CHAPTER 7
RESEARCH ON FACTORS RELATED TO FINANCIAL SOCIALIZATION: AN ANNOTATED BIBLIOGRAPHY

by

Jonathan J. Fox, Ph.D.
Suzanne Bartholomae, M.S.
The Ohio State University

Introduction and Summary

The research on children's understanding of family finance can be described within the context of a consumer socialization model. Consumer socialization is defined as "the process by which young people acquire skills, knowledge and attitudes relevant to their functioning in the marketplace" (Ward, 1980, p.380). Consumer socialization models describe the learning process as the outcome of socialization processes, which are structured by antecedent variables. Socialization processes include the collection of life events and personal interactions giving children the opportunity to develop financial skills and knowledge.

An illustrative example of consumer learning through the financial socialization process would be playing an online stock market game. Presumably, understanding of market fluctuations, trading strategies, and the importance of portfolio allocation decisions would be the potential learning output from playing the game. Clearly, there are critical elements that need to be in place before the game can be played. Antecedents such as access to a computer and the Internet, computer skills, a basic understanding of stocks, and a school assignment related to the game will likely proceed the potential socialization agent of the Stock Market Game.

The antecedents or exogenous variables in financial learning typically include descriptions of social structural, demographic and life cycle events characterizing the natural endowments of the student. The 1997 Jump$tart *Personal Financial Survey* included parents' income, highest level of parents' education, student educational, occupational and income aspirations and expectations, gender and race, along with information on the characteristics of the high school, all of which could be considered antecedents in the socialization process. Research on consumer socialization identifies several other antecedents to socialization processes including age or life cycle stage, age or life cycle stage of the parent, birth order, household structure, student ability and aptitude, and adolescent values and beliefs.

Socialization processes are those opportunities that a child engages in that contribute to their acquisition of financial skills and knowledge. Socialization opportunities come from individual, organizational or institutional agents that children come into contact with or maintain a relationship with. Typical socialization agents making up a child's milieu are peers, school, family and the media. The 1997 Jump$tart *Personal Financial Survey* included sources of financial information, self perception of financial knowledge relative to others, and experiences with financial institutions through credit, banking, insurance and investments.

Other socialization agents found to impact financial learning and understanding include families, schools, employers, peers and the media. The economic role of adolescents has changed with changes in family structure. Dual-income earner families, single-parent families and families facing economic hardship offer new challenges and opportunities for adolescents (Doss, Marlowe, & Godwin 1995; Furnham & Thomas, 1984; Rabow & Rodriguez, 1993). Family agents have been studied through evaluating the impact on knowledge of allowance systems, co-shopping, direct child observation of parents, general parenting style, and family communication patterns. Schools are potential agents through the offering of formal programs in consumer and financial education. Employment and earnings outside of the home have been linked to better financial understanding. Peers and the media have been shown to be some of the most influential factors in adolescent consumer socialization.

The majority of studies on learning about economic concepts focus on the impact of age and movement through developmental stages. While age is an active variable in many studies, clearly there is little variance in the Jump$tart sample and age is not a question that needs to be considered. However, many of the antecedent and socialization agents relate to what may have happened to students while passing through critical developmental stages. As children pass through the stages of economic understanding, their experiences are marked by differences in opportunities and endowments. In the following section we attempt to identify the opportunities that young people may have had while growing up and learning about money. Opportunities are defined by a combination of events and personal characteristics that give the child a chance to learn.

Factors Predicting Financial Socialization and Proposed Measures of These Factors

Note: The numbers in parentheses in this section refer to the literature described in the section entitled "Financial Socialization Literature," which appears later in this chapter.

I. Antecedent Factors

A. Life Cycle Characteristics

- Based on Piaget, the development of children's beliefs about the concept of money increases in stages and with age, representing the incremental nature of acquiring economic concepts. (7, 17, 52)
- The age of the child was associated with development of economic concepts. (12, 35)
- Understanding of the role of wages and investments increased with age, but age wasn't influential in other knowledge areas, indicating an inconsistency. (27)
- Students in lower class ranks and under age 30 had lower levels of financial knowledge. (14)
- Family communication regarding consumption decreased with age. (15)
- More complex consumer skills were better grasped by older children and adolescents than by younger children. (43, 54)
- Overt parent-child communication and positive reinforcement regarding consumption decreased with age. (44)
- Age was a strong predictor of consumer knowledge and skills. (44, 45, 56)
- Older adolescents had greater ability to manage finances, greater levels of consumer knowledge, and engaged in more consumer activities. (46)
- Older adolescents scored higher on all dependent measures of consumer competencies. (47)
- Age was not a strong predictor of understanding of economic concepts. (55)
- Age was the strongest predictor for 20 of 24 consumer behavior outcomes. (57)

- Comparing younger and older adolescents, no developmental differences were found on consumer learning dimensions. (59)
- Age differences were found in the amount of family communication about consumption, with younger adolescents communicating more than older ones. (57)

1997 Jump$tart *Personal Financial Survey*
What is your high school class level?
a) senior
b) junior
c) sophomore
d) freshman

Recommendation: Low priority. Implement the survey to all classes to test for age differences and developmental aspects of financial literacy.

B. Family Structure

- Male adolescents with mothers who were married saved less. (2)
- Children overestimated their fathers' influence in household decision making. (5)
- No differences were found in the sources of income, or patterns of spending, saving, or giving of adolescents among dual-earner parents, single parents, and single-earner parents. (18)
- More realistic notions of money developed from economic hardship in the family, from divorce, and in families after divorce. (51)
- Mothers' consumer behavior was important for the consumer skills of older children. (57)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: High priority.

Are your biological parents:
a) married and living together
b) never married and living together
c) never married and not living together
d) divorced
e) separated
f) widowed

C. Socioeconomic Status

- Students of lower economic means scored lower on a consumer knowledge test. (11)
- More middle class than working-class adults thought children should be given pocket money, and working-class adults thought money should be received at a later age. (28)
- Knowledge of money increased with socioeconomic status. (39)

- Socioeconomic status was related to greater consumer knowledge and higher levels of materialism. (42)
- Middle class adolescents were better managers of consumer finances, better at discerning advertising puffery, and strongly motivated by economics for consumption. (45)
- Significant age and socioeconomic status interaction (lower class adolescents had a change in consumer attitudes, whereas middle class attitudes were stable) and gender and socioeconomic status (middle class females had greater consumer ability than lower class) interaction was found in relation to adolescent consumer skills. (46)
- Higher socioeconomic status adolescents had greater financial management skills. (46)
- Higher socioeconomic status adolescents scored higher on four of seven dependent measures of consumer competencies and engaged in more peer communication regarding consumption than lower class students. (47)
- High school students from a higher socioeconomic status saved more. (50)
- Latino college students from impoverished backgrounds had educational and career goals that were more clearly defined than a White sample. (51)
- Socioeconomic status was not a strong predictor of understanding of economic concepts. (55)
- Occupation of the household did not make a difference in consumer skills. (56)

1997 Jump$tart *Personal Financial Survey*
What is your best estimate of your parents' total income last year? Consider annual income from all sources before taxes.

a) less than $20,000
b) $20,000 to $39,999
c) $40,000 to $79,999
d) $80,000 or more
e) don't know

Recommendation: In case students aren't knowledgeable about parents' salary, perhaps their perception of their socioeconomic status should be assessed instead.

Do you think your family is...

a) very poor
b) poor
c) middle class
d) a little rich
e) very rich

D. Gender

- Males saved less than females. (2)
- Women had lower levels of financial knowledge than men. (14)
- No gender differences were found in peer communication about consumption. (15)

- Minimal gender variation was found in the understanding of economic concepts among British children. (27)
- Girls were more likely to be given an allowance, yet monetary practices didn't differ between genders. (31)
- Women score slightly higher on average than men on a financial literacy exam. (36)
- Males had greater levels of newspaper reading, socio-orientation and materialism. but lower concept orientation. (42)
- Males communicated less with parents about consumption, received less positive reinforcement, yet had greater levels of consumer knowledge than females. (44)
- Males had greater levels of consumer knowledge than females. (45, 56)
- Males were more knowledgeable about consumer issues, more socially motivated for consumption, more materialistic, and engaged in less consumer activism than women. (46)
- Males were more knowledgeable with regard to price accuracy and legal knowledge and had less communication regarding consumption with parents compared to females. (47)
- Adolescents who had to spend more on necessities were more likely to be female. Those who spent more on discretionary items were likely to be male. (50)
- Female high school students saved more than males. (50)

1997 Jump$tart *Personal Financial Survey*
What is your sex?
a) male
b) female

E. Race

- Whites scored higher than minorities in most knowledge areas. (10)
- African Americans and Hispanics scored lower on a consumer knowledge test than Whites. (11)
- Whites scored higher than Asian, Hispanic, African and Native Americans. (36)
- Whites had lower scores on concept orientation compared to Blacks. (42)
- Less observation of parental modeling of consumer behavior and lower levels of consumer knowledge were found among Blacks, but they were more likely to perform positive consumer activity than Whites. (44)
- White high school students saved more. (50)
- Black adolescents were more likely to have to spend more on necessities. Whites spent more on discretionary purchases. (50)
- Compared to a White sample, Hispanics were more knowledgeable about the importance of money and better able to manage it. (51)

1997 Jump$tart *Personal Financial Survey*
How do you describe yourself?

a) White or Caucasian
b) Black or African American
c) Hispanic American
d) Asian American
e) Native American or American Indian
f) other

F. Parent Education

- Mother's education was not associated with economic understanding. (1)
- Parent education was related to scores on a financial literacy exam. (36)
- Knowledge of money increased with parent education. (39)
- Adolescents whose mothers had a high school education or less were less likely to receive an allowance. (4)
- High school students whose parents had greater levels of education saved more. (50)

1997 Jump$tart *Personal Financial Survey*
What is the highest level of schooling your father or mother completed?

a) neither completed high school
b) completed high school
c) some college
d) college graduate or more than college
e) don't know

Recommendation: Medium priority. Break out question individually for mother and father.

What is the highest level of schooling your father completed?

a) did not complete high school
b) completed high school
c) some college
d) college graduate or more than college
e) don't know

What is the highest level of schooling your mother completed?

a) did not complete high school
b) completed high school
c) some college
d) college graduate or more than college
e) don't know

G. Age of Parent

- Younger adults appeared to be more likely to withhold money as punishment and younger adults were more in favor of linking allowances to chores. (28)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: Low priority as an addition.
How old is your mother?
How old is your father?

