A study examined the effects of factors (including television, family, peers, age, and socioeconomic status) on consumer socialization, the process by which individuals develop consumption-related cognitions and behaviors. The specific criterion variables studied included consumer affairs knowledge, puffery filtering, consumer finance management, and brand preferences. Initial questionnaires were administered to 556 subjects in grades six through twelve, and a second wave of questionnaires was given to a subsample of 230 students 14 months later. The results indicated that the amount of television viewing was related positively to adolescents' discontent with the consumption process and with their attitudes toward the marketplace. It was negatively related to puffery filtering. The family appeared to play a relatively minor role in the development of consumer skills. Peer communication about consumption was associated positively with consumer discontent. The more money the youths had available, the more likely they were to expect to purchase major items in the near future. Upper class adolescents were more likely than their lower class counterparts to be able to filter puffery in advertising, as were first born youths. Age was positively associated with brand preference, ability to manage consumer finances, and level of consumer affairs knowledge.
A LONGITUDINAL STUDY OF CONSUMER SOCIALIZATION

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A LONGITUDINAL STUDY OF CONSUMER SOCIALIZATION

The study of consumer socialization, the process by which individuals develop consumption-related cognitions and behaviors, usually involves examination of the effects of various sources of consumer information or "socialization agents" (e.g., family, television, peers, and school) on the development of consumer orientations. Unfortunately, such effects can merely be inferred from correlational evidence in cross-sectional studies (e.g. Adler 1977, Ward 1974).

Definite answers on the effects of socialization agents on the development of consumer behavior require evidence of concomitant variation, time order of occurrence, and lack of alternative explanations (Seltiz et al. 1959). Cross-sectional studies do not allow assessment of the directionality of the influence (cf. Robertson, Rossiter and Gleason 1979), while time order of occurrence addressed in several experimental studies of TV advertising effects (e.g. Goldgerg, Gorn and Gibson 1978, Goldberg and Gorn 1979) raise questions of external validity (e.g. Murray 1980) and permanence (Adler 1977). In addition, alternative explanation of the effects of socialization agents have been suggested by several researchers. For example, changes in the youth's consumer behavior may be due to either cumulative exposure to advertising as the person grows older, due to learning from significant others or due to maturation and experience (Adler 1977).

While several important research questions concerning consumer socialization require longitudinal research designs (e.g. Adler 1977), nearly all previous research studies have been either cross-sectional or experimental. A few longitudinal studies have examined only the formation and persistence of brand loyalty but excluded the effects of socialization agents (e.g., Guest 1955 and 1964, Fauman 1966, Arndt 1971, Madison Avenue, 1980). Thus, although longitudinal research is often advocated, it is seldom used to study consumer socialization (e.g., Ward 1979, McLeod 1974).
This article presents the results of a longitudinal study designed to assess the effects of socialization agents, both in the short run as well as in the longer run, on a wide variety of consumption-related orientations.

**BACKGROUND**

Research into the acquisition of thought and action patterns that comprise consumer behavior is based mainly on two models of human learning: the cognitive development model and the social learning model. The cognitive development approach essentially views learning as a cognitive psychological process of adjustment to one's environment with age as a proxy variable for cognitive development. The social learning model, on the other hand, focuses on "socialization agents" which transmit attitudes, motivations and values to the learner. Learning is assumed to take place during the person's interaction with socialization agents in various social settings.

Previous studies of consumer learning have used a conceptual framework of consumer socialization based upon the two main socialization theories (Moschis and Moore 1978 and 1979; Moschis and Churchill 1978; Churchill and Moschis 1979). The conceptual model incorporates five different types of variables: learning properties, age or life cycle position, social structural variables, socialization agents and learning processes (Moschis and Churchill 1978). The five variables are classified as either "antecedent variables," "socialization process" or "outcomes".

Antecedent variables include social structural variables that locate the individual in his social environment as well as developmental variables. Examples of social structural variables are social class, race, sex and education, while developmental variables are normally limited to either age or life cycle. Socialization processes refer to agent-learner relationships, which incorporate the specific agent and learning process. Socialization agents often
include mass media, parents, peers and school, while learning processes include modeling (imitation of learner's behavior), reinforcement (positive or negative) and social interaction (it may include both modeling and reinforcement).

