

Teenagers' Money, Discretionary Spending And Saving

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This study investigated how much money was obtained and how it was spent by teenagers. It also examined the effects of individual and family characteristics on teens' discretionary spending and saving. Teens' income and age, separately, had negative effects on food expenditures and positive effects on both clothing and entertainment expenditures. Family income had a positive effect on teens' clothing and entertainment expenditures. Having an allowance negatively affected teens' food and clothing expenditures. Compared to female teens, males saved less and spent less on clothing and personal care items.

KEY WORDS: *adolescent consumption pattern, adolescent spending, children money, teen saving, teen spending behavior.*

Introduction

The substantial spending power of children, in general, and teens, in particular, has not been extensively studied. Although several studies have estimated the economic power of children and explored the acquisition and use of their money, little has been done to examine and analyze the magnitude of the issue, its major determinants within and outside the family circle, and its impact on families and society at large. Even those studies which carried out the estimation tasks are relatively new because children have only recently been considered independent consumers. McNeal (1990) revealed that the first estimate of the purchasing power of children did not appear until 1968. In his 1987 book, McNeal explained that many people either don't consider children an important enough market to do expensive and thorough research on or think it is inappropriate to look at children as a market. The latter sentiment, according to Stipp (1988), has spawned much of what little research has been published in this area. Doss, Marlowe, and Godwin (1995) acknowledged that "Children's acquisition and use of money rarely has been investigated in academic research, although it has been a frequent topic in the media" (1995, p. 219). Stipp also shares this notion on the lack of research in the area of children's spending. He stated that "there is little information about children as consumers. Many companies have studied children's reactions to their products and advertising. But there has been a lack of systematic research that looks at children's preferences, their income, spending, and how they influence purchases in the context of the family" (1988, p. 28).

If one of the obstacles to researching the purchasing power of children is whether or not children are considered to be consumers, what would constitute being a consumer in the first place? A consumer, according to the *MIT Dictionary of Modern Economics*, is "any economic agent responsible for the act of consuming final goods and services" (Pearce, 1986, p. 78). The responsibility for consumption, thus, seems to be conditioned by the ability to make purchasing decisions or to formulate consumer choices. Consumer choice, in turn, is based upon two major elements. The first is the ability to pay for the purchases, and the second is the willingness to trade among the alternative purchases (Eastwood, 1996). Children, therefore, may not be considered consumers in the line of these classic theoretical stipulations. In reality, however, children seem to prove they are big spenders. On this ground, it is plausible to assume that the mere size of expenditures should warrant the study of children's spending, if not the study of their consumer decision-making.

Children's Spending

Children, in general, and teens in particular, constitute a significant power in the market, feeding the most lucrative businesses and industries. Zollo (1995a) estimated that teens' spending was close to a staggering \$100 billion a year. In 1994, teens spent \$63 billion of their own money on personal needs, according to Teenage Research Unlimited (1994). However, when teen expenditures include family money, teens would spend an amount equivalent to half of the U.S. defense budget, according to Zollo (1995b). Teens' spending has particularly increased during the 1980s and 1990s.

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According to Tootelian and Gaedeke (1992), expenditures by teenagers increased nearly 43% in the 1980s despite a 15.5% decline in the teenage population. Furthermore, in 1991, teenagers spent a total of \$82 billion, an increase of 3.8% over the \$79 billion spent in 1990 (Bailey, 1992; O'Neill, 1992). Such an increase in one year was considerable, given the fact that during that time the economy suffered a recession and that the teenage population had decreased by 300,000 between 1990 and 1991 (O'Neill, 1992). By 1994, teens had an aggregate income of \$96 billion, up from \$86 billion in 1993 (Zollo, 1995b).

A 1994 national survey by America's Research Group (ARG) revealed that an average teenager visits the shopping mall at least eight times a month and that nine out of ten teenagers make at least one purchase a visit, spending an average of \$33. With this impressive purchasing power, and an additional estimated total of \$10 billion in savings, teens may constitute a far more sophisticated set of buyers than is often thought (Tootelian & Gaedeke, 1992).