H. Birth Order

- Being first born appeared to have an effect on consumer outcomes, but was not associated with family communication about consumption. (15)
- Birth order had little effect on consumer decision making style. (53)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: Low priority.
In your family, what number child are you? ______

I. Family Size

- Number of siblings had little effect on consumer decision making style. (53)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: Low priority.
How many siblings do you live with?

a) one
b) two
c) three
d) four
e) five
f) six or more

J. Ability and Aptitude

- Better math skill students had better economic understanding. (1, 11)
- Concept of money required more abstract thinking with the use of logic and mathematical concepts. (7)
- Weak reading skills were associated with lower scores on consumer knowledge test. (11)
- Cognitive capacity is suggested as an impact on conceptual capacity or the ability to understand economic concepts. (21)
- Students' previous academic performance led to better performance in a personal financial management class. (20)

- School grades had a positive association with influence on family purchasing decisions (level of influence was found to be associated with knowledge). (22)
- Achievement conformity, work ethic, and mastery had a positive indirect impact on money beliefs. (33)
- Knowledge of money was positively related to IQ. (39)
- High school students with higher cognitive ability and school grades saved more. (50)
- Adolescents who had to spend more on necessities received lower cognitive test scores and grades, and adolescents who spent more on discretionary items received lower grades. (50)
- Intelligence was not a strong predictor of understanding of economic concepts. (55)
- Family plays an important role in cognitive ability (which impacts consumer skills). (57)
- Intelligence was a significant predictor of recall of advertising for younger and older adolescents. (59)

Recommendation: Medium priority addition.
What is your current grade point average (GPA)? _____

In my classes at school I ...

a) get mostly As
b) get mostly Bs
c) get mostly Cs
d) get mostly Ds
e) get mostly Fs

What were your SAT and/or ACT scores? _____Math SAT _____Verbal SAT _____ACT

K. Educational and Occupational Aspirations

- Students planning to attend vocational schools scored lower on a consumer knowledge test. (11)
- Academic major influenced performance on consumer knowledge test. (14)
- Previous academic performance influenced performance in personal finance class. (20)
- Subjects studied in school impacted economic values or knowledge. (26)
- Student with no plans for post-secondary education scored lower than other high school seniors. (36)
- Adolescents who had to spend their allowance on necessities tended to have greater aspirations related to education. (40)
- High school students planning for college saved more. (50)
- Adolescents who had to spend more on necessities did not place a lot of importance on success in the work world, whereas those spending more on discretionary income placed importance on jobs, not school. (50)

1997 Jump$tart *Personal Financial Survey*
What are your educational plans after high school?

a) no further education is planned
b) attend a 2-year college or junior college
c) attend a 4-year college or university
d) other plans for training or education
e) don't know

What type of work do you intend to do when you finish school?

a) manual work such as truck driver, laborer, farm worker
b) skilled trade such as plumber, electrician
c) service worker such as secretary, food service worker, office worker, police officer, firefighter
d) professional worker such as nurse, computer programmer, lawyer, doctor, teacher, engineer
e) other or don't know

When you start to work full-time, after you finish your education, how much do you expect to make per year before deductions for taxes and other items?

a) under $15,000
b) $15,000 to $19,999
c) $20,000 to $29,999
d) $30,000 or more
e) don't know

Recommendation: Low priority.
What do you plan to major in when you get to college?

a) business
b) liberal arts
c) sciences
d) other
e) undecided
f) not planning to attend college

L. Adolescent Values and Beliefs

- Achievement conformity, work ethic, and mastery had a positive indirect impact on money beliefs. (33)
- Identifying with an organization impacted money beliefs of college students. (33)
- Adolescents who received a larger amount of allowance had earlier plans for marriage and exhibited greater risk taking. (40)
- High school students with an internal locus of control saved more. (50)
- Political beliefs highly correlated with money attitudes. (25, 26, 35)

- Urban children compared to children raised in a kibbutz had similar understanding of economic concepts, yet urban kids held capitalist views, whereas kibbutz kids held socialist views. (34)
- Feelings of efficacy did not impact financial competency. Students who felt that they understood finances did not perform better than students who did not. (36)
- Adolescents who had to spend more on necessities were more likely to have an external locus of control. (50)

1997 Jump$tart *Personal Financial Survey*
Compared to other people your age, how much do you feel you know about managing your money?
a) more than most
b) about the same as most
c) less than most
d) don't know

Recommendation: Low priority.
How would you describe your political beliefs?
a) conservative
b) moderate
c) liberal
d) don't know

II. Socialization Agents

Relatives, financial professionals, financial companies, teachers, computer software, the Internet, friends, television and radio were reported as sources of financial information. (3)

1997 Jump$tart *Personal Financial Survey*
Where did you learn most about managing your money?
a) at home from my family
b) at school in class
c) from talking with my friends
d) from magazines, books, TV and the radio
e) from experience in managing my own funds

Recommendation: High priority. Break out sources of learning into questions that follow for each socialization agent.

A. Family as Agent

- Parents were found to be positive socialization agents. (53)
- Family was found to have an influence independent of cognitive ability on consumer skills. (57)
- Younger adults appeared to be more likely to withhold money as punishment and were more in favor of linking allowances to chores. (28)

1. Allowances

- Source of money impacts behavior. (18, 19)
- Allowance not contingent on work or grades etc. increased economic understanding. (1, 39)
- Money received whenever needed and money for chores was not associated with economic understanding. (1)
- Receiving money as gifts impacted savings. (18)
- The amount of money received didn't influence economic values. (26)
- Hermann suggests that too much money for discretionary spending impairs the effective learning of money management skills, suggesting that too much spending money may have a negative impact on socialization. (30)
- Children who receive an allowance versus those who don't did not differ in their money management practices. (31)
- Girls were more likely to receive allowances than boys. (31)
- There was no difference in financial knowledge between children who received allowances and those who did not. (38)
- Adolescents who received allowances as earned income had more household responsibilities, received a smaller amount than those who received entitled allowances and were less likely to spend it on necessities. (40)
- Allowance had a positive impact on consumer decisions made by 8- to10-year-olds, however children who received payment for chores did not exhibit good consumer behavior. (49)
- Children who worked for money and received an allowance demonstrated more discriminating consumer behavior. (49)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: High priority addition.
How would you describe the allowance you received when growing up?

a) I did not receive a regular (weekly or monthly) allowance. I was given money only when I needed it.
b) I received a regular allowance that depended on the completion of some household chores.
c) I received a regular allowance and did not have to perform chores for it.

2. Co-Shopping and Co-Decision Making

- Children were least influential in decisions related to financial issues in all product categories (5) and involved only in decisions impacting the purchase of lower priced items intended for use by child. (23)
- Children had little influence in the process of family decision making yet perceived their influence to be greater than it actually was by parental reports. (5, 23)
- Mothers tended to report attitudes that reflected trust and expected financial responsibility of children. (28)
- Mother-child interaction was positively related with consumer skills for younger children. (57)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: Medium priority addition.
To what extent do you agree with this statement: I am involved in my family's financial decision making.

a) strongly agree
b) agree
c) neither agree or disagree
d) disagree
e) strongly disagree

3. Learning by Observing Parent

- Several participants indicated that observing their parents was mainly how they learned about money management. (8)
- Children of parents who manage money wisely will be more financially literate. (39)
- Observation of parental consumer behaviors and positive reinforcement were associated with consumer role perceptions and consumer activity. (44)
- High school students saved more if their parents planned the use of their money, saved more for general purposes and saved more for college. (50)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: Low to medium priority addition.
My parents discuss family money matters in front of me…

a) never
b) rarely
c) sometimes
d) often

4. Parent Styles

- Parenting style did not impact the level of consumption autonomy granted by mothers. Authoritative and permissive parents interacted more with children by communicating about consumption and shopping with them. Shopping and media use were controlled by authoritative parents. (13)
- Parents who gave an allowance gave their children more experience with money and had greater agreement with their children on the things money was spent on. (38)
- Adolescents who received allowances had parents who were more autocratic in decisions regarding the amount of allowance and other allowance-related decisions. (40)
- Adolescents from pluralistic homes were significantly more competent in terms of consumer competencies and were less materialistic compared to other family communication pattern (FCP) types. Adolescents from consensual FCPs were significantly more materialistic. (42)

- Concept-oriented FCPs led to significant differences in newspaper exposure, whereas socio-oriented FCPs led to more television viewing (which led to greater materialism). (42)
- Parenting style based on FCPs didn't contribute to adolescent consumer socialization, however their practices (e.g., overt communication regarding consumption, use of reinforcement) differed. (44)
- Children who received gentle versus heavy-handed guidance and children who were held to high economic expectations appeared to make better consumer decisions. (49)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: Medium priority.
Please indicate your level of agreement or disagreement with the statement: My parents withheld money as punishment and/or gave money as reward.

a) strongly disagree
b) agree
c) neither agree or disagree
d) disagree
e) strongly disagree

5. Family Communication

- Family communication about consumption increased with the amount of television viewing. (15)
- Parent teaching impacts the way a child acquires economic concepts. (21)
- Adolescents had more influence in a concept-oriented family communication environment. (22)
- Consumer knowledge and perceptions of product importance were positively associated with influence in decisions. (22)
- Family communication about consumption was a positive predictor of consumer learning. (43)
- Overt parent-child communication was positively associated with consumer role perception and consumer activity. (44)
- Males communicated less with their parents about consumption than females. (44)
- Family communication about consumption was a significant predictor of consumer activism, but not of level of knowledge, ability to manage finances or materialism. (46)
- Family communication about consumption was a significant predictor of seven competencies related to skills and knowledge. (47)
- A positive relationship between consumption interaction (defined as parent-adolescent communication) and consumer activity was found. (48)
- Family communication about consumption was related to consumer behavior, suggesting this to be a social process. (59)

1997 Jump$tart ***Personal Financial Survey:*** No question.

Recommendation: Medium priority (question 1) and low priority (question 2).
My parents and I discuss issues related to money:

a) never
b) rarely
c) sometimes
d) often

My parents have direct discussions about family budgeting with me:

a) never
b) rarely
c) rarely, but only for major financial decisions
d) rarely, but only for minor financial decisions
e) often

B. School as Agent

- Increased financial planning understanding occurred after taking a 7-unit curriculum on financial planning. (9)
- Students of financial planning class felt more confident with their financial knowledge. (9)
- Low scores on a consumer knowledge exam were a result of inadequate consumer education. (10, 11)
- The amount of formal consumer education was not significantly related to any of the seven consumer skills tested (e.g., knowledge, ability to manage finances). (46, 47)
- Students who reported learning about managing money primarily in school and who resided in states with mandated consumer or financial education did not perform better on a financial literacy examination. (36)
- Consumer education was found to be a positive socialization agent in utilitarian consumer orientation. (53)
- Concluded that social learning processes rather than direct education are relevant to consumer socialization. (58)

1997 Jump$tart ***Personal Financial Survey:*** No question.

Recommendation: High priority.
How would you describe the classes you have had in personal finance?

a) never had a course
b) had one class session as part of another class
c) had 2-5 class sessions
d) had 5 or more class sessions
e) had an entire course

Any additional indicators of school quality (funding per student, student-teacher ratio, scoring on standardized exams, college placement) can help explain the value of the school as a potential socialization agent.

C. Employment as Agent

- Saving is more likely to occur among adolescents who earn all of their income. This study makes a case for the importance of the source of income. (6)
- Students with little work experience had lower levels of financial knowledge. (14)
- Kids with a full-time job for summer perceived their knowledge as higher. (3)
- The amount of money saved was positively associated with level of earnings. (18)
- The amount adolescents gave to others was greater if their sources of money came from earnings or gifts. (18)
- Children who earned money managed money differently and saved more regularly than non-earners. (31)
- Boys reported greater earnings in the past year than girls. (38)
- Older adolescents employed part-time tended to believe that workers received fair treatment. (26)
- Adolescents who had to spend more on necessities had greater hourly earnings, as did adolescents who spent more on discretionary items. (50)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: High priority.
How would you describe your employment history?

a) never formally employed outside the home
b) worked part-time during summer and/or school year
c) worked full-time during the summer and/or school year

D. Peer as Agent

- Peer communication about consumption increased with television viewing. (15)
- No gender differences were found in peer communication about consumption. (15)
- Consumer affairs knowledge, social motivation for consumption, and materialism were positively related to adolescents' peer communication. (46)
- Peers were associated will six of seven consumer competencies. (47)
- Peers had a negative effect on consumer socialization because their influence was positively related to social/conspicuous orientation and other undesirable orientations. (53)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: Low priority.