Outcomes in the model include consumer knowledge, attitudes and norms. Such orientations can be categorized into those properties that help the person function in any given social system and are socially desirable and those properties that are related to the individual's behavior regardless of the social demands, including socially undesirable orientations.

This research examines the effects of socialization agents and antecedent variables whose importance has been suggested by previous research (e.g. Moschis 1981, Ward 1974). They include respectively: television, family, peers, and school; and available money, age, sex, race, socioeconomic status and birth order. The specific criterion variables studied include several variables used in previous cross-sectional and experimental studies: consumer affairs knowledge, puffery filtering, consumer finance management, attitude toward the marketplace, consumer discontent, brand preferences, and purchase expectations (e.g. Moschis and Churchill 1978, Moschis and Moore 1978 and 1979).

METHODS

Sample

A two-wave panel study of adolescents with a little over one-year lag provided an opportunity to explore relationships between the selected dependent and independent variables. Adolescents from several cities and towns in five counties in urban, suburban, semirural and rural Georgia in junior and senior high schools were asked to participate in a longitudinal study by completing anonymous, self-administered questionnaires. Specific schools were selected after personal interviews with school officials to ascertain schools demographically representative of their respective regions.
Questionnaires were administered to 556 eligible respondents in sixth through twelfth grades in March (T1); a second wave of questionnaires was administered to a subsample of 230 of the original students approximately 14 months later (T2). Several of the students in the first wave were not included in the second wave due to graduation, absence or relocation. Matching of the questionnaires was done using the respondent’s birthdate and other demographics, whenever necessary. The sample was generally representative of the area with respect to sex (44% males, 56% females) age (57% middle schoolers and 43% high schoolers), race (14% black and 86% white) and socioeconomic status measured on Duncan’s (1976) scale (mean=50.3). These demographic characteristics are not very different from the characteristics of samples used in previous studies of consumer socialization. Because some of the questionnaires were incomplete or had errors in birthdays, the final usable sample consisted of 211 respondents.

Although these demographic characteristics are fairly representative of youths in their respective regions, differences in socialization between those who completed both surveys ("respondents") and those who only completed one ("nonrespondents") were still possible. To determine whether the two groups were affected differently by these processes, the equality of the regression coefficient was tested for each criterion variable using Chow’s (1960) F test. The results suggested no major differences between the two groups.

**Definition and Measurement of Variables**

In order to compare the findings to those of previous studies, variables and measurements used in the present study were similar to those of previous studies using cross-sectional designs. Table 1 summarizes information on variables used in this study, including operational definition, measure, and number of items included in the construct. Names shown in parenthesis in the Table 1
refer to studies that have a similar variable and measure. Alpha reliability coefficient was used to assess the reliability of the scales (Nunnally 1967).

**ANALYSIS AND RESULTS**

**Cross-Sectional Analysis**

Cross-sectional analysis, in line with previous consumer socialization research (e.g., Moschis and Moore 1978 and 1979, Moschis and Churchill 1978, Moore and Stephens 1975, Ward and Wackman 1971), involved computation of multiple regression coefficients between each of the criterion variables and the independent variables measured at the same point in time ($T_1$). Table 2 shows the results of this analysis.

The amount of television viewing is related positively to the adolescent's discontent with the consumption process ($b=.15$, $p<.05$). Television advertising viewing appears to be a stronger predictor than exposure to advertising. It is positively associated with consumer discontent ($b=.13$, $p<.05$) and attitudes toward the marketplace ($b=.21$, $p<.01$); it is negatively related to puffery filtering ($b=-.14$, $p<.05$).

The family appears to play a relatively minor role in the development of consumer skills in the short run, since family communication about consumption was not related to any of the variables examined. Peer communication about consumption was associated positively with consumer discontent, suggesting that peers may serve as sources of negative consumer attitudes toward the marketplace ($b=.15$, $p<.05$). Similarly, the number of consumer-related courses an adolescent takes at school may affect the level of his/her dissatisfaction with the marketplace ($b=.18$, $p<.01$), suggesting that such courses may make adolescents aware of unfair business practices.

The more money the youth has available, the more likely s/he is to expect to purchase major items in the near future ($b=-.15$, $p<.05$), suggesting that
money availability may create short-run need for instant gratification. White adolescents are likely to develop expectations about the purchase of main products earlier than their black counterparts (b=-.15, p<.05).