Teens' Money and Market

Teens have three major sources of income: family allowances, earnings from part-time employment, and gifts and other funds received from parents and relatives. The amount of an allowance children receive as well as its timing and frequency depend not only on a family's income but also on the family's values and philosophy and the age and maturity of the children (Brophy, 1986). Miller and Yung (1990) conceptualize family allowance as regular intra-family cash transfer or welfare fund allotted to children for recurring expenditures. Based on the rationale by which the allowance is given, the authors divide allowances into three categories: (a) earned allowance, which includes any payments by the family for household chores or rewards for achievement and good behavior, (b) educational allowance, which is given to offer educational opportunities for promoting self-reliance in financial decision making and money management, and (c) entitled allowance, which is given to offer basic support especially to cover expenses for necessities and extras. Danes (1993) considers the entitled allowance as the family member's privilege which permits children to have their own share of family income. In addition to the earned and entitled allowances, she adds two more types of children money: the dole, which is money given to children upon request, and cash gifts, which are received on special occasions such as birthdays and holidays. Danes (1993) and Danes and Dunrud (1993) emphasize the importance of parents

discussing money matters, establishing a consistent approach to teach children about money, and include them in the decision-making process.

With several possible sources of income, children are likely to enjoy more opportunities to have some kind of money at their disposal. Zollo (1995a) estimated that one-third of all teens get an allowance, while more than 80% earned money in the labor market. Doss, Marlowe, and Godwin (1995) found that 57% of children ages 10-15 received an allowance, over 50% earned money, and 20% received gift money. In the 1991 College for Financial Planning Survey, 43% of the high school students reported part-time jobs, 13% reported an allowance, and the rest reported gifts and other sources as major sources of income (O'Neill, 1992). Baecher (1991) found that 50% of children between nine and fourteen received an allowance. Heinzerling and Chandler (1989) reported 73% of children ages 10-14 received an allowance. Horner (1984) reported that teens comprise 10% of the U.S. labor force. By 1990 more than two-thirds of the employed teens worked at least 16 hours a week while attending school (Bailey, 1992; O'Neill, 1992). A teen's average weekly earnings, as estimated by the Rand Youth Poll (1983), was \$32, in addition to an average allowance of \$22 a week. Their estimated earnings went up in 1991 to \$85 a week (O'Neill, 1992). In a 1994 estimation, teens had an average weekly income of \$67 (Zollo, 1995a).

Adolescents today may perceive themselves as having a spending and money management philosophy different from that of their parents. According to O'Neill (1992), adolescent employment appears, in many cases, to be motivated not by economic need, but by a desire for luxuries. In its first financial awareness survey, the College for Financial Planning (1990) revealed that entertainment was the top category of adolescent spending. Bailey (1992) also reported that teens spent about 82% of their income primarily on entertainment, clothing, cosmetics, and transportation.

Doss, Marlowe and Godwin (1995) studied middle-school children's sources and uses of money. They found that teens' discretionary spending was related to the amount of money received from parents and the amount of gift money received. The amount of money teens earned was not related to teens' discretionary spending but was related to their savings.

In surveying 13 and 14-year-old students, Belk, Rice, and Harvey (1984) found that dual sources of income and

greater amounts of income were associated with more spending on self. However, their findings suggested that giving money to children may foster saving and gift-giving more than spending on self.