How often do you discuss product, commercials and/or issues related to money with your friends?

a) never
b) rarely
c) sometimes
d) often

E. Media as Agent

- Family communication about consumption increased the amount of television viewing. (15)
- Newspaper exposure was a positive predictor of consumer skills among middle school students. (43)
- Amount of television viewing was positively related to social motivations for consumption and negatively related to attitudes toward prices and economic motivations for consumption. (46)
- Social motivations for watching television were a positive predictor of consumer affairs knowledge, materialism, and economic motivations for consumption. (46)
- Newspaper reading was the strongest positive predictor of consumer skills, ability to manage finances, consumer affairs knowledge, consumer activism, favorable attitudes towards prices, and economic motivations for consumption. (46)
- Frequency of watching television was related to consumer role conceptions, but not to six other consumer measures. (47)
- Print media was found to be a positive agent in adolescent socialization. (53)
- Interactions were found between age and media usage as the media impacts consumer learning. Older adolescents' television viewing was predictive of consumer learning, whereas magazine reading was positively predictive for younger adolescents. (59)

1997 Jump$tart *Personal Financial Survey:* No question.

Recommendation: Medium to high priority.
Of the following types of media, which do you use *most* in making financial decisions?

a) newspapers, books, magazines
b) the Internet
c) television
d) radio
e) materials from financial institutions

F. Marketplace and Financial Institutions as Agent

- Low competency scores resulted from little experience of college students in the marketplace. (10, 21)
- Experience with credit card use, checking and savings accounts and auto insurance was shown to positively impact scores. (10)

- The relative inexperience of college students with personal finances led to low knowledge levels of tax, life insurance and investment, and higher levels of understanding of automobile insurance and apartment leasing. (14)
- Lack of marketplace experience was associated with lower scores on knowledge test. (11)
- The larger amount of money received from parents led to more spending on required and discretionary purchases, suggesting that greater amounts of money lead to consumer experience, which leads to consumer learning. (18)
- Experience with finances did not translate into better understanding of finances. (36)
- College seniors majoring in business management who were involved with their own personal finances were more knowledgeable about personal finance. (37)
- Children with significant money experience, children with money to spend, and children who saved were more knowledgeable. (39)
- For high school students, weekly spending was a positive predictor of consumer learning (price accuracy). (43)
- Frequency of television viewing was related to consumer role conceptions (one of seven competencies measured). (47)
- Age changes in the economic understanding of children (older children had more complex thoughts) was attributed to child experiences, increased role behaviors, and decreased egocentrism. (52)

1997 Jump$tart *Personal Financial Survey*

Whose credit card do you use?

a) my own
b) my parents'
c) both my own and my parents'
d) none, I don't use a credit card

Do you have an ATM (automated teller machine) card?

a) yes
b) no

Which of the following best describes your automobile driving?

a) I don't have a driver's license.
b) I have a driver's license but no car in the family that I can drive.
c) I drive the family car, which is used by others, and help pay for the insurance.
d) I drive the family car, which is used by others, and don't help pay for the insurance.
e) I drive my own car and help pay for the insurance.
f) I drive my own car and don't help pay for the insurance.

Recommendation: Medium priority. Avoid the driving content and refocus the question on insurance decisions that reflect financial experience.

What kind of bank account do you have?

a) I don't have a bank account.
b) I have a savings account but no checking account.
c) I have a checking account but no savings account.
d) I have both a savings and a checking account.

Do you own stocks or mutual funds either in your own name or in your parents' name?

a) No, I own neither.
b) I own stocks, but no mutual funds.
c) I own mutual funds, but no stocks.
d) I own both stocks and mutual funds.

Recommendation: Low to medium priority.

What percent of your family budget do you feel as though you have significant control over? _____

At what age did you open your first savings account (if you don't have an account, enter "no account"? _____________

Financial Socialization Literature

1. **Abramovitch, R.J., Freedman, L., & Pliner, P. (1991). Children and money: getting an allowance, credit versus cash, and knowledge of pricing. *Journal of Economic Psychology, 12,* 27-45.**
This was an experimental study of 120 Canadian youths equally distributed in three age groups (6, 8 and 10 years old). Children were given $4 in either cash or credit and allowed to shop at an experimental store. Subjects could keep all monies not spent. Differences in spending between those spending cash and credit were interpreted as economic understanding. Children who received allowances showed no difference in spending between credit and cash, implying a better understanding of money. Those not receiving an allowance spent significantly more on credit. A second measure of economic sophistication was based on pricing knowledge, where children receiving allowances again demonstrated better understanding of money. These differences in pricing knowledge were observed only in the younger children. Younger children with better math skills also demonstrated better price knowledge. Girls spent more in the experimental store than boys, but the authors concluded that this is likely a result of the merchandise available in the store. Neither family income, receiving money for chores, receiving money whenever needed, the mother's education, nor parent assessment of maturation was associated with economic understanding. The authors proposed that non-contingent allowances lead to understanding of money as children are involved in, and trusted in, family budget decisions.

2. **Alhabeeb, M.J. (1996). Teenagers' money, discretionary spending and saving. *Financial Counseling and Planning*, *7*, 123-132.**
This study investigated individual and family characteristics of teen spending and saving. A 29-item questionnaire (11 items relating to individual and family demographic and socioeconomic status characteristics, and 18 items relating to teens' money and work) was administered to a sample of 423 mostly non-White (29 percent Hispanic, 27 percent Black, 13 percent others) middle and high school students (12-16 years old) from three socioeconomic levels. Four OLS models, with dependent variables of expenditures in dollars in three spending categories (food, drink, snacks; clothing and personal care; entertainment) and savings, revealed several significant findings. Age was related to the spending categories and not savings. Teens spent less on the food, drink, snack category as they got older and more on entertainment, clothing and personal care. Gender was significant for two of the four categories, with males spending less on clothing and personal care and saving less than females. Having a job increased the amount of spending on food, drink and snacks, with no significant association with other categories. Receiving an allowance decreased the spending on food, drink, snacks, clothing and personal care. A little more than two-thirds of the sample received an allowance and over three-quarters worked 10 hours or less. Among family characteristics, as family size increased, more was spent on the food, drink and snacks category. The older the mother, the more money teens spent on clothing and personal care. Teens with a single mother spent less on clothing and personal care and saved less. Mothers' race (being White) was negatively associated with entertainment spending. Family income (middle versus low) was positively associated with the amount spent on clothing/personal care and entertainment. Gender (being male) and marital status (married mothers) had a negative association with savings. Teens' perception of peer spending influenced spending or saving, however respondents' satisfaction with their own spending, specifically those who thought they spent too little, spent more on entertainment. Adjusted R^2s ranged from 5 percent (savings equation) to 14 percent (entertainment equation). This article provided a review of studies on children's spending, teen's money and market, and the consumer and financial socialization of children.

3. American Savings Education Council. (1999). ***Youth & Money 1999: Results of the 1999 Youth and Money Survey.*** **Washington, DC.**

Of the 21 percent of students who had taken a personal finance course, self-evaluation of knowledge was higher, however, there was no observable difference in financial behavior. Only 15 percent of students felt that they understood financial matters very well and only 18 percent thought that they did a very good job of managing their money. Twenty-three percent made a monthly budget and stuck to it. Of those who report very good money management, only 39 percent kept a monthly budget. Twenty-eight percent of students maintain a balance on their credit card. Forty-two percent of students did not like dealing with large financial institutions. Of those taking a financial education course, 41 percent had begun a savings program, 28 percent had increased savings, 20 percent invested differently after the course, and 19 percent had developed a budget. More than 9 of 10 students reported their parents as a financial information source, most often discussing jobs, paying for college, setting financial goals, saving and investing, major purchases, and household budgeting. Other significant sources of financial information were relatives, materials from financial companies, financial professionals, written materials, teachers, computer software, the Internet, friends, television and radio. College students felt that they understood finances better than high school students and there were no gender differences in perceived understanding of finances. Students whose parents had a higher economic status and those working full-time during the preceding summer reported a "very good" understanding of financial issues more frequently. Many students with positive self-appraisals actually demonstrated poor financial behaviors. No analysis of the factors contributing to the actual understanding of finances was conducted.

4. Atkin, C.K. (1978). Observation of parent-child interaction in supermarket decision making. ***Journal of Marketing*, *42*, 41-45.**

Through "unobtrusive observation" of the interaction between parents and children in supermarket shopping for breakfast cereal, Atkin found cereal choice to be more frequently initiated by children (66 percent of the time). There were no gender differences in initiation rates, and older children were more successful in obtaining the desired cereal. Female and middle class children were slightly more influential in the decision making process. The shopping behavior of 516 families with children between the ages of 3 and 12 were observed.

5. Belch, G.E., Belch, M.A. & Ceresino, G. (1985). Parental and teenage child influences in family decision making. ***Journal of Business Research*, *13*, 163-176.**

Examining 260 families from a west coast metropolitan area, this multi-informant study investigated the family decision making process across stages (initiation, search and evaluation, final decision) and across product categories (television, automobile, vacation, household appliance, furniture, breakfast cereal). The study found the influence of father, mother and child (mean age equaled 17) to vary by product category, stage in the decision making process, and the decision area (e.g., style, make, model, when and where to purchase, how much to spend). Children had little influence in the process of family decision making. Children had the greatest influence regarding breakfast cereal, minimal influence on family vacation decisions, and little influence over any of the other products. With regard to the stages in the decision process, for all categories except the automobile decision, children had greatest influence in the initiation stage, and lower influence in the other two stages. Children were more influential in the initial two stages, followed by a drop in influence in the final automobile decision. With regard to the decision area, children were least influential in decisions related to financial issues (e.g., how much to spend) and most influential in product attributes (e.g., style, model). Evaluating family members' perception of their amount of influence in the decision making process, children overestimated their fathers' influence (compared to the fathers' and mothers' reports) and perceived their own involvement to be greater than it actually was as reported by parents.

6. **Belk, R.W., Rice, C., & Harvey, R. (1984). Adolescents' reporting of saving, giving and spending as a function of sources of income. *Advances in Consumer Research, 12,* 42-46. In E.C. Hirschman and M.B. Holbrook (eds.), Provo UT: Association for Consumer Research.**
This study investigated 13- and 14-year-olds'sources of income, expenditures and the relationship between the two. Among a sample of 122 7th graders primarily from blue-collar families, gender and family income differences were found in the source of income. Boys were more likely to receive money from relatives or a summer job compared to girls, who received money from babysitting. Family income of the respondent affected the amount of income, but not the source of income. Overall, one-third of the sample reported saving money, two-fifths spent income, and one-third spent it on others. The lower income students spent significantly less on themselves compared to the other groups. Examining the sample across income source groups (earned only, given only, both), significant differences emerged in the amount of income allocated to spending and savings but no difference in expenditure on gifts. Students with two sources of income (earnings and gifts) spent more compared to those whose source of income was solely from their own earnings, who saved a greater proportion. Implications from this research include: 1) giving money to children did not lead to them spending more on themselves, 2) saving is more likely to occur among those who earn all of their income, 3) kids whose income comes from earnings and gifts are most likely to spend it on themselves, and 4) kids with higher incomes tend to spend more, save some, and give a smaller proportion than lower income kids. The authors concluded that kids should not receive too much money and should receive it from only one source or the other (as a gift or earned), but not both.