Upper class adolescents are more likely than their lower class counterparts to be able to filter puffery in advertising (b=.13, p<.05) and to manage consumer finances (b=.15, p<.05). Similarly, first-born youths are more likely than later borns to be able to filter puffery in advertising (b=.20, p<.01).

Finally, maturation appears to be a strong short-term predictor of consumer socialization. Age was positively associated with brand preferences (b=.17, p<.01), ability to manage consumer finances (b=.15, p<.05) and the adolescent's level of consumer affairs knowledge (b=.28, p<.001).

**Longitudinal Analysis**

Longitudinal analysis in line with previous research (e.g., Atkin, Greenberg, Korzeny and McDermott 1979), involved computation of multiple regression coefficients between the independent variables measured at Time 1 (T1) and each of the criterion variables measured approximately fourteen months later (T2). Because the effects of socialization agents in the long run may differ by previous levels of consumer learning (Moschis and Moore 1982), regression coefficients were also computed after including in the regression as an independent variable the corresponding dependent variable measured at T1. The results of this analysis are also shown in Table 2.

While exposure to television had low correlations with the dependent variables, television advertising viewing had a negative impact on the adolescent's ability to filter puffery in advertising (b=-.14, p<.05) and his level of knowledge about consumer matters (b=-.19, p<.01). Television advertising viewing was positively related to the respondent's dissatisfaction with the marketplace (b=.16, p<.05).
While family communication about consumption had no short-run effects, this predictor was positively linked to the adolescent's level of brand preferences (b=.15, p<.05) and to his ability to filter puffery in advertising (b=.15, p<.05). However, the effects of family communication on puffery filtering were weakened when the measure of puffery filtering at T1 was included in the analysis (b=.12, p<.07), suggesting that family influence may be contingent upon previous learning levels. Interaction with peers about consumption matters, on the other hand, produced no long-run effects on the respondent's level of consumer learning.

Consumer-related courses taken at school were a strong predictor of the adolescent's level of knowledge about consumer matters (b=.13, p<.05). This relationship weakens (b=.09, n.s.) when the measure of consumer affairs knowledge at T1 is introduced into the analysis as an independent variable. On the other hand, while the relationship between formal consumer education and the youth's ability to manage finances approaches significance (b=.11, p<.10), the relationship becomes significant (b=.13, p<.05) after the measure of this variable at T1 enters into the analysis as an independent variable.

The more money an adolescent has available, the greater the level of his/her knowledge (b=.14, p<.05), suggesting that opportunities for consumption are likely to affect one's level of knowledge about consumer matters. However, this relationship becomes insignificant when consumer knowledge measured at T1 enters into the analysis as an independent variable, suggesting that such learning may be affected by previous levels of knowledge.

While sex differences were not detected, some racial differences emerged. Specifically, blacks showed lower levels of consumer knowledge than their white counterparts (b=-.27, p<.001) and they had less favorable attitudes toward the marketplace (b=-.13, p<.05), although this relationship
becomes insignificant after introducing measure of attitudes at T1 into the analysis (b=-.10).

Upper social class adolescents are more likely than their lower class counterparts to be able to filter puffery in advertising (b=.18, p<.01) and to expect to purchase major products at specific stages in their life (b=.15, p<.05). Also, first born adolescents are better able than later born youths to filter puffery in advertising (b=.16, p<.05). However, birth order effects on puffery filtering become insignificant when puffery filtering measured at T1 enters into the analysis. First-born adolescents were found to have higher levels of knowledge about consumer matters than their later-born counterparts (b=-.13, p<.05). Finally, unlike the results of cross-sectional analysis, age was found to be a weak predictor of consumer socialization.

DISCUSSION

In line with the results of previous studies (e.g., Moschis and Churchill 1978, Moore and Stephens 1975, Ward and Wackman 1971) specific motivations for television advertising viewing proved to be a better predictor than crude measures of the amount of television (exposure). Some family influences emerged in the long run, while the effects of peer interaction on the dependent variables examined were minimal. However, one cannot draw conclusions regarding the relative influence of socialization agents due to the limited number and types of dependent variables examined -- i.e. effects tend to vary depending upon the dependent variable examined (cf. Moschis and Churchill 1978).