According to McNeal's (1987) notion of the multiple market (McNeal, 1987), teens can flex their purchasing power muscles in three markets. The first is the current market, where they make their choices independently and pay for them from their own money. The second is the influential market, where they have a major influence on the choices their parents and other parties make. Zollo (1995a) distinguished between family money spent by teens themselves and family spending influenced by teens. He estimated that teens spent a total of \$36 billion in family money, not including the family spending they influence. McNeal (1992) stated that, because most parents are employed outside the home, children are being permitted to influence household spending decisions that total about \$132 billion a year. Josten (1991) reported that more than 37% of what is treated as adolescent expenditures was influential spending. Trachtenberg (1986) estimated that teens chose one-fifth of the supermarket purchases for their families. The third teen market is the future market where much of their current spending behavior is carried over into their future choices. This market is governed by the behavior of adult consumers which is shaped by the nature and direction of their early economic socialization.

Consumer and Financial Socialization of Children

Consumer socialization is defined as "the process by which young people acquire skills, knowledge, and attitudes relevant to their effective functioning as consumers in the market place" (Ward, 1974, p.2). Financial socialization, according to Danes (1994), is much more inclusive than just learning to function effectively in the market place. She describes it as "the process of acquiring and developing values, attitudes, standards, norms, knowledge, and behaviors that contribute to the financial viability and well-being of the individual" (p.128). The comprehensiveness of financial socialization is evidenced by the many broad areas of money handling it includes. It would cover learning about earning, spending, saving, borrowing, and sharing (Danes & Dunrud, 1993; Schuchardt, Danes, Swanson & Westbrook, 1991). It could be argued here that in addition to generating, spending, and managing money, the areas of maintaining (insurance, taxes, wills), and increasing (investment) money should be added.

In researching parental perceptions on children's

financial socialization, Danes (1994) specifies the family as "the context in which children learn about financial knowledge, attitudes, beliefs, and practices" and specifies parents as the "primary agent for financial socialization" (p.132). She found that the majority of parents (69.5%) believed that children under nine years of age were ready to receive an allowance, while 63.9% of parents believed that the same age group would be ready to open a savings account. She also found that almost one-third of parents believed that children between 9 and 11 could help create a budget and that children between 12 and 14 should be aware of their family's living costs. More than a decade ago, Moschis (1985) stated that parents could influence the development of consumer behavior in their children, both directly and indirectly. Direct influence includes overt interaction on consumption matters and providing opportunities for children to observe their own consumer behavior. Indirect influence may occur when the family mediates the effects of other socialization agents such as mass media and peers. Consumer and financial socialization within the context of the family has scarcely been researched, as Danes (1994) acknowledges. The majority of research which has been done has focused on the consumer socialization and emphasized external agents of socialization such as the media, peers, and retail personnel. The following is a brief review of these major studies.

Gilkison (1965) studied the influences on teenagers' buying decisions by comparing the nature and relativity of five predetermined frames of references: parents, friends, salesclerks, television, and magazines/newspapers. He selected eight different product lines for his survey: personal clothing, toiletry articles, sports equipment, transportation, food, small appliances, insurance policies, and other items such as beverages, cigarettes, and magazines. He found that teenagers between sixteen and nineteen tended to regard parents as their number one frame of reference when buying personal clothing, toiletry articles, transportation, insurance policies, appliances, and food. Friends and salesclerks were regarded as the number one frame of reference for buying sports equipment and other items.

Ward and Wackman (1972) examined the second-order consequences of mass media on purchasing decisions, focusing on the impact of television advertising on mother-child interactions in purchasing 22 selected products. They found that food purchases were those most influenced by children, followed by durables such as games, toys and records. They also found that these influences decreased with children's age, but the older the

child was, the more likely the mothers were to give in to children's influence. Furthermore, mothers who restricted their children's television watching were less likely to yield to purchase influence. Those mothers who spent time watching television themselves and those who were able to recall commercials were more likely to be influenced and to yield to children's requests.