7. **Berti, A. & Bombi, A. (1981). The development of the concept of money and its value: a longitudinal study. *Child Development, 52,* 1179-1182.**
Using Piaget's theory of cognitive development, this study examined the development of children's beliefs about the concept of money (e.g., its role in buying and selling) and its value. Extending the work of Strauss (1952), the authors constructed six stages of learning based on their study outcomes. With a sample of 80 children (ages 3 to 8), a longitudinal study was conducted over a 12-month interval. Children were asked to determine what objects certain denominations of money could purchase. They participated in a simulated market in the role of customer and as a shopkeeper. Based on the child's behavior and as hypothesized, six developmental stages emerged: 1) no awareness of payment (child didn't pay or return change for a reason), 2) obligatory payment (no discrimination between the kinds of money, but child realized the customer must make a payment), 3) discrimination between money (child realized money denominations were not equivalent), 4) amount of money is not always enough (child made distinctions between some objects costing more or less money), 5) a direct agreement between money and objects (child realized the correct amount of money must be given in exchange for an object), and 6) change is used correctly (child realized when money is given in excess of price of object). These stages represented the developmental nature of acquiring economic concepts, in line with Piaget's framework. The stages moved from vague awareness of the value of money to the application of rules regarding money, to the awareness of other money rules, followed by connections between rules. The first four stages were preoperational, and depended on direct experience, whereas the last two required more abstract thinking with the use of logic and mathematical concepts.

8. **Bowen, C.F. (1995). Teen and parent perceptions of informal money management education. Poster presented at the annual Association for Financial Counseling and Planning Education conference, New Orleans, LA.**
Employing a convenience sample of 46 academically talented teenagers (mean age 16 years) and their parents (majority ranging in ages 41-50), this poster reported on money management education. Approximately 44 of the 46 parents responded yes to the question of whether they thought they had helped their teen learn to manage money, with 40 of the 46 young scholars agreeing that their parents had helped

them to learn to manage money. While several teens reported never discussing money in their families, several indicated that observing their parents was mainly how they learned about money management. Money management topics most frequently mentioned by parents and teens were budgeting, savings, credit, allowances and checking accounts. Bowen suggested parents combine their teen's observation with direct conversations and hands-on activities to produce more effective and responsible money managers.

9. Boyce, L. & Danes, S. M., (1998). ***Evaluation of the NEFE High School Financial Planning Program 1997-1998*****, National Endowment for Financial Education, Englewood, CO.**
This is a program evaluation piece, documenting increases in financial planning understanding following implementation of a 7-unit curriculum. The program was credited for inspiring saving behavior in 29 percent of teens starting the program and increasing the savings of an additional 15 percent of participants. Three months after program completion, 37 percent of teens showed improved budgeting skills, 47 percent knew more about credit costs, 38 percent had a better understanding of investments, and 38 percent felt more confident with their financial knowledge. The most prevalent change in financial behavior reported by teens three months out of the program was opening a savings account. Some regional differences in savings behavior were noted, with students in the north central and northeast regions reporting higher use of savings accounts following the program.

10. Brobeck, S. (1993). College student consumer knowledge: a nationwide test. Washington, DC: Consumer Federation of America.
The average score for 2,010 college age students from 75 different schools was 51 percent on a consumer knowledge exam. The general level of college student understanding was higher than that in a similar Consumer Federation of America study of high school students, and the level of understanding among college students equaled that of the general population. There was little difference in scores between genders, between students attending public versus private institutions, or related to the major subject studied in college. Business majors scored slightly higher in most knowledge areas. Whites scored higher than minorities in most knowledge areas, yet the difference was not as great as that found among high school students. Interestingly, Blacks understood the workings of the credit bureau system much better than Whites, yet many more Whites (76 percent) than Blacks (59 percent) held credit cards. Overall, low scores were deemed the result of inadequate consumer education and little experience of college students in the marketplace. Experience with credit card use, checking and savings accounts, and auto insurance was shown to positively impact scores.

11. Brobeck, S. (1991). High school student consumer knowledge: a nationwide test. Washington, DC: Consumer Federation of America.
This test of high school consumer decision making skills and knowledge showed that seniors were "virtually unprepared" for purchasing decisions upon graduation. On average, 42 percent of consumer knowledge questions were answered correctly by 428 high school seniors. African Americans, Hispanics, students planning to attend vocational schools, and students of lower economic means scored lower on the knowledge test. Authors suggested that the general causes of low consumer knowledge among high school students were weak reading and math skills, inadequate consumer education, and lack of marketplace experience. The impact of formal education in consumer skills was found to be negligible.

12. Burris, B. (1983). Stages in the development of economic concepts. ***Human Relations, 36*****, 791-812.**
Relying on Piaget's cognitive development theory, this study confirmed the developmental nature of the acquisition of economic concepts among children between the ages of 4 and 12. A sample of 96 children from an eastern U.S. suburb were interviewed regarding six basic economic concepts (work, income, value, property, exchange and the commodity). The study divided the children into groups (pre-school, second

grade and fifth grade) representing Piaget's preoperational, concrete operational, and formal operational stages of development. Significant associations between the age of the child and the type of response regarding the economic concept were found and interpreted as distinct stages of development. The authors argued that structural similarities between the concepts indicate the existence of development trends. Four general trends related to the child's development of social consciousness were discussed—for example, the ability to distinguish between social and natural phenomena. The study found younger children to define commodity by physical characteristics, and to define the trading/buying/selling of commodities also as physical, not social, which occurs at a later age. The findings supported the sequential nature of the development of children's knowledge of the social world.

13. Carlson, L., & Grossbart, S. (1988b). Parental style and consumer socialization of children. *Journal of Consumer Research*, *15*, 77-94.
Carlson and Grossbart evaluated the relationship between parents' general socialization style and consumer socialization tendencies. Surveying 499 mothers of kindergarten through sixth grade students, various differences in consumer socialization were identified. More consumption autonomy was granted to older children and to boys. Parenting style (ranging from authoritarian to permissive) did not impact the level of consumption autonomy granted by mothers. As expected, authoritative and permissive parents interacted more with children by communicating about consumption, shopping with them, and asking their opinions. Authoritative parents were found to be more in control of children's exposure to media.

14. Chen, H. & Volpe, R.P., (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107-128.
Based on a 36-item survey instrument measuring college student financial literacy, Chen and Volpe characterized those with lower levels of financial knowledge as being non-business majors, women, students in lower class ranks, under age 30, and with little work experience. They generally concluded that American college students are not knowledgeable about finances, as the average score on the knowledge test was only 53 percent. Breaking the knowledge areas down they showed that the relative inexperience of college students with personal finances (proxied by age in their empirical work) led to low knowledge levels of tax, life insurance and investments, and relatively higher levels of understanding in automobile insurance and apartment leasing. Unique to this study was the attempt to relate financial knowledge to financial decisions such as the choice of investment vehicles, life insurance, spending and credit use, and maintenance of financial records. Low financial literacy levels were shown to correlate with poor financial decision making.

15. Churchill, G.A. & Moschis, P.P. (1979). Television and interpersonal influences on adolescent consumer learning. *Journal of Consumer Research*, *6*, 23-25.
Using 2-stage least squares, this study estimated relationships between variables in a model of adolescent consumer socialization. The model was conceptualized as inclusive of both cognitive-psychological and social processes. Building on their earlier work, Churchill and Moschis employed a sample of 806 Wisconsin middle school and high school adolescents. The R-squares ranged from .02 to .09, thus the results were discussed with some caution. Their hypothesis that television viewing would decline with age was not supported. They found support for the hypothesis that family communication regarding consumption decreased with age, and increased with the amounts of television viewing and peer communication. However, no relationship between family communication and with birth order and/or socioeconomic status was found. Peer communication about consumption was not significantly related to gender, as hypothesized, however it increased with television viewing, as with age, among the first born and with the amount of family communication about consumption. Overall, with regard to the consumer socialization model, important antecedents appeared to have significant direct (sex) and indirect (birth

order, age) effects. Regarding socialization agents as sources of consumer information, peers, family and media were all deemed important.

16. Cramer, S.L. (1995). Financial management practices and attitudes of Chinese university students. Poster presented at the annual Association for Financial Counseling and Planning Education conference, New Orleans, LA.
The financial management practices, attitudes and satisfaction of 210 students from South China Normal University were investigated. Only descriptive findings were reported. Well over half of the students, the majority of whom came from China's most affluent regions, reported keeping some type of spending plan (the majority kept a mental plan, 10 percent written, 10 percent no plan). Only one-fourth reported learned practices related to financial planning from their parents, the rest (three-quarters) reported learning on their own. Forty-one percent of students reported discussing money issues with their peers often, and a third worried about their financial situation often. Among the financial issues students were most concerned about were caring for parents and finding a job.

17. Danzinger, K. (1958). Children's earliest conceptions of economic relationships. *Journal of Social Psychology*, *47*, 231-240.
Through interviews of 41 Australian children, Danziger inquired into the understanding of the uses of money, the differences between being rich and poor, and the position of the "boss" at work. The children were from two age stages (5-7 years old, and 8-year-olds), identified as fundamentally different by Piaget. Among the youngest group, the use of money was understood as mere payment to avoid immoral stealing, and was seen as a medium of 2-way exchange by the older group. Early-stage children had no idea how to differentiate between the rich and the poor. Eight-year-olds identified the rich and poor in terms of money or lack of it. In early stages, children identified fantastic methods of getting rich such as stealing and discovering treasure. In later stages, they mentioned hard work, saving and entrepreneurship. Finally, only older children identified the economic role of the "boss" as opposed to the pure supervisory role described by the younger children. Based on these observations and similar findings on kinship social learning, Danziger proposed a 4-stage model of social learning ranging from a total lack of economic understanding to rational explanations of economic events.

18. Doss, V.S., Marlowe, J., & Godwin, D.D. (1995). Middle-school children's sources and uses of money. *Journal of Consumer Affairs*, *29*, 219-241.
The impact of background characteristics (age, gender, family structure) and sources of money on spending (discretionary spending on selves and spending related to the child's or the family's needs), saving and giving was investigated among 409 rural middle school children (ages 10 through 15) from Georgia. Questionnaires were administered to students during a social studies class. It was hypothesized that family structure would impact adolescents' level of money responsibility, however, ANOVAs and multiple regressions revealed no differences in the sources of income, or patterns of spending, saving or giving of adolescents among dual-earner parents, single-earner parents, and single parents. It was also hypothesized that source of adolescent income would impact their use of money. Those who received more money from parent(s) spent more on required and discretionary purchases. In terms of spending, the greatest proportion of adolescents' income was on discretionary spending, however adolescents (about three-fifths) reported saving some of their money or giving it away as a donation or gift, although they were relatively small amounts. Multiple regression revealed no student characteristics (age, gender) or family structure differences to be significant predictors of spending, saving or giving. However, the amount of money received from parent(s) was positively related to discretionary and required spending. Similar to the findings of Belk, Rice and Harvey (1984), the amount of money saved by adolescents was positively associated with their level of earnings. The amount adolescents gave to others was greater if their sources of money came from earnings or gifts. R-squares ranged from .06 to .13. This study provided estimates of

children's spending power, implications for parents and consumer educators, and recommendations for future research.

19. Dunsing, M. (1956). Spending money of adolescents. ***Journal of Home Economics*, *48*, 405-408.**
Sources of spending money among 738 adolescents (grades 8 through 12) were examined. Three groups were devised based on sources of spending money: allowance (might also receive money from other two sources—31 percent), irregular earnings (might also receive money from dole, but not allowance—61 percent), and dole (did not receive money from other sources—8 percent). Compared to boys, a greater proportion of girls received money from an allowance or the dole, whereas a greater percentage of boys received money from irregular earnings. The article presented gender and age variations in the receipt of allowance (amount and frequency), amounts, uses, work obligations attached to allowance, and types of work engaged in to earn money. Actual and recommended practices were discussed. Only frequencies were presented, thus no strong conclusions regarding the impact of allowance on adolescent consumer skills could be drawn. However, the author suggested that adolescents be given the opportunity to manage money, to increase the needs covered with that money, to supplement income with earnings, and to eventually give beyond allowance and earnings only in the case of emergency. She also suggested the importance of parents in the education of money management and adolescents.

