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INCOME, WORK, AND SPENDING BEHAVIOR OF EARLY ADOLESCENTS

By

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ABSTRACT

INCOME, WORK, AND SPENDING BEHAVIOR OF EARLY ADOLESCENTS

By

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Early adolescent children are drawing attention because of their access to, and use of, greater amounts of money. Secondary analysis of data collected in the 1987 Michigan Early Adolescent Survey II was employed to estimate the income 168 early adolescents received from parents and from jobs outside of the home, and to describe children's spending behavior. Chi-square tests of independence and analysis of variance were used to determine if children's income, source of income, and spending behavior were related to four independent variables: age, gender, family income level, and place of residence.

Job participation and average income increased as children's age increased. There was no association between job participation and gender, nor did boys' and girls' average incomes vary significantly. Children with two sources of income, allowances and earnings, reported highest average incomes.

Children's spending was largely for nonessential items. Few reported buying school lunches or giving to church and charity. Over half of the children reported saving for a specific large item and for the future, and buying records or tapes, gifts, clothes, and snacks. Children's spending behavior was associated significantly with age, gender, place of residence, and work participation.

To my FATHER
who provided my first allowance,

and my MOTHER
who guided my earliest spending decisions.

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Chapter 1

INTRODUCTION

Changes in the consumer activity of children and early adolescents have been making headlines in the popular press with increasing frequency during the 1980s. This interest in the young consumer is not entirely new. Saturday morning television programing has long been associated with advertisements aimed at enticing young viewers with the latest in breakfast cereals, toys, and games.

Traditionally, however, children were not perceived to be direct consumers. Parents gave modest allowances with the intention of teaching their children how to save money for the future, not spend it in the present. And when spending did occur it was most often done under the guidance of parents (McNeal, 1987).

According to Hall (1987), businesses and marketing strategists have a special eye on this sector of former savers. Early adolescent children between the ages of nine and 15 are becoming known for their newly heightened level of brand consciousness. They are playing an expanded consumer role because they have access to, and power over, greater amounts of money.

This change from "parent-guided saver" to "brand-conscious free agent" has not occurred overnight. Rather it has developed along with other changes taking place within American families in the last several decades. Increased affluence since World War II and the growing labor participation of women have contributed to the gradual shift away from home production activities. Whole families, not just children, have

expanded their consumer purchases, buying goods and services in the market place which they formerly produced within the home.

In 1984 the annual income of the 30,019,000 children between the ages of four and 12 years in the United States was an estimated $4.7 billion (McNeal, 1987). Most of this -- $4.2 billion -- was spent and only $500 million was saved. Since parents provide for most of the children's basic needs at this stage, this spending by the youths was largely discretionary and explains why the business and marketing community has been so attentive to young consumers.

In contrast to the business community's keen interest in children's buying habits, serious analysis of the consumer activity of children from a social science perspective is still relatively limited. Medrich et al. (1982) included an examination of the work that children do, the allowances they receive, and their spending habits within a larger study of children's lives outside of school. McNeal (1987) documented the volume of children's discretionary incomes and the extent to which children can rightly be considered individual consumers or a market group. Others have examined the way in which children obtain consumer knowledge (Ward, Wackman & Wartella, 1977) and have investigated some of the possible effects that increased earning and spending opportunities might have upon young people (Steinberg et al., 1982; Bachman, 1983).

Few of these existing studies focused their analyses specifically on the early adolescent population, that group of children ranging in age from 10 to 14 years, which is currently drawing so much attention. This may be due to the fact that in the past, research concerning human development tended to concentrate more on the early childhood or

the adolescent years than on this middle stage of development.

Recent changes in the family and the larger society are highlighting some of the unique characteristics of early adolescence. For example, as working parents make decisions concerning the care and supervision of their children during the parents' absence, it is relatively clear that younger children need constant supervision for their care and safety. At the other end of the spectrum older adolescents, in preparation for leaving home and establishing independent living, are able to assume greater care for themselves.

Bridging these extremes is the stage of early adolescence, a time when children's need for parental supervision is balanced with a need for experiences requiring increased responsibility that will lead to adult competencies (Cole and Rodman, 1987). This stage is now recognized as a crucial period in human development when youths begin to work at six psychosocial issues identified by Hill (1980). These include attachment, autonomy, sexuality, intimacy, achievement and identity. Throughout early adolescence there is a high level of joint participation by parents and children in decision making (Dornbusch et al., 1985).

Because of the relative newness of the research concerning the economic activities of children, there remains a need to expand upon current findings. Furthermore, in light of the emerging emphasis on early adolescence as an important and unique stage in the human development process, it is important to study the income and spending behavior of children in this specific age group. Such research must be done considering developmental changes occurring at this stage of the life cycle and within the context of the family.

This study was therefore undertaken with the intention that its findings would be useful to families, enabling them to compare their individual decisions and practices regarding children's work activities, allowances and spending behavior with information about these behaviors in other families. Furthermore, the findings would provide family and parent educators with increased understanding of the economic aspect of early adolescent life, supplementing current knowledge about adolescent development.

Ecological Perspective on the Problem

As with any topic that involves the interaction of people with other people or systems in their environment, the current topic of how early adolescents obtain and spend money needs to be studied and understood within a multi-dimensional, ecological perspective. Newspaper and magazine articles that emphasize the market impact of early adolescent spending practices attest to the fact that the outcomes of family decisions, such as whether to provide a child with an allowance, whether to encourage the child to get a job, or the degree of discretion the child should have over the disposal of that income, are felt in various domains beyond the boundary of the family itself.