Moore and Stephens (1975) explained variation in adolescent consumer learning and examined the possible influences of certain factors on the socialization outcome. Four aspects of consumer learning - price accuracy, slogan recall, brand specification, and attitudes toward advertising - were utilized in the analysis. The major findings were that older teens had acquired complex consumer skills and negative attitudes toward advertising to a significantly greater degree than younger teens. The findings also revealed that friends and siblings were rated the highest as sources of influence on buying, with media sources receiving lower ratings, and that the frequency of parent-child communication about consumption was minimal. Older teens were found to spend more money and seek out more sources of advice prior to purchasing when compared to younger teens.

Gorn and Goldberg (1977) assessed the attitudinal and behavioral effects of exposing children from lower income families to television commercials for child-related products. They found that, with minimal commercial exposure, the participants developed favorable attitudes toward the product advertised, but that it took additional exposure to induce them to try harder to win the product compared to the control group. Moschis and Moore (1978) examined the impact of television, family, school, and peers on the acquisition of specific consumer skills that contribute to the adolescent's competency and proficiency as a consumer in the marketplace. This study found that peers were the most significant source of acquisition of consumer-related skills, while family and school were not significantly related to any of the consumer skills for teens. Television, however, appeared to be significantly related to those consumer behaviors that teens considered socially desirable.

Kourilsky and Murray (1981) showed that instructional mediation led to an increased level of economic reasoning in family budgetary decisions, which in turn increased the level of children's and parents' satisfaction with the decision making process. Parents' and children's satisfaction levels with budgetary decisions were found to be correlated.

Carlson and Grossbart (1988) examined the differences in parents' consumer socialization tendencies. Their results indicated that mothers with alternative parental styles differ in communicating with children about consumption, number of consumer socialization goals, restricting and monitoring both consumption and media exposure, and views on advertising. Contrary to their expectations, they found that mothers with different styles do not differ in the amount of consumption autonomy they grant to children.

Rationale and Objectives

The enormous current and future purchasing power of adolescents and its duration and complexity makes it necessary to study the spending behavior of this group. Two other facts make it important to study the money and spending habits of teens. First, as previously mentioned, patterns of spending are most likely to develop during adolescence and continue throughout adulthood. Secondly, problems related to adolescents' money, spending, and employment are considered a major source of family conflict and, ultimately, a major factor in family well-being.

The existing research in the area of children and money includes surveys, descriptive studies, estimates of funds, sources of money, and acquisition and use of money. The research has approached this topic either from a marketing point of view (Horner, 1984; Walsh, 1985; Hauser, 1986; McNeal, 1987, 1990, 1992; Stipp, 1988, 1993; Tootelian & Gaedeke, 1992; Zollo, 1995) or from a consumer and family point of view (Peters, 1987; Swanson, 1990; Bailey, 1992; O'Neill, 1992; Danes & Dunrud, 1993; Danes, 1993, 1994; Doss et al., 1995). This study adopts the latter point of view.

While many studies have considered the family as an influencing factor in adolescent spending and decision-making process, little research has been done (except for Danes, 1994, and Doss et al., 1995) to explain the extent to which adolescent spending is influenced by the characteristics of their families. The idea of looking at the family as a whole, and as only one of many independent factors such as the media and school, did not offer an opportunity for an internal look at the family. As a result, an important feature of the complete picture is missing. The emphasis, in this study, is placed on the consumer's internal socialization with the inter-family characteristics assumed to impact the adolescents' decision making process. In addition to investigating how much money teens receive, from what sources, and how and where it is spent or saved, this study examines

the association of discretionary consumption and savings with a set of demographic and socioeconomic variables for the teens and their families. The focus of this study is also on teens' own money, spent or saved at their own discretion, since the greater part of children's money is discretionary (McNeal, 1990; Doss, Marlowe & Godwin, 1995),

A comprehensive knowledge of adolescents' conscious behavior in money handling and of the factors affecting their spending and saving may help recognize the proper response and preparation by their families, their educational system, their communities as well as by the market and the economy in general. The discovery of specified tendencies in adolescent behavior in relation to money and products and the recognition of the direction of those tendencies permit more accurate predictions by parents, family practitioners, businesses, and researchers. Those predictions may ultimately benefit the economic well-being of families, as well as the performance of the market and society.