20. Fox, J.J. & Bartholomae, S. (1999). Are Educational Outcomes Linked to Student Learning Style in Financial Management Courses? ***Financial Services Review*, in second revision.**
Using Kolb's Learning Style Inventory, this paper explored the relationship of student learning style, teacher instructional style and teaching strategy, and academic success in an undergraduate family financial management class. While the financial management students were heavily distributed among the learning styles stressing active experimentation for learning, no distinct relationship was shown between learning style and educational outcome (measured as class grade). Academic major, time use, and previous academic performance proved to be stronger influences on performance in a college level personal financial management class.

21. Fox, K. (1978). What children bring to school: the beginnings of economic education. ***Social Education*, *10*, 478-81.**
This was a discussion paper, combined with a review of limited research, on the economic education of elementary school students. Fox discussed the three tools that children bring to school with regard to economic knowledge—economic attitude, unprocessed direct experience, and cognitive capacity—and how these impact the way a child acquires economic concepts. Economic attitudes were defined as parent teachings and proverbs that children acquire as they grow up and rely upon when they lack the formal knowledge. Unprocessed direct experience refers to those activities related to economics (e.g., selling lemonade, collecting baseball cards, shopping with a parent, saving money in a bank) that eventually contribute to children's economic understanding, but the underlying principles are not yet realized. Cognitive capacity was the third tool and referred to the possible potentials and limitations of a child's cognitive development and hence conceptual capacity. Fox explained this tool using Piaget's preoperational stage of cognitive development. Based on the fact that children were unable to think abstractly at the preoperational stage, she recommended the incorporation of existing knowledge and cautions in the formal teaching of economic concepts. Fox concluded with a discussion of implications of the informal economic educational tools possessed by children.

22. Foxman, E.R., Tansuhaj, P.S., & Edstrom, K.M. (1989a). Adolescents' influence in family purchase decisions: a socialization perspective. ***Journal of Business Research*, *18*, 159-172.**
This was the same study as Foxman et al. (JCR) described in the context of a consumer socialization model. Family communication environment, child characteristics and resources, and product-related factors were

considered as general determinants of child influence on decision making. Adolescents were found to have had more influence in a concept-oriented family communication environment. Among adolescent resources, school grades were shown to positively correlate with influence on family purchasing decisions. Adolescent knowledge and perceptions of product importance were also positively associated with influence.

23. Foxman, E.R., Tansuhaj, P.S., & Edstrom, K.M. (1989b). Family members' perceptions of adolescents' influence in family decision making. *Journal of Consumer Research*, *15*, 482-491.
This study examined the perceived impact of adolescents in household economic decision making in 161 families. The research was based on interviews with children between the ages of 11 and 18 and their parents. Mothers, fathers and children all rated children as involved in household economic decisions, however children perceived their impact as higher than that perceived by parents. Children tended to be perceived as most involved in decisions impacting the purchase of lower priced items that were intended for use by the child. Questions of general influence on consumer decision making were structured around a 5-point Likert scale ranging from 100 percent parent-based decisions to 100 percent child-based decisions. Areas of adolescent influence on family decision making were identified as suggesting price ranges, shopping together, suggesting stores or outlets, and suggesting brands.

24. Furnham, A. & Thomas, P. (1984). Pocket money: a study of economic education. *British Journal of Developmental Psychology,* 2, 205-212.
Furnham and Thomas found that economic concepts develop later than other concepts, often not until the middle or late teens. Class and sex differences were found. Males were taught to be more money conscious, with an emphasis on their future responsibility for decision making about money. In contrast, girls were more likely to receive gifts of money and were not generally taught to be money conscious.

25. Furnham, A. (1996). Attitudinal correlates and demographic predictors of monetary beliefs and behaviors. *Journal of Organizational Behavior*, *17*, 375-388.
Furnham used six separate questionnaires to assess the money attitudes and level of "money madness" among 277 adults. He found political beliefs and work values to be the only strong predictors of monetary beliefs and behaviors. Those with a strong work ethic appeared to be "obsessed" with money, and pathology was higher among those self-labeled as right wing. Sixteen attitudinal and five demographic variables (sex, age, education, political beliefs and income) were included in the study of money-related pathology.

26. Furnham, A. (1987). The determinants and structure of adolescents' beliefs about the economy. *Journal of Adolescence*, *10*, 353-371.
Two studies were reported in this paper. One on 16- to 17-year-olds' determinants of economic values and the second on the determinants of slightly older adolescents' economic preferences and knowledge. In the study of values, males were shown to prefer the free enterprise system and were more against government intervention in setting prices. Neither subjects studied in school (A levels), amount of money received, nor borrowing and lending practices influenced economic values. Those employed part-time tended to believe that workers received fair treatment. Political beliefs and anticipated voting behavior were the strongest determinants of economic values. Receiving higher amounts of money weekly correlated with a preference for the free enterprise system. Overall, the results of the study demonstrated a relatively poor understanding of the economy among British adolescents. The second study of 150 perspective college students evaluated adolescent understanding of desired public spending in light of political beliefs. Subjects were asked to allocate the government budget as if they were acting in the government run by conservatives, the labor party, liberals, or completely on their own. Results showed that college age students tended to allow political beliefs to dominate economic decisions.

27. Furnham, A., & Cleare, A. (1988). School children's conceptions of economics: prices, wages, investments and strikes. ***Journal of Economic Psychology*, *9*, 467-479.**
Furnham and Cleare presented a study of 11- to 16-year-olds' understanding of economic concepts such as prices, wages, investments and labor strikes. Age differences, along with minimal gender variation, were found among the 134 British school children's responses to mostly open-ended questions on prices, wages, saving and investing, and labor strikes. Older students showed a better understanding of the role of wages and investments, and females held different views on the direction of recent price changes. Otherwise, responses did not vary by gender or socioeconomic class. No age, gender, or class difference was found in the understanding of strikes. The somewhat inconsistent relationship between age and understanding was interpreted as evidence of the piecemeal approach to building knowledge of an economic system. A poor understanding of inflation among all aged children was linked to the difficulty of transforming individual behavior (microeconomic concepts) into aggregate supply and demand conditions (macroeconomic/social concepts).

28. Furnham, A. & Thomas, P. (1984). Adults' perceptions of the economic socialization of children. ***Journal of Adolescence*, *7*, 217-231.**
The distribution of money within the family was studied through a survey of 212 adults. Age, gender, socioeconomic status, and having children significantly impacted beliefs on the timing and method of money distribution with the family. More middle class than working class adults thought children should be given pocket money, and working class individuals thought money should be received at a later age. Half of the sample thought children should work for pocket money received. The appropriate amount of money received was found to increase exponentially with age until 18 years old. A higher percentage of adults with children thought that children should be given money weekly as opposed to monthly or when needed. Women tended to report attitudes that reflected trust and expected financial responsibility of children. Surprisingly, younger adults appeared to be more likely to withhold money as punishment and younger adults were more in favor of linking allowances to chores.

29. Gunter, B. & Furnham, A. (1998). ***Children as Consumers: A Psychological Analysis of the Young People's Market.*** **London: Routledge.**
Drawing from several fields—psychology, sociology, marketing, political science, economics—this book synthesized the research on why, where and how children grow into economic actors in society. The book began with an appraisal of the youth market, followed by a look at the socialization of children as consumers. This chapter discussed a model for consumer socialization, including the important socialization agents in the process. The remainder of the book discussed what children consume, their understanding of money, the role of advertising, and tapping the consumer market. The book concluded with a discussion of the education and protection of children in their role as consumers.

30. Herrmann, R.O. (1970). Today's young adults as consumers. ***The Journal of Consumer Affairs*, *4*, 19-60.**
This discussion paper examined differences in consumer behavior between those coming of marriageable age (at the end of the sixties) and their parents. Written in 1969, Hermann discussed the major forces impacting the consumer behavior of the early baby boom generation, including the continuous prosperity they experienced throughout their childhood (1940s-50s), permissive parenting, greater levels of education, and increased media exposure. The period of prosperity not only instilled optimism in this cohort, but also provided more spending money for discretionary goods (e.g., parents covered necessities, kids spent money on entertainment, etc). With this ability to spend money freely, Hermann concluded that money management skills were not learned and allowance as an educational tool was less effective. A brief review of available studies and statistics (from the 1940s and 1950s) on adolescent money management, experience

with credit, and the influence of peers and media on consumption behavior was included. A discussion of the needs of this generation in terms of consumer education was also discussed.

31. Hollister, J., Rapp, D., & Goldsmith, E. (1986). Monetary practices of sixth grade students. *Child Study Journal, 16,* 183-190.
Through an analysis of the financial behavior of 111 sixth grade students, Hollister et al. found that children who earned money managed money differently than those who did not earn money. The largest difference in monetary handing practices was in savings, with earners saving more regularly than non-earners. General monetary practice was measured through a series of Likert scale questions on saving, lending and borrowing, budgeting, and shopping behaviors. Girls were found to be more likely to receive an allowance, yet the monetary practices of those receiving allowances and those not receiving allowances did not differ. There were no observable gender differences among sixth grade monetary practices.

32. Jahoda, G. (1979). The construction of economic reality by some Glaswegian children. *European Journal of Social Psychology, 9*, 115-127.
One hundred and twenty 6- to 12-year-olds were participants in an economic experiment. The children were interviewed on their fictitious role as shopkeepers in an experimental store. Younger children understood the need for payment for work performed by shopkeepers, but did not relate these wages to the need for shops to charge higher prices than those paid for goods. At age 11, the two sides of economic understanding appeared to come together. Child understanding of the concept of profit appeared to pass through three stages. Younger children held no grasp of the system, with cash transactions being viewed as mere ritual. As learning about the economy progressed with age, children began to understand separately the producer and consumer side of the equation. Finally, at or near age 11, children appeared to understand the system and the need for different purchase and selling prices paid by shopkeepers.

33. Kirkcaldy, B., & Furnham, A. (1993). Predictors of beliefs about money. *Psychological Reports*, *73*, 1079-1082.
A series of multiple regressions were employed to achieve the path coefficients in the relationships between antecedent endogenous and exogenous variables in the beliefs about money (defined as the degree of importance a person attached to money). Among a sample of 306 German college students, work ethic (commitment to work), achievement conformity (identifying with the organization), and mastery (over problems and events) had a positive, indirect impact on money beliefs through achievement motivation (need for excellence). Achievement motivation was positively associated with competitiveness, indirectly impacting money beliefs. The causal effects of these dimensions in the belief of money suggested the importance of including these factors when assessing a person's outlook (and possibly behavior) on money.

34. Leiser, D., & Zaltzman, J. (1991). Children's economic socialization, inside and outside the kibbutz. *Journal of Economic Psychology*, *11*, 551-566.
Interviews with 7-, 11-, and 14-year-olds (n=30 per age group) were used to compare the understanding and attitudes of economic concepts between children living in a kibbutz and those from an urban area in Israel. Prices, salaries, savings and investment were the topics of economic understanding, whereas wealth and unemployment were the concepts related to economic attitudes. Comparisons revealed few differences between kibbutz and urban children in their economic understandings, however unique attitudes persisted due to their environmental circumstance. Kibbutz children held a socialist perspective compared to urban children, who held middle class capitalist viewpoints of economics issues.