Unlike a large number of previous cross-sectional studies, including the results of the present cross-sectional analysis, that found no relationship between the number of consumer-related courses taken at school and the youth's development of consumer skills (e.g., Langrehr and Mason 1977, Moschis and Churchill 1978, Moschis and Moore 1978), the results of this study
suggest that the adolescent's experiences in the classroom may take time before being manifested into higher consumer competencies. In addition, the extent of learning at school may be contingent upon previous levels of consumer learning.

The differential influence of antecedent variables and maturation suggests that the effects of these variables may differ at different points in a person's life and under different circumstances, including levels of previous learning and interaction with socialization agents. The results suggest that such variables may play a significant role in consumer socialization. Future research could analyze the effects of socialization agents by level of antecedent variable as well as direct and indirect effects on the development of consumption-related orientations.

Unlike previous studies of consumer socialization that have relied on cross-sectional analyses, this research utilized a longitudinal design. The results, when compared to those obtained from cross-sectional analysis, are rather different. Furthermore, the effects of independent variables in several instances are confounded by previous levels of learning. A more fruitful approach in future research may be to operationalize the dependent variables in relative terms (e.g. knowledge gain, attitude change) rather than using absolute measures.

The differences found between cross-sectional and longitudinal analyses may be attributed to the directionality of influence and/or permanence of learning. For example, positive attitudes toward marketing stimuli may lead respondents in the short run to watch TV ads than vice versa. Alternatively, presence of short-term effects and absence of longer-term effects may be attributed to short-term learning (lack of permanence),
whereas absence of short-term effects may be due to some mediating variable or lag time required for learning to occur (e.g. "sleeper effect").

While it did not examine all possible variables related to consumer behavior, the study provides at least partial answers to questions raised by previous researchers regarding short-term versus longer-term effects of socialization agents and possible effects of previous learning on later learning (Adler 1977). The results suggest that short-term effects may differ from longer-term effects. Consumer socialization researchers should be alert to these differences. It is also possible that other time intervals may produce different results. Finally, longitudinal designs allow one to analyze the effects of previously learned cognitions on later learning; and they generally appear to be superior to the rather simplistic cross-sectional designs which have produced much of the present knowledge regarding consumer socialization.
REFERENCES