Methodology

Sample and Analysis Procedures

A sample of 423 teenagers was randomly drawn from middle and high school students enrolled in the public school district in Springfield, Massachusetts. Three different socioeconomic levels from the predominantly lower-income to the predominantly upper-income neighborhoods were represented in the sample. The Research Center in the public school system helped in obtaining parental consent, and in administering and collecting the survey questionnaires in the classrooms. The questionnaire contained a total of 29 items with a page of instructions and explanations. Eleven items concerned the individual and family demographic and socioeconomic characteristics. The rest of the items were related to teens' money and work. It took students an average of 25 minutes to complete the survey. Parents of the participating students were contacted later to check on selected items such as those related to parents' income, education, and occupation. Although the language and structure of questions had been simplified after a pilot test of 15 students, a research assistant was present during the survey to go over the instructions, clarify terms, and answer questions. Twelve percent of the collected questionnaires were discarded because they were either incomplete or gave inconsistent responses.

Theoretical and Empirical Model

The theoretical model was based on a modified Neoclassical demand theory by which expenditures (E) are a function of income (Y), prices of market goods and

services (P), and tastes and preferences (T).

$$E = f(Y, P, T)$$

Due to the use of cross-sectional data here, prices are assumed to be constant. Income would be teens' income (Y_t), and taste and preferences are those of teens (C_t). Teens' expenditures (E_t), therefore, are expressed by:

$$E_t = g(Y_t, C_t)$$

Family income and family taste and preferences may act as exogenous variables which may have an impact on teens' income and preferences. Vectors of several demographic and socioeconomic characteristics of teens and their families would represent the independent variables in the empirical model. Teens' expenditures will be broken down into four major categories which represent the dependent variables in the empirical model:

Food, Drink and Snacks: includes all food and beverages a teen would buy for self or others by his/her own desire, excluding what is bought by teens to help the family, and what is bought by the family for teens.

Clothing and personal care: includes outerwear, underwear, shoes, jewelry, tatoos, make-up, perfume, deodorants, shampoos, hair cuts and hair products; and beauty services, supplies and accessories.

Entertainment: includes movie and concert tickets; audio and video related items such as stereos, tapes, CD's, speakers (purchased or rented), dating, partying, books and magazines, toys and hobbies, games, trips, sports products and activities; and cigarettes.

Saving: includes money spared intentionally as saving, as well as money which is simply not spent.

Four separate expenditure equations were set to estimate the parameters (B_0, B_j) and determine the relationships between teens expenditures and the predicting factors using the Ordinary Least Squares (OLS) technique. The dollar amount spent in the i th categories (E_i) were estimated as a function of the same set of the independent variables (X_j).

$$E_i = B_0 + B_j X_j + u$$

$i = 1, \dots, 4$; $j = 1, \dots, 17$

The independent variables included two groups. The first group was the teens' characteristics which were age, gender, income, having a part time job, having an allowance, perception of having a job, perception of own spending, and perception of peer spending. Teen's income is defined the total money received a week which includes allowances, earnings, gifts and others. The second group was the family characteristics which included family income before taxes, family size, mother's age, mother's education, mother's marital status, and mother's race. Mother's characteristics were chosen for parents' characteristics because of the multicollinearity found between them and father's characteristics which were dropped from the analysis. Multicollinearity among the independent variables was detected using a correlation matrix. Variables were deemed to have a collinearity problem when the correlation coefficient was .80 or more (Kennedy, 1985).