35. Leiser, D., Sevon, G., & Levy, D. (1990). Children's economic socialization: summarizing the cross-cultural comparison of ten countries. *Journal of Economic Psychology*, 11, 591-631.
Children ages 8, 11, and 14 from ten countries (Algeria, Austria, Denmark, Finland, France, Israel, Norway, Poland, West Germany and Yugoslavia) were tested on their understanding, reasoning, and attitudes of economic concepts, events and consequences. Among a sample of 1,050 (n=350 per age group), understanding of prices, salaries, savings and investments increased with age consistently across nations. The authors summarized their exploratory findings of the age trends by classifying the younger child's economic concept as having the perspective of the "social man" compared to older children, who conceptualize it from the perspective of the "economic man." Further, evidence supported that children's understanding of economic systems was influenced by factors present in the environment. Answers to individual questions were tabulated and there were national differences found. The differences could be primarily due to the differences in the existing political and economic systems, differences in the institutional conditions (dominance of the government), cultural conditions (society's values and attitudes), or differences in study conditions related to interviewing and sample sizes per country.

36. Mandell, L., (1998). *Our Vulnerable Youth: The Financial Literacy of American 12th Graders.* Jump$tart Coalition for Personal Financial Literacy, Washington, DC.
A 31-item financial literacy examination was administered to 1,532 high school seniors from 65 high schools. On average, students answered only 57 percent of the questions correctly and only one in 10 scored above 70 percent. Students who reported learning about managing money primarily in school and who resided in states with mandated consumer or financial education did not perform better on the examination. Surprisingly, experience with finances did not translate into better understanding of finances. In fact, in some cases experience with finances negatively related to financial literacy. Women scored slightly higher on average than men, but a higher percentage of men scored above 70 percent. There were significant racial differences in scores, with Whites scoring higher than Asian, Hispanic, African, and Native Americans. Scores did not vary greatly by family income, and those with no plans for post-secondary education scored lower than other high school seniors. Income and educational aspirations positively related to scores. Parent education level directly related to scores. Students in the northeast and north central regions of the country scored better than those from the south and west. Students who felt that they understood finances did not perform much better than students reporting otherwise. Finally, state bankruptcy rates were shown to be higher in states where students scored the lowest.

37. Markovich, C.A. & DeVaney, S.A. (1997). College seniors' personal finance knowledge and practices. *Journal of Family and Consumer Sciences*, *89*, 61-65.
Based on a 21-item multiple choice knowledge instrument, college seniors majoring in business management who were involved with their own personal finances were more knowledgeable about personal finance. Though there were gender differences in knowledge, differences were determined to be more attributable to gender distribution through college majors, and not gender itself. Markovich and DeVaney also attempt to measure satisfaction with personal finance knowledge and satisfaction with ability to manage finances, which were shown to be highly correlated.

38. Marshall, H (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*, 104-35-51.
This study hypothesized that the financial knowledge and responsibility of children would differ for those who received an allowance versus those who did not. Respondents were scored on a battery of tests related to 10 measures of financial knowledge and experience. Financial knowledge was measured by 13 multiple-choice questions related to knowledge of money management, insurance and mortgages, and knowledge of

costs of consumption items. Additionally, respondents were scored on their numerical reasoning skills, on a coin test of knowledge of money use, and experience with money. A total of 180 children ages 10, 11 and 12, some receiving an allowance and some not receiving an allowance, were matched on age, sex, IQ, socioeconomic status, family structure, number of siblings, residence (farm versus non-farm) and length of time attending the school. Employing analysis of variance on the 10 financial knowledge measures, the hypothesis that there is no difference in financial knowledge between children who received allowance versus those who did not was fully supported. Among those parents giving an allowance, more than half did so with the belief that it would contribute to the financial knowledge and responsibility of their children, however the results do not support this intention. Marshall also hypothesized that parents who gave an allowance versus those who did not would differ in their money attitudes and practices. Her study supported this notion with allowance parents giving their children more experience with money, having greater agreement with their children on the types of items the money was spent on, and non-allowance parents reporting that their children received half as much spending money over the past week. However, parents did not differ in their attitudes about the importance of money. A greater proportion of allowance children earned money outside of the home in the past week, with no differences between allowance and non-allowance children in the proportion earned at home. Sex differences were found in the mean amount of money earned, with boys reporting greater earnings in the past year than girls. Overall, allowance was not effective in helping adolescents learn about money management.

39. Marshall, H. & Magruder, L. (1960). Relations between parent money education practices and children's knowledge and use of money. *Child Development*, *31*, 253-284.
This study tests a series of 12 recommendations commonly given in parenting literature on how to teach children about money. Knowledge and monetary experience measures consisted of a "coin test," where children identified coins and linked denominations with possible purchases, an experience with money score based on spending, shopping and money handling practices of children, the amount of spending in the last week, the amount received in gifts, earned money, and a materialistic attitude score. Parents were interviewed to obtain recommended practices scores and level of money centeredness of their attitudes. Based on interviews with 512 children ages 7, 8, 11 and 12 and their parents, four recommendations on parental practices were supported: 1) children with significant money experience were more knowledgeable, 2) children with money to spend were more knowledgeable, 3) children who saved were more knowledgeable, and 4) children of parents who manage money wisely will be more financially literate. The study did not support the use of child allowances and earnings as means of building knowledge. Money being used as reward or punishment was not positively related to knowledge. Specific money education practices of parents were tied to child knowledge of money usage. Money knowledge and experience were shown to positively relate to age. Knowledge of money was also positively related to IQ. Monetary knowledge increased with parent education and socioeconomic status only for 7- and 8-year-olds. Gender, number of siblings, age of parent, employment status of the mother, living on a farm, and the father's occupation did not significantly impact monetary knowledge.

40. Miller, J., & Yung, S. (1990). The role of allowances in adolescent socialization. *Youth and Society*, *22*, 127-159.
A questionnaire was self-administered to 220 high ability New York City high school students. The focus of the study was on allowance arrangements, employment, uses of money, household work, and parental influence and control over decision making. Age, gender, ethnicity, and family composition were insignificant predictors of who did and did not receive an allowance. However, adolescents whose mothers had a high school education or less were less likely to receive an allowance. Younger adolescents were more likely to currently receive an allowance than older adolescents. Of those receiving an allowance, three-quarters cited "entitlement" (e.g., necessities, pocket money, entitlement) as the most important reason for receiving it, whereas 18 percent reported receiving it as earned income (e.g., in exchange for

housework or good grades), and only 2.3 percent reported receiving it for the educational value of learning about financial management. Those who received allowances as earned income had more household responsibilities, had parents who were more autocratic in decisions regarding the amount of the allowance and other allowance-related decisions and, compared to students receiving entitled allowances, received a lower amount and were less likely to spend it on necessities. The study conducted multiple regressions on the impact of allowance and household responsibility socialization on adolescent orientations, including self-concept (mastery, self-esteem, self- estrangement), stance toward authority (authoritarianism and risk taking), gender role concepts (for adult and adolescent) and aspirations (educational and age at marriage). Multiple Rs ranged from .26 to .47, however no significant findings were related to the type of allowance (earned versus entitlement) and adolescent orientations. However, analysis found the way allowances are decided upon (e.g., parent alone, child alone or democratically) to be associated with adolescents who plan to delay marriage, and who held less authoritarian attitudes and more traditional gender-role distinctions. Receiving a larger amount of allowance was related to greater risk taking and plans for earlier marriage. Adolescents who had to spend their allowance on necessities tended to have greater aspirations related to education. Adolescents whose parents withheld their allowance had greater levels of self-estrangement. Work obligations in the home were associated with adolescents with greater authoritarianism, with plans for earlier marriage, lower aspirations related to education, poorer self-concept and more traditional gender role concepts.

41. Miller, L., & Horn, T. (1955). Children's concept regarding debt. *The Elementary School Journal, 56*, 406-412.

Social relationships dealing with debt were the focus of this study. Twenty court cases related to debt were described and explained in a paragraph presented to children who were then asked to answer a series of 144 follow-up questions. Answers from Texan children in grades 4, 6, 8, 10 and 12 (n=1,297) were examined for the amount of agreement between their responses with the legal and ethical opinions from authorities with regard to the cases. For 47 of the 129 items, children did not have similar legal and ethical judgements, with 82 of 129 being in agreement. Examining grade differences in concepts, the greatest disparity was found between older grades (8, 10 and 12) and earlier grades. The older grades had significantly greater agreement with the legal and ethical judgements. One gender difference found was that boys had greater sympathy for the debtors than girls (who were more demanding upon the debtors). Findings related to the specific items of disagreement and age differences were further discussed. Opportunities for parents and educators were also presented.

42. Moore, R.L. & Moschis, G.P. (1981). The effects of family communication and mass media on adolescent consumer learning. *Journal of Communication,* 31, 42-51.

Employing a typology of family communication patterns, this study investigated how these patterns impact processes leading to the acquisition of consumer knowledge (knowledge of marketplace and consumer-related legislation), consumer behavior (purchases made in a socially desirable way), and materialism. The four types of family communication patterns are based on two communication dimensions. Socio-orientation dimension involved parent-child relations that were harmonious and deferent, whereas concept-orientation promoted independence, fostering the child's development of his/her own worldview. The product of these dimensions were a) laissez-faire (family communication patterns without either orientation or little interaction), b) protective (emphasized the socio-orientation by stressing obedience and harmony), c) pluralistic (encouraged concept-orientation), and d) consensual (emphasized both orientations). These patterns, hypothesized to lead to different consumer competencies, have empirical support in the political socialization literature. Applied to consumer socialization, 734 geographically diverse adolescents in junior and senior high school were examined. Among the four family communication patterns, adolescents from pluralistic homes were significantly more competent in terms of consumer competencies and were less materialistic compared to other family communication pattern types. Kids from consensual family communication patterns were significantly more materialistic. It was also hypothesized that the family communication patterns would lead to different use of and exposure to media sources therefore intervening on the acquisition of consumer competency. Concept-oriented family communication patterns led to significant differences in newspaper exposure, whereas socio-oriented family communication patterns led to more television viewing leading to greater materialism. Among the antecedents significantly impacting consumer competency—socioeconomic status was related to greater consumer knowledge, higher levels of materialism, newspaper reading, and negatively related to television use. Males had greater levels of newspaper reading, socio-orientation, and materialism, but lower concept-orientation. Whites had lower scores on concept orientation compared to Blacks.

43. Moore, R.L. & Stephens, L.F. (1975). Some communication and demographic determinants of adolescent consumer learning. *Journal of Consumer Research,* 2, 80-92.
In a sample of rural, mostly lower middle class, middle (n=132) and high school (n=180) students, this cross sectional study examined the influence of family and media on four consumer learning measures (price accuracy, slogan recall, brand specification, attitude toward advertising). Moore and Stephens conceptualized the process of adolescent consumer learning as being influenced by intervening contextual variables (intrafamily communication about consumption, product information seeking for six categories, amount of media exposure, reasons for motivations of media exposure [social utility, communication utility, vicarious consumption]) and exogenous variables (socioeconomic status, academic achievement, and amount of weekly spending, age, and sex). Price accuracy and brand specification was viewed as a more complex consumer/learning skill to be grasped by older adolescents while slogan recall was considered simple, to be easily grasped by both age groups. The older group scored higher on the skill of price accuracy, brand specification and negative attitude toward advertising, whereas no differences were found in slogan recall. No significant differences were found between older and younger adolescents in the level of parent-child communication about consumption, with levels being minimal for both age groups. Older students sought out more sources for advice on purchases, but there was no significant difference. Parents and media rated below friends and siblings who were rated highest as sources of influence on recently purchased items. In terms of media exposure, younger students spent significantly more time watching television, whereas older students read the newspaper and listened to the radio significantly more. Older students spent significantly more money (about twice as much) per week than did middle school students. Based on the substantial correlations among the four consumer skill measures, the authors suggested that these are integrated skills that may be learned incidentally through exposure, purposively through the adolescents' consumption efforts, or they may represent cognitive skills and not simply consumer skills. While this study set out to uncover developmental differences among younger and older adolescents in the process of acquiring and retaining consumer skills, support was not found for slogan recall or attitudes towards advertising, however, was found for the skill of price accuracy. For high school students weekly spending and family communication about consumption were the only salient (positive) predictors of price accuracy whereas newspaper exposure time was the only important predictor (positive) for middle school students. A path model examining the antecedents to brand specification, slogan recall and price accuracy found brand specification to result from slogan recall but not time exposed to media. Slogan recall was a function of the motivation for exposure to commercials, with product price, and with age. Prices were influenced by amount of spending money.