### TABLE 1
**DESCRIPTION OF THE VARIABLES**

<table>
<thead>
<tr>
<th>CONSTRUCT</th>
<th>OPERATIONAL DEFINITION</th>
<th>MEASURE</th>
<th>NUMBER OF ITEMS</th>
<th>RELIABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Explanatory Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Television Viewing</td>
<td>Adolescent's frequency of viewing specific program categories.</td>
<td>3 point every day—never scale. Category such as &quot;movie&quot; and &quot;cartoons.&quot;</td>
<td>7</td>
<td>.69</td>
</tr>
<tr>
<td>2. TV Advertising Viewing</td>
<td>Motivations to watch TV ads as means of gathering information about life styles and behaviors associated with use of consumer products.</td>
<td>4 point very often—never scale. Items such as: &quot;I watch TV ads to find out what things to buy to impress others.&quot;</td>
<td>7</td>
<td>.90</td>
</tr>
<tr>
<td>3. Family Communication About Consumption</td>
<td>Overt interaction between parent and adolescent concerning goods and services.</td>
<td>5 point very often—never scale. Items such as: &quot;My parents and I talk about buying things.&quot;</td>
<td>7</td>
<td>.62</td>
</tr>
<tr>
<td>4. Peer Communication About Consumption</td>
<td>Overt peer—adolescent interactions concerning goods and services.</td>
<td>3 point very often—never scale. Items such as &quot;My friends and I talk about buying things.&quot;</td>
<td>8</td>
<td>.80</td>
</tr>
<tr>
<td>5. Formal Consumer Education</td>
<td>Number of consumer-related courses taken at school.</td>
<td>Summated index of the number of courses respondent completed in the following areas: consumer education, home economics, economics, environmental sciences, guidance and &quot;other&quot;.</td>
<td>6</td>
<td>.54</td>
</tr>
<tr>
<td>6. Available income</td>
<td>Total disposable income.</td>
<td>Dollars available weekly from work, allowance and other sources.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>B. Criterion Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Consumer Affairs Knowledge</td>
<td>Cognition held with respect to basic terms in economics, insurance, finance, real estate and marketing; knowledge of consumer legislation in the areas of unit pricing, bait advertising, code dating, and remedies available to consumers.</td>
<td>0 to 11 point accuracy index representing correct answers to statements such as &quot;you buy stock, you own part of a company.&quot; &quot;True-False—Don't Know&quot; response alternatives.</td>
<td>23</td>
<td>.64 .62</td>
</tr>
<tr>
<td>2. Puffery Filtering</td>
<td>Ability to discriminate facts from exaggerations in advertising.</td>
<td>0-12 point accuracy index representing correct responses to advertising claims measured on &quot;believe it is mostly true—mostly untrue&quot; scales. Items consisted various amounts of puffery as determined in a pretest. Examples: &quot;Bayer works wonders.&quot; (Puffery)</td>
<td>23</td>
<td>.57 .53</td>
</tr>
<tr>
<td>3. Finance Management</td>
<td>Ability to correctly estimate amount of average family's monthly budget ($1,000) going for food, clothes, home expenses, automobile other expenses and savings.</td>
<td>6 to 30 point accuracy index representing the degree of accuracy for each of the six items on a 3 point scale.</td>
<td>6</td>
<td>.61 .52</td>
</tr>
<tr>
<td>4. Attitude toward the Marketplace</td>
<td>Cognitive and affective orientation toward various marketing stimuli (advertising, stores, prices, salespeople and general attitude toward businesses).</td>
<td>5 point agree-disagree scale. Items such as: &quot;Salespeople help you buy those things that are best for you.&quot;</td>
<td>3</td>
<td>.72 .62</td>
</tr>
<tr>
<td>5. Consumer Discontent</td>
<td>Cognitive and affective orientation toward products and product performance following purchase.</td>
<td>3 point agree-disagree scale. Items such as: &quot;Some things I buy do not work as well as they are supposed to.&quot;</td>
<td>6</td>
<td>.77 .72</td>
</tr>
<tr>
<td>6. Brand Preferences</td>
<td>Affective orientations toward brands of randomly selected products representing major consumption categories.</td>
<td>0-12 point index representing existence of favorite brand. Items such as: &quot;Coffee ____, with respondent filling in a favorite brand.</td>
<td>12</td>
<td>.83 .80</td>
</tr>
<tr>
<td>7. Purchase Expectations</td>
<td>Stage in life cycle of purchase of strategic items is anticipated. (Arndt 1975)</td>
<td>0 to 24 point index measuring deferment of 8 purchases. 1 = before getting married, 2 = after getting married, 3 = after having children.</td>
<td>11</td>
<td>.87 .59</td>
</tr>
</tbody>
</table>
### Table 2

**Short-term and Long-term Relationships between Explanatory Variables and Consumer Skill Measures**

<table>
<thead>
<tr>
<th>Independent Variables (T₁)</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brand Preference</td>
</tr>
<tr>
<td></td>
<td>T₁</td>
</tr>
<tr>
<td><strong>TV Exposure</strong></td>
<td>.03</td>
</tr>
<tr>
<td><strong>TV Ad Viewing</strong></td>
<td>.11</td>
</tr>
<tr>
<td><strong>Family Communication</strong></td>
<td>.63</td>
</tr>
<tr>
<td><strong>Peer Communication</strong></td>
<td>.02</td>
</tr>
<tr>
<td><strong>Consumer Ed Courses</strong></td>
<td>.05</td>
</tr>
<tr>
<td><strong>Available Income</strong></td>
<td>.06</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td>-.01</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>-.01</td>
</tr>
<tr>
<td><strong>SES</strong></td>
<td>-.03</td>
</tr>
<tr>
<td><strong>Birth Order</strong></td>
<td>-.02</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>.17*</td>
</tr>
<tr>
<td><strong>Multiple R</strong></td>
<td>.25</td>
</tr>
</tbody>
</table>

**Note:** Table entries are standardized regression coefficients (beta-weights) between the independent variables and the fourteen dependent variables. Asterisk (*) denotes that the variable in the equation accounts for a significant amount of variance in the dependent variable (p = .05). Coefficients are rounded off to the nearest decimal point.