Findings

Descriptive Statistics

Teens who participated in this study were between 12 and 16 years old. Three-fourths of the sample were 13 and 14 years old, and the average age was 13.2 years. A little more than half were males, and almost one-third of the respondents held a part-time job. Seventy-seven percent of those employed worked 10 hours or less a week, while 23% worked more than 10 hours a week. A little more than one-third of the respondents did not receive an allowance. Almost half of those who received allowances reported between \$6 and \$20 a week and a little more than one-third received \$5 or less, while the rest reported more than \$20 a week. The average weekly allowance received was \$9.78. One-third of the respondents reported labor market earnings of \$20 or less a week, 46% reported between \$21 and \$50, while the rest reported more than \$50 a week. The average weekly earnings was \$10.53. Seventy percent of the respondents thought that holding a part-time job was necessary, while the rest thought it was not necessary. A little less than half of the respondents spent \$10 or less a week, while a little over than one-sixth spent between \$11 and \$20, and the remaining one-third of the sample reported spending over \$20 a week. The average total spending was \$16.72 a week which is almost 81% of their income leaving 19% for saving which averaged at \$3.98 a week. Entertainment category topped the list of spending at \$5.91 or 29% of income. Clothing and personal care was next at \$5.45 a week, or 26% of income. Food, drink and snacks was at \$4.49 a week, or 22% of income. There

also was a category of "others" which averaged \$0.87 a week, or about 4% of income.

On questions dealing with the teenagers' perceptions of spending, two-thirds of the sample reported being content with the amount they spent, one-fifth complained that they spend too little, and the remaining one-sixth thought they spent too much. When asked about what they thought of the spending of their peers, 62% thought other teenagers spent too much, 32% felt their peers' spending was just right, and only 6% thought teenagers around them spent too little.

Teens in this survey lived in households that had an average size of 4.2 person. The average annual household income was \$38,321. Single parent households had an average annual income of \$22,469, and married parent household had an average of \$54,171. Only 31% of the households in the sample were White while 69% were non-White (29% Hispanic, 27% Black, and 13% others). About 44% of the adolescents lived in married-couple households. Parents in more than half of the households had at least a high school or college education. Table 1 shows the mean value and standard deviation of selected variables.

Regression Results

Results show that the predicting variables exhibit different relationships with teens' spending across the four equations (Table 2). Six variables had significant effects on the food, drink and snack category,. Respondent's age, receiving an allowance, respondent's income, and believing job is necessary had negative effects while having a job and family size had positive effects. All other things equal, teenagers spend less on food as they get older. Teenagers who have jobs appear to spend \$23 more on food compared to those who do not have jobs. However, teens who receive an allowance spend \$13 less on food than otherwise similar teens who do not receive an allowance. Teens seem to spend less on food as their income increases. It appears that there is a reduction of 17 cents in food expenditures for each dollar increase in income. Teens who believe having a job is necessary appear to spend about \$10 less on food when compared to those who do not consider having a job necessary. Among all variables standing for family characteristics, only family size appears to affect the spending of teenagers on food. teenagers from larger families seem to spend more on food than those from smaller families.

Table 1

Mean Value and Standard Deviation of Variables

Variable	Mean	S.Deviation
Respondent's Age	13.2	.781
Family Size	4.2	1.99
Mother's Age	36	5.49
Household Annual Income	38,321	19,853
One-earner Household	22,469	8,356
Two-earner Household	54,171	13,115
Teen's Weekly Income	20.70	33.50
Teen's Weekly Allowance	9.78	15.35
Teen's Weekly Earnings	10.53	25.71
Teen's Weekly Spending	16.72	19.62
Food, Drink, and Snack	4.49	6.11
Clothing & Personal Care	5.45	10.11
Entertainment	5.91	13.74
Saving	3.98	16.79
Others	.87	3.04

(n=423)

Seven variables had significant effects on clothing and personal care category. Respondent's age, respondent's income, mother's age, and family income were positive, while respondent's gender, having an allowance, and mother's marital status were negative. Age of the respondent suggests that teenagers spend more on clothing and personal care as they grow older. For example, a 15-year-old would spend \$3.17 more on clothing and personal care than a 14-year-old. A male appears to spend \$9.60 less on clothing and personal care than a female. Having an allowance, once again, has a negative effect on spending. It seems that those who receive an allowance spend \$7.10 less on clothing and personal care than those who do not receive an allowance. Teenagers who have higher income spend more on clothing and personal care. It appears that about 23 cents of each additional dollar of income would be spent on clothing and personal care.