44. Moschis, G.P., Moore, R.L., & Smith, R.B. (1984). The impact of family communication on adolescent consumer socialization. *Advances in Consumer Research, 11,* Tomas C. Kinnear, (Ed), Chicago, IL: Association for Consumer Research, 314-319.
The process of consumer socialization was examined in relation to the learning mechanisms transmitted from parent to child and the established patterns of communication between parent-child. Learning mechanisms included social interaction (overt communication regarding consumption), modeling

(observation of parental behaviors) and positive and negative reinforcement. Consumer socialization was measured as consumer knowledge, consumer role perceptions, and consumer activity. Among 734 junior and senior high school students, the study found overt parent-child communication, observation of parental behaviors, and positive reinforcement was significantly associated with consumer role perception and consumer activity. Negative reinforcement was not associated with consumer socialization, and consumer knowledge was not associated with any of the learning mechanisms. These observations were based on product-moment correlation coefficients. In terms of student characteristics that were associated with these processes, overt communication regarding consumption decreased with age as did positive reinforcement, however age was a strong predictor of consumer knowledge. There was less observation of parental modeling of consumer behavior and lower levels of consumer knowledge among Blacks but they were more likely to perform positive consumer activity than Whites. Males communicated less with parents, received less positive reinforcement, yet had greater levels of consumer knowledge than females. There was no relationship between the learning mechanisms and socioeconomic status. As the authors observed, these findings suggest that consumer socialization is a developmental process. Results from a regression model including all measures and the addition of family communication patterns (FCP) found these patterns to contribute little variance in explaining consumer socialization. However, pluralistic parenting, which foster independent behavior and thinking, used positive reinforcement more and negative reinforcement less than the other types of FCPs. Consensual parenting, which emphasized obedience and harmony in hand with the development of independence, was associated with overt communication about consumption and negative and positive reinforcement. Laissez-faire parents, involved in little parent-child interaction, had almost no family influence on adolescent consumer socialization. Protective parents, stressing obedience and harmony, were more likely to use negative reinforcement and less likely to use positive reinforcement.

45. Moschis, G.P, & Churchill, G.A. (1979). An analysis of the adolescent consumer. *Journal of Marketing*, *43*, 40-48.

Three-way analysis of variance, employed to examine the independent effects of socioeconomic status, age, and sex characteristics on adolescent consumer skills, were conducted on a sample of 806 adolescents from urban, suburban, rural and semi-rural Wisconsin. Younger (under 15) and older (over 15) adolescents completed self-administered questionnaires. Examining the main effects of socioeconomic status, compared to lower class adolescents, middle class adolescents were better managers of consumer finances, better at discerning advertising puffery, and were strongly motivated by economics for consumption. Age differences, representing Piaget's stages of cognitive development, found older adolescents to be more knowledgeable about consumer affairs, better managers of finances, sought several information sources before decision making, and were more consumer active than younger consumers. Attitudes toward advertising and prices were more favorable among younger adolescents than older adolescents. Regarding gender differences, females held more favorable attitudes toward advertising, sought information from several different sources, and were better able to identify product attributes (cognitive differentiation), whereas males were more knowledgeable about consumer affairs, were more materialistic, were socially motivated for consumption, and held more favorable attitudes toward stores. Regarding significant interaction effects, an age and socioeconomic status interaction occurred in relation to attitude toward advertising. Middle class adolescents had stable attitudes with age, whereas lower class adolescent attitudes toward advertising shifted from favorable to unfavorable with age. Interaction between sex and social class found females better able to cognitively discriminate product information than males, however, middle class females had greater ability than lower class females, whereas no differences between males across classes was found. The effect of age and social class impacted materialistic values, with middle class adolescents developing stronger materialistic attitudes with age, whereas lower class adolescents developed less favorable attitudes with age.

46. Moschis, G.P., & Churchill, G.A. (1978). Consumer socialization: a theoretical and empirical analysis. ***Journal of Marketing Research,*** **15, 599-609.**

Rather than a cognitive development process, this study observed consumer socialization as a social learning process among a sample of 806 adolescents. From urban, suburban, rural and semi-rural Wisconsin, adolescents completed self-administered questionnaires measuring consumer skills (knowledge of consumer affairs, consumer activism, financial management ability, attitude toward prices, materialism, and economic and social motives for consumption) and the impact of socialization agents and antecedent variables. Multiple regression analyses were conducted, with multiple Rs ranging from .17 to .49. Family communication about consumption was a significant predictor only of consumer activism. Regarding mass media as a socialization agent, amount of television viewing was positively related to social motivations for consumption and negatively related to attitudes toward prices and economic motivations for consumption. However, social motivations for watching television programs was a significant positive predictor of consumer affairs knowledge, materialism, and economic motivations for consumption. Social motivations for watching television advertisements was negatively related to economic motivations for consumption and a positive predictor of social motivations for consumption and attitudes toward materialism. Among the predictors related to consumer skills, the strongest was newspaper reading, positively related to ability to manage finances, consumer affairs knowledge, consumer activism, favorable attitudes towards prices, and economic motivations for consumption. The causality of this predictor could not be determined from this study. The authors suggested that reverse causality (e.g., reading is a function of consumer skills) may be present, or a possible third variable may be at work (e.g., a family environment fostering newspaper reading and consequently consumer skills). Consumer affairs knowledge, social motivations for consumption, and materialism were positively related to the adolescents' peer communication. School, as a socialization agent, was the weakest among predictors. The amount of adolescents' formal consumer education was not significantly related to any of the seven consumer skills. The weakness of school as an agent could be ineffective instructional material, ineffective instructional methods, or the propensity for academically challenged students to be attracted to this type of "easy" course. Compared to younger adolescents, older adolescents had greater ability in managing finances, greater levels of consumer knowledge, and engaged in more consumer activism, whereas younger adolescents had more favorable attitudes toward prices. With regard to gender differences, males were more knowledgeable about consumer issues, were more socially motivated for consumption, held stronger materialistic attitudes, and engaged in less consumer activism. Higher socioeconomic status adolescents were found to have greater financial management skills and be economically motivated for consumption. Marketing and public policy implications are discussed.

47. Moschis, G.P., & Moore, R.L. (1978). An analysis of the acquisition of some consumer competencies among adolescents. ***Journal of Consumer Affairs*****, Winter, 277-291.**

Moschis and Moore provide a comprehensive theoretical framework for consumer socialization, along with an empirical test of components of the model. This study investigated the influence of socialization agents (parents [intrafamily communication], peer [communication about consumption], school [consumer-related courses], media [television viewing]) on consumer skills and competencies. Measured as brand knowledge, price accuracy, legal knowledge of consumer rights and remedies, and consumer role conceptions as the dependent variables, demographic (age, sex, and socioeconomic status) differences in the acquisition of these skills were examined among 604 middle and high school students from Georgia. Using t and F tests, results suggested the developmental nature of consumer socialization, with older adolescents scoring significantly higher on all dependent measures as compared to younger adolescents. Similarly, higher socioeconomic status adolescents were significantly more knowledgeable on all four consumer measures and engaged in peer discussions more often than lower class adolescents. Gender differences revealed that males were more knowledgeable with regard to price accuracy and legal knowledge, and they had significantly less communication with parents regarding consumption matters compared to females. Employing regression analysis to control for age, sex, and socioeconomic status, the influence of socialization agents was further examined. Regarding media, the frequency of television was significantly related only to consumer role conceptions. With regard to family and school, intrafamily communication and consumer-related courses were not significantly associated with any of the consumer competencies. Peers as socialization agents were significantly associated with all dependent consumer measures except for role conceptions. While this article provides a solid conceptual and empirical starting point in the literature regarding adolescent socialization, the authors suggested the findings as tentative given the weak reliability coefficients of the dependent measures, the omission of several learning processes, and the focus on cognitive skills and not motivations or behaviors.

48. Palan, K.M. (1998). Relationships between family communication and consumer activities of adolescents: an exploratory study. *Journal of the Academy of Marketing Science*, *26*, 338-349.
Primarily a methodological study, this paper examined the general quality and consumption-related content of family communication in relation to adolescent consumer activity. A multi-informant method was employed by measuring perceptions of the mother, father and adolescent. The sample was comprised of 100 middle to upper middle class families (85 percent intact, 15 percent step-families) with adolescents ranging in age from 12 to 15. A table of instrument items was provided. The study provided empirical evidence supporting the conceptual distinction between communication quality (20 items measuring two distinct communication qualities—openness and problems) and consumption interaction (six items measuring parent-adolescent communication regarding shopping, purchases, budgeting, and advertising). Because past research has found parent-adolescent communication to affect consumer learning, this finding provides an important distinction in the design of adolescent consumer socialization research. There were positive significant relationships found between consumer activity and consumption interaction, as well as between consumption interaction and consumer activity. These relationships varied by the perception of the individual informants and dyads. No relationship was found between communication quality and consumer activity. A discussion regarding future research in communication and socialization was included.

49. Pliner, P., Darke, P., Abramovitch, R., & Freedman, J. (1994). Children's consumer behavior in a store with unattractive merchandise: the "caveat emptorium." *Journal of Economic Psychology*, *15*, 449-465.
Using experimental economic methods, Pliner et al. showed the positive impact of allowances on consumer decisions made by 9- to 10-year-olds. The experiment further showed that children who received payment for chores at home did not exhibit "good" consumer behavior. The positive impact of allowances was interpreted as a result of the trust and responsibility given to children through allocation of family financial resources. The experiment consisted of 120 children receiving $4.00 each. Half received the money for work, and the other half received the money as a present. Half of the children were allowed to shop in an experimental store with "attractive" merchandise and the other half had only "unattractive" merchandise to choose from. Spending in the experimental store was optional and the children could take home any unspent money. Spending on attractive and unattractive goods was evaluated in light of five economic socialization variables based on information obtained from parents. Among socialization variables, receiving an allowance was found to be unrelated to being paid for chores around the house, and performing chores for pocket money was shown to be associated with heavy-handed parenting. Children who worked for the money in the experiment and who also received an allowance spent much less in the unattractive store than in the attractive store, demonstrating more discriminating consumer behavior. Overall, girls spent more than boys. With respect to parenting styles, children who received gentle versus heavy-handed guidance, and children held to high economic expectations, appeared to make better consumer decisions. The authors concluded that allowances are far more instructive about money than earnings for chores around the house.