Early adolescent development and the economic activity of early adolescents are undoubtedly related to factors in the microenvironment such as family structure and work patterns, parental attitudes, and the amount of resources available to children. No less important are factors in the macroenvironment such as society's changing attitudes toward work and money, the overall economic status of the country, and the influences of the early adolescent subculture. Although it may not be

possible to include all of these factors in the design of any single study, they must nevertheless be recognized as vital elements in a complete discussion of the topic.

Research Objectives

The overall goal of this research was to learn more about the ways in which early adolescent children obtain and spend money. In order to attain this goal three objectives were outlined.

The first objective was to estimate the level of income among a sample of early adolescent children and determine the extent to which that income was received from parents and the extent to which it was earned through jobs outside of the home. The second objective was to describe the manner in which the early adolescents spent or saved their money.

The final objective was to employ statistical methods to determine the manner in which the children's level of income, source of income, and spending behaviors were influenced by and/or associated with other variables of interest such as age, gender, family income level and place of residence.

Chapter 2

REVIEW OF LITERATURE

In an attempt to develop an ecological framework for understanding the study of income, work, and spending behavior of early adolescents, and because research on this topic is still somewhat limited, the following review of literature draws from additional, related areas. First, a brief review of early adolescent development will place the current research within a framework of the developmental tasks undertaken by children at this stage of the life cycle, and the variables known to relate significantly to those tasks. Secondly, current social trends and changes within the family will be reviewed, with special interest in their economic implications and influence upon the meaning of work held by American families. Finally, existing research on the income, work, and spending behavior of early adolescents, and the variables found to affect that behavior will be examined.

Early Adolescent Development

Early adolescents, when defined as children between the ages of 10 and 14, span two of the four stages in cognitive development outlined by Piaget (1958). During the stage of *concrete operations*, the seven-to 11-year-old child can classify and organize thoughts in a logical manner and begin to perform actions mentally. From the ages of 11 and 12 onward, early adolescents perform *formal operations* which include abstract thinking and conceptualization of things never seen.

Robinson, Rowland, & Coleman (1986) emphasized that, in Piaget's framework, children's cognitive development is a result of both heredity and environment. They stressed the value of a responsive setting where children can be involved in experimentation and imitation of the way society, family, peers, and other adults interpret the concepts and ideas that are being explored. Even though they recognized the growing independence of children at this stage, they believed that children still need attention and guidance. This supports Bronfenbrenner's (1979) contention that the most immediate and potent events affecting a youth's development are activities that are engaged in with other people or in the presence of others.

Hill (1980) outlined six psychosocial issues or tasks of early adolescent development. These included attachment, autonomy, sexuality, intimacy, achievement and identity. Three of these, autonomy, achievement and identity, are considered most pertinent to the research at hand because of the way they are traditionally associated both with work and with financial responsibility and independence. Hill asserted that autonomy is not a new and unique issue at adolescence, but rather a task that begins much earlier, especially in middle-class families.

With early adolescence come new responsibilities which increase autonomy. Havighurst (1964) referred to the early adolescent stage of development as a time for "acquiring basic habits of industry" (p. 216). These habits are learned through tasks such as handling an increased allowance, caring for younger brothers and sisters, being responsible for household tasks such as taking out the garbage and cleaning up after oneself.

In addition to household tasks, some early adolescents also

begin looking for ways to earn money outside of their homes. While it is often assumed that such work has a positive influence on personal and social development, Steinberg et al. (1982) reported that, depending on the nature of the job and the amount of time spent working, early work experiences may entail as many costs as benefits for young people. In their study of tenth and eleventh graders they found that part-time employment did enhance the development of self-management skills such as punctuality, but it did not promote social responsibility. Working had an unequal effect on growth in autonomy for boys and girls; girls benefited substantially more from their work experiences than did boys.

The same study additionally found that employment led to diminished participation in school and family activities and decreased emotional closeness with friends. Most troubling perhaps was the finding, confirmed by Bachman (1983), of a positive association between the number of hours that youths worked in part-time jobs and their drug and cigarette use.

The aforementioned research concerned middle adolescents and may not be directly applicable to most early adolescents who do not have access to the same types of employment opportunities, nor work as many hours, as the older youths. Nevertheless, if adolescence is seen as a continuum, there is a need to be aware of how the same type of activity -- work, in this case -- may influence adolescent children at various points along that continuum.

The process of developing new levels of autonomy and identity in early adolescence has been associated with changed relationships between children and their parents and between children and peers. Gulotta (1983) argued that the peer group has become the primary

influence on the lives of young people. He viewed this as a relatively recent phenomenon, resulting from changes in family structure, work roles and parental roles during the past three decades. He also reported that early adolescents have few opportunities to play useful roles in their communities.

Steinberg & Silverberg (1986) found evidence to support the importance of peer influence in early adolescence, but described it as one step in the developmental process. They found a negative correlation between emotional autonomy from parents and autonomy in the face of peer pressure, suggesting that early adolescents trade dependency on parents for dependency on peers before reaching a level of complete autonomy.

Hill (1980) refuted the popular notion that autonomy is a product of rebelliousness. He reported that adolescents who were most autonomous reported the most positive relationships with parents.

McNeal (1987) addressed the issue of external influences, especially upon the consumer behavior of children, in terms of the needs that children have which are satisfied by such influences. He identified four needs: understanding, affiliation, *infavoidance* (the need to avoid humiliation and embarrassment), and achievement.

According to McNeal, all of these needs are met as early adolescents obtain information from their parents and peers about certain products, as they use particular brands which