Mother's age suggests that teenagers of older women spend \$1.15 more on clothing and personal care than those of younger women. Teenagers of married mothers seem to spend \$11 less on clothing and personal care than those of non-married mothers. Family income suggests that teenagers from middle income families spend \$1.49 more on clothing and personal care than those from low income families. It is assumed that low income families are those with an annual income below \$20,000. Middle income families are those with an annual income between \$20,000 and \$60,000, and High

Table 2.
Regressions of Individual and Family Characteristics on Spending Levels and Saving.

Variable	Food, drink & snacks	Clothing & personal care	Entertainment	Saving
	Coeff.	Coeff.	Coeff.	Coeff.
Age	-0.85*	3.2*	5.5*	-2.9
Male	0.97	-9.6*	1.4	-6.4*
Has job	23.1*	2.7	0.9	0.7
Receives allow.	-13.0*	-7.1*	0.1	-0.2
Resp.'s income	-0.17*	0.2*	0.2*	0.3
Is job necessary?	-9.8*	-0.9	1.9	3.0
Satisfaction with own spending	0.56	0.2	18.7*	0.7
Perception of peer spending	1.2	-0.1	1.8	-2.7
Family size	1.1*	-0.8	-1.0	8.4
Mother's age	0.8	1.2*	2.2	0.6
Mother married	4.0	-11.0*	2.3	-5.5*
Mother non-White	1.6	1.0	-0.5*	2.3
Mother's educ. High School (vs. <H.S.)	3.0	1.4	0.8	4.1
Mother's educ. Coll. (vs.<H.S.)	11.9	10.3	1.0	1.6
Mother's educ. Grad. (vs.<H.S.)	4.0	0.9	0.7	3.0
Family Income: Middle (vs. Low Income)	1.7	1.5*	2.0*	0.8
Family Income: High (vs. Low Income)	2.3	0.9	0.5	0.3
Intercept	36.1	51.9	20.1	22.5
Adjusted R squared	0.10	0.12	0.14	0.05
F-value	6.8	11.3	6.3	0.4

*p<0.05 n=423

income families are those making over \$60,000 a year.

Five variables had significant effects on entertainment expenditures. Respondent's age, respondent's income, respondent's satisfaction with own spending, and family

income were positive while mother's race was negative. The age coefficient suggests that \$5.51 is spent on entertainment for each additional year in a teen's age. Income coefficient also shows that teens spend more on entertainment when they have higher income. It was interesting to see that teenagers who believe they spend too little appear to have spent \$18.70 more on entertainment than those who believe they spend too much. Teenagers of white mothers seem to spend about 50 cents less on entertainment than those of non-white mothers. Consistent with the effect on clothing category, teenagers from middle income families appear to spend \$1.98 more on entertainment than those from low income families.

Only respondent's gender and the marital status of the respondent's mother had significant effects on saving. Both variables are negative. It appears that a male saves \$6.40 less than an otherwise similar female, and teenagers of married mothers save \$5.50 less than otherwise similar teens with non-married mothers.

Adjusted R²s are: 9.6% for food equation, 12.4% for clothing and personal care equation, 13.7% for entertainment equation, and 5.3% for saving equation. They suggest that the model's set of independent variables best explain the variation in entertainment expenditures (about 14%), and worst explain the variation in saving (less than 6%). All F-values are significant.