50. Pritchard, M.E., Kimes Myers, B., & Cassidy, D.J. (1989). Factors associated with adolescent saving and spending patterns. *Adolescence, 24*, 711-723.
In 1980 and 1982, data was collected in questionnaire format from over 1,000 U.S. high schools as part of the High School and Beyond Study (HSB). This study, utilizing 1,619 employed high school seniors and their parents from the HSB, examined characteristics (student, family, economic) associated with adolescent spending and saving. Contingency table analyses and the chi-square statistic revealed the following characteristics to be related to higher levels of adolescent saving: being female, being White, being from a higher socioeconomic status, having higher cognitive test scores and high school grades, planning to attend college, having an internal locus of control, and having parents who had greater educational levels who planned the use of their money, saved in general and for college, and believed their child to be a hard worker. White male adolescents spent more on discretionary purchases, as did those adolescents who felt that having a lot of money was important, who placed greater importance on their job than on school (thus greater importance was placed on success in work), who received lower grades, made greater hourly earnings, and were not rated by their parents as being hard workers. Adolescents who spent more on necessities were Black, female, from public schools, received low cognitive test scores and grades, did not place a lot of importance on money or on success in the work world, had an external locus of control and had greater hourly earnings. A discussion of implications for future research and for practitioners was provided.

51. Rabow, J., & Rodriguiez, K.A. (1993). Socialization toward money in Latino families: an exploratory study of gender differences. *Hispanic Journal of Behavioral Sciences, 15*, 324-341.
Interviews of ten Latino brother-sister dyads uncovered how they learned about money. Authors' previous research with a White sample found realistic notions of money to develop from economic hardship in the family, divorce, and in families after divorce. This Latino sample learned about money from parents' direct instruction about saving, from observing parental discussions and disagreements over money. In addition, the very scarcity of money in the family served as instruction. No sex differences in financial instruction from parents were found between brothers and sisters. Compared to the White sample, Latino students were more knowledgeable about the importance of money and were better able to manage it, largely as a result of the open discussions of money the parents had in front of them. Additionally, the authors observed that first generation dyads developed financial independence, whereas second and third generation dyads were financially dependent on their parents. The majority of subjects came from impoverished backgrounds, and upbringing in this context had two residuals. First, the students had difficulty spending money and continually tried to save. Second, they had educational and career goals that were more clearly defined compared to the White sample.

52. Sevon, G., & Weckstrom, S. (1989). The development of reasoning about economic events: a study of Finnish children. *Journal of Economic Psychology, 10*, 495-514.
The economic understanding and reasoning of Finnish children ages 8, 11 and 14 (n=105) was examined using personal interviews, during which time they reasoned about economic concepts (pricing, taxes, money supply, natural resources). The study hypothesized that younger children would demonstrate less complex and more concrete notions compared to older children. Evidence was provided that with age, children take on the perspective of others when considering economic situations and acquire increasingly complex "event knowledge structures." Event knowledge structure is the notion that people use frames or schemas based on personal and/or vicarious experiences of an event. With age, the study found these structures include more and more economic events. The authors attributed observed age changes to increased child experiences, diminished egocentrism, and increased role behaviors. The study also found that older children held the perspective of "economic man" (individuals are selfish, in pursuit of own interests), whereas younger children held a "social man" perspective (individuals are governed by moral and social norms).

53. Shim, S. (1996). Adolescent consumer decision making styles: the consumer socialization perspective. ***Journal of Psychology and Marketing, 13*****, 547-569.**
Shim modeled adolescent consumer decision making style for 1,954 students in 29 southwestern high schools. Socialization agents such as peers, parents, print media, television commercials, and consumer education were found to influence adolescent consumer decision making styles. Gender, ethnicity, reasons for working, and the amount of allowances were important antecedent variables in the model. Shim used the Consumer Style Inventory developed by Sproles and Kendal (1986) to classify the decision making styles of high school students. The eight categories were high-quality, brand-conscious, fashion-conscious, recreational, price-conscious, impulsive, confused, and habitual, which were organized into three main areas of utilitarian, social/conspicuous, and other undesirable orientations. Specifically, parents, print media and consumer education were found to be positive socialization agents in utilitarian consumer orientations, but they were also positively associated with adolescents classified as confused by over choice (an undesirable consumer orientation). Influence of peers, as expected, positively related to social/conspicuous orientations and other undesirable orientations. Social class, reasons for working, and allowances had conflicting effects on styles within orientations, thus their impact on consumer socialization was determined to be unclear. Birth order and number of siblings had little effect on consumer decision making style.

54. Sonuga-Barke, E. & Webley P., (1993). ***Children's Saving: A Study in the Development of Economic Behaviour.*** **Lawrence Erlbaum Associates, Ltd., East Sussex, UK.**
This collection of reviews and experimental research on the determinants of savings beliefs and practices was presented in a socio-developmental framework where economic understanding is constructed within the social group, aided by financial or economic institutions. The authors described their study as an examination of social climate for savings. The socio-developmental view set forth considers the child as an economic problem solver, with decisions grounded in the concept of opportunity cost and constrained maximization problems, not unlike neoclassical microeconomic theory. In a series of experiments, the development of the understanding of inter-temporal decision making is explored for pre-adolescent children. While very young children randomly used banking and interest in the board games (usually thinking that money saved was money lost), older children (age 9) were able to understand the relationship between saving and expenditure over several periods.

55. Sutton, R. (1962). Behavior in the attainment of economic concepts. ***Journal of Psychology, 53*****, 37-46.**
Personal interviews with 85 children (ages 6 through 13) explored the development of understanding of money and the accumulation of capital. Taped responses to 12 questions (e.g., Do you like to earn money? What will money buy? What is a bank? Why do people save?) were transcribed and the language evaluated for stages of development. The study concludes that this sample of children from northeastern Georgia were in the initial stages ("pre-categorical": naming something with little comprehension of its meaning) of conceptualizing money and capital. Background characteristics (age, intelligence, socioeconomic status) did not impact the development of economic concepts. The author suggested the need for greater stimulation in aiding the development of economic concepts.

56. Turner, J. & Brandt, J. (1978). Development and validation of a simulated market to test children for selected consumer skills. ***The Journal of Consumer Affairs, 12*****, 266-276.**
Employing a simulated market game, Turner and Brandt investigated the use of consumer skills (ability to get the best buy, ability to determine quantity by comparing sizes and shapes of packages, ability to compare price and quantity) of children aged 4 (n=30) and fourth graders (n=32). Personal home interviews with children were conducted along with a parent interview to determine the child's responsibilities at home, experience with money, and demographic characteristics. Regarding demographic characteristics, age and gender made a difference, with older and male children scoring higher on the test and retest,

however, the occupation of the household head did not make a difference in scores. Children were given a score based on a composite index of the opportunities the family provided to the child in terms of the use of money (e.g., allowance, shopping) and home responsibilities (e.g., participation in decisions). Analysis revealed that children who scored higher on the index performed better on the test and retest of the market game. A major purpose of the study was to develop and validate the simulated market game as an effective instrument measuring children's consumer skills. Unique to this research was the experimental nature of the market game that allowed the study of actual consumer behavior of children.

57. Ward, S., Wackman, D.B. & Wartella, E. (1977). The development of consumer information processing skills: integrating cognitive development and family interaction theories. *Advances in Consumer Research*, *4*, William D. Pereault, J., (Ed.) Atlanta, GA: Association for Consumer Research, 166-171.
This paper, a precursor to the book *Children Learning to Buy: The Development of Consumer Information-Processing Skills* (1977), presented a conceptualization of child consumer socialization. Socialization was conceptualized as influenced by information processing skills (based on cognitive processes), developmental in nature (based on cognitive development theory), and to be integrated with intra- and inter-personal processes (family, media, peers, school). Within this framework they tested the 24 behavioral child outcomes (e.g., money use, spending and savings patterns, frequency and content of purchase requests) with specific interest in how the family impacts the process. Derived from child development research, the three mechanisms through which the family was thought to impact socialization included observation of parental consumer behavior, direct discussions related to consumption, and monitoring/supervising children's spending. The study focused on these mechanisms, but examined only the influence of the mother, with the addition of the consumer goals set by mothers for children. With a sample of kindergartners, third and sixth graders, separate regression analyses were conducted for the entire sample and for each grade. Age was the strongest predictor for 20 of the 24 child consumer behavior outcomes. The family variables were not significant in the initial regression (entire sample), but, among kindergartners, mother-child interaction was associated with consumer skills, whereas mothers' consumer behavior was important for the consumer skills of older children. Examining just the kindergartners, several alternative consumer socialization processes were tested. First, it was expected that family would impact cognitive skills through cognitive ability, however family was found to have an influence independent of cognitive ability on consumer skills. Second, it was expected that cognitive ability would be a prerequisite for consumer skills, with family having no impact, but support was found for the important role family plays in cognitive ability. Finally, a model with family having a direct impact on consumer skills was tested. For the consumer skills examined, family context variables accounted for one-sixth of the variance, indicating the direct impact on consumer skills. A figure of the model was included in the article, as were the item variables, but the regression tables were available only by request.

58. Ward, S. (1974). Consumer socialization. *Journal of Consumer Research*, *1*, 1-14.
This review paper, providing a synthesis of the research on consumer socialization, provided a definition of consumer socialization as well as a conceptualization of the process and outcomes. A discussion of the importance of studying consumer socialization was included. Ward suggested three issues that early childhood learning may have in relation to consumer socialization—permanency of consumer learning, influences modifying earlier consumer learning, and characteristics of early consumer socialization related to adult consumer behavior. Ward's review of theoretical perspectives of consumer socialization observed the need for more development due to the excess of theoretical essays in hand with the lack of propositions. The summation of relevant learning processes concluded that social learning process rather than direct education are relevant to consumer socialization. Ward discussed theories of cognitive development and influential socialization agents. He also offered implications of child consumer socialization, along with directions for future research.

59. Ward, S., & Wackman, D.B. (1971). Family and media influences on adolescent consumer learning. ***American Behavioral Scientist, 14,*** **415-427.**

The purpose of this study was to examine the developmental changes and patterns in consumer learning during adolescence. Eighth through twelfth graders (n=1,094) from Prince Georges County, Maryland were administered questionnaires to assess the impact of communication with family and media on levels of materialism, impact of commercials on buying behavior, recollection of commercial content, and attitude toward television advertising. No developmental differences (e.g., similarities between younger and older adolescents) were found on the consumer learning dimensions. The authors hypothesized that certain types of consumer learning would occur together or separately depending on the stage of development of adolescents (younger versus older), however no support was found. There were differences found in the types of communication about consumption. Younger adolescents engaged in more consumption related to communication with their families, were likely to watch more television programs and commercials for social utility reasons, but were similar to older adolescents in the amount of magazine usage and the amount of commercials they viewed for vicarious consumption reasons. Separate step-up regression analyses (with criterion of independent variable accounting for a minimum of one percent of variance) were conducted for younger and older adolescents to examine differences in consumer learning. Intelligence was a significant predictor of recall of advertising for both age groups, however magazine reading was an important predictor for younger adolescents, whereas amount of television time was predictive for older adolescents. For younger adolescents, time spent watching television and viewing commercials for social utility reasons predicted attitudes toward television commercials, whereas, for older adolescents, vicarious consumption motivations for watching commercials, family communication related to consumption and socioeconomic status were predictive. Vicarious consumption and social utility reasons for watching commercials were related to older and younger adolescents' materialistic attitudes, however the amount of money available to an adolescent was related to materialism in younger adolescent, and intelligence was related to materialism in older adolescents. The final analyses suggested consumption behavior to be a social process, with the effects of television advertising on buying behavior for younger and older adolescents being related to family communication about consumption, watching commercials for social utility reasons, and the amount of magazine exposure. It was concluded that three major processes impact adolescent consumer learning: intelligence, reasons for viewing television (motivation is mostly social), and communication (indicating the social process of learning about consumption).