July-September), 185-202.
- Rossiter, John R. (1976), "Visual and Verbal Memory in Children's Product Information Utilization," in *Advances in Consumer Research*, Vol. 3, ed. Beverlee B. Anderson, Ann Arbor, MI: Association for Consumer Research, 572-576.
- and Thomas S. Robertson (1974), "Children's TV Commercials: Testing the Defenses," *Journal of Communication*, 24 (Autumn), 137-144.
- and Thomas S. Robertson (1976), "Canonical Analysis of Developmental, Social, and Experiential Factors in Children's Comprehension of Television Advertising," *Journal of Genetic Psychology*, 129 (December), 317-327.
- Rubin, Ronald S. (1974), "The Effects of Cognitive Development on Children's Responses to Television Advertising," *Journal of Business Research*, 2 (October), 409-419.
- Rust, Langbourne (1993), "Observations: Parents and Children Shopping Together," *Journal of Advertising Research*, 33 (July/August), 65-70.
- Sargent, J., M. A. Dalton, M. Beach, A. Bernhardt, D. Pullin, and M. Stevens (1997), "Cigarette Promotional Items in Public Schools," *Archives of Pediatric and Adolescent Medicine*, 151 (12), 1189-1196.
- Selman, Robert L. (1980), *The Growth of Interpersonal Understanding*, New York: Academic Press.
- Sheikh, Anees A. and Marvin L. Moleski (1977), "Conflict in the Family over Commercials," *Journal of Communication*, 27 (Winter), 152-157.
- Siegler, Robert S. and Eric Jenkins (1989), *How Children Discover New Strategies*, Hillsdale, NJ: Erlbaum.
- Smart, Reginald G. (1988), "Does Alcohol Advertising Affect Overall Consumption? A Review of Empirical Studies," *Journal of Studies on Alcohol*, 49 (4), 314-323.
- Soley, Lawrence C. and Leonard N. Reid (1984), "When Parents Control Children's TV Viewing and Product Choice: Testing the Attitudinal Defenses," in *Marketing Comes of Age: Proceedings of the Annual Meeting of the Southern Marketing Association*, Boca Raton, FL: Southern Marketing Association, 10-13.
- Stephens, Lowndes and Roy L. Moore (1975), "Price Accuracy as a Consumer Skill," *Journal of Advertising Research*, 15 (August), 27-34.
- Stephens, Nancy and Mary Ann Stutts (1982), "Preschoolers' Ability to Distinguish between Television Programming and Commercials," *Journal of Advertising*, 11 (2), 16-26.
- Strauss, Anselm (1952), "The Development and Transformation of Monetary Meanings in the Child," *American Sociological Review*, 17 (June), 275-286.
- Stutts, Mary Ann, Donald Vance, and Sarah Hudleson (1981), "Program-Commercial Separators in Children's Television: Do They Help a Child Tell the Difference between *Bugs Bunny* and the *Quik Rabbit*?" *Journal of Advertising*, 10 (Spring), 16-25.
- Swinyard, William R. and Cheng Peng Sim (1987), "Perception of Children's Influence on Family Decision Processes," *Journal of Consumer Marketing*, 4 (Winter), 25-38.
- Szybillo, George J. and Arlene K. Sosanie (1977), "Family Decision Making: Husband, Wife and Children," in *Advances in Consumer Research*, Vol. 4, ed. William D. Perreault, Ann Arbor, MI: Association for Consumer Research, 46-49.
- , Arlene K. Sosanie, and Aaron Tenenbein (1977), "Should Children Be Seen but Not Heard?" *Journal of Advertising Research*, 17 (December), 7-13.
- Tootelian, Dennis H. and Ralph M. Gaedeke (1992), "The Teen Market: An Exploratory Analysis of Income, Spending, and Shopping Patterns," *Journal of Consumer Marketing*, 9 (Fall), 35-44.
- Turner, Josephine and Jeanette Brandt (1978), "Development and Validation of a Simulated Market to Test Children for Selected Consumer Skills," *Journal of Consumer Affairs*, 12 (Winter), 266-276.
- U.S. Department of Health and Human Services (1994), *Preventing Tobacco Use among Young People: A Report of the Surgeon General*, Atlanta: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, Office on Smoking and Health.
- Ward, Scott (1972), "Children's Reactions to Commercials," *Journal of Advertising Research*, 12 (April), 37-45.
- (1974), "Consumer Socialization," *Journal of Consumer Research*, 1 (September), 1-14.
- , Greg Reale, and David Levinson (1972), "Children's Perceptions, Explanations, and Judgments of Television Advertising: A Further Explanation," in *Television and Social Behavior*, Vol. 4, *Television in Day-to-Day Life: Patterns of Use*, ed. Eli A. Rubinstein et al., Washington, DC: U.S. Department of Health, Education, and Welfare, 468-490.
- and Daniel B. Wackman (1971), "Family and Media Influences on Adolescent Consumer Learning," *American Behavioral Scientist*, 14 (January/February), 415-427.
- and Daniel B. Wackman (1972), "Children's Purchase Influence Attempts and Parental Yielding," *Journal of Marketing Research*, 9 (November), 316-319.
- , Daniel B. Wackman, and Ellen Wartella (1977), *How Children Learn to Buy*, Beverly Hills, CA: Sage.
- Wartella, Ellen, Daniel B. Wackman, Scott Ward, Jacob Shamir, and Alison Alexander (1979), "The Young Child as Consumer," in *Children Communicating: Media and Development of Thought, Speech, Understanding*, ed. Ellen Wartella, Beverly Hills, CA: Sage.
- Wells, William D. (1997), "Narratives in Consumer Research," working paper, School of Journalism and Mass Communication, University of Minnesota, Minneapolis, 55455.
- and Leonard A. LoSciuto (1966), "Direct Observation of Purchasing Behavior," *Journal of Marketing Research*, 3 (August), 227-233.
- Whitney, Paul and Seth Kunen (1983), "Development of Hierar-

- chical Conceptual Relationships in Children's Semantic Memories," *Journal of Experimental Child Psychology*, 35 (April), 278-293.
- Williams, Laura A. and Ann Veeck (1998), "An Exploratory Study of Children's Purchase Influence in Urban China," paper presented at the Association for Consumer Research Asia-Pacific Conference, Hong Kong, June.
- Wiman, Alan R. (1983), "Parental Influence and Children's Responses to Television Advertising," *Journal of Advertising*, 12 (1), 12-18.
- and Larry M. Newman (1989), "Television Advertising Exposure and Children's Nutritional Awareness," *Journal of Academy of Marketing Science*, 17 (Spring), 179-188.
- Young, Brian M. (1990), *Television Advertising and Children*, New York: Oxford University Press.