Conclusions and Implications

To identify factors associated with teen spending behavior and to map the teen consumption and saving pattern, this study examined the effects of several characteristics pertaining to teens and their families. Several factors revealed statistically significant relationships to the four categories of spending. Most of the findings seem to be consistent and plausible. For example, the suggestion that teens allocate less money for food and snacks as they grow older could be explained by their growing needs for other consumer products such as clothing and personal care and entertainment. In fact, a look at the age variable across the second and third equations (Table 2) would confirm the age effect in increasing the expenditures on clothing and personal care and entertainment. It seems that as they grow older, teens appreciate entertainment items more than they do for clothing and personal care items. The suggestion that boys spend less than girls on clothing and personal care could be explained by the well-established socioeconomic and cultural norm which

offers girls a wider variety of clothing and personal care products such as apparel, jewelry, make-up, and hair supplies and accessories. Further, girls found to be more likely to save than boys. This could be interpreted that girls may have developed a higher level of responsibility related to the use of money since they have been found to handle family purchases more often than boys (Stipp 1988).

The finding that teenagers who have jobs spend significantly more on food than those who do not have jobs could be explained by the fact that they had to spend more time out of their homes to meet the job requirements. It was interesting to find that teenagers who get an allowance may spend less on food and clothing than those who do not get an allowance which may sound contradictory. It may, however, be interpreted that teenagers who do not receive an allowance may tend to exhibit a certain level of independence in their behavior especially when their spending priorities are concerned. The finding of the negative effect of Respondent's income on food, and its positive effect on both clothing and entertainment could be seen as an indication that teenagers' food and snacks represent an inferior good to clothing and entertainment which were considered normal goods. The finding of the teens' perception of own spending may suggest that those teenagers who consider themselves generally spending too little are willing to spend more on entertainment, and therefore, appreciate it more than those who consider themselves generally spending too much. Family size was the only significant variable among all family characteristics to affect food expenditures. This could be explained that being in a larger size family may lower the per capita share of food and snacks, and therefore, raise the individual motivation to eat out or to share some of the household costs of food by using personal money to buy additional food for the family. The finding that suggests teenagers of non-married mothers may save more than those of married mothers could be explained that those teenagers may attempt to lessen the financial burden on their mothers, and it could reflect the increasing motivation of those mothers to enforce their kids discipline because those mothers are most likely to be the major, and probably the sole responsible adult in the household.

Based on the R² values, the independent variables were able to explain the variation in the entertainment spending better than any other spending category. However, number of the significant variables in the first three equations, and particularly in Food equation, may

indicate that it is the individual characteristics more than the family characteristics that are more relevant in explaining the teens' spending behavior.

The findings of this study have implications for youth education program and public school system. They also have implications on marketing and on consumer research. Parents, educators, counselors, and family practitioners should be aware of the prevalent norms in spending and saving among adolescents. Mapping the consumption pattern and knowing the spending priorities may help identify the direction of a better consumer education and financial literacy programs for adolescents.

Considering the findings of this study, there are two major outcomes which would pose enormous economic and ethical challenges for the future. First, there is some evidence indicating that most of the adolescents' discretionary income would be spent on recreation and luxury items, and second, there is virtually little evidence that adolescents practice or even appreciate saving. Although it is not surprising to find teens as highly interested as the results show in spending on age-appropriate items such as clothing and entertainment, it is essential that they develop skills in money and time management. It is equally important for adolescents to understand the value of money as well as the value of work, and appreciate the differential in spending capacities among themselves and across their families. It is also vital to recognize that the adolescents' money, regardless of its source, should serve a purpose. The least of that purpose is to foster independence, increase the adolescent ability to make rational decisions, and develop a better understanding and appreciation of the balance between their individual interests and family commitments and responsibilities. Finally, The findings of this study are by no means conclusive. A lot of caution should be taken before making any generalization of these findings. Some characteristics of the sample used in this study do not make it eligible to be nationally representative. The most noticeable characteristics in this respect was the ethnic make-up of the sample where the majority was non-White. More research is needed to examine more affecting variables, and to use a nationally representative sample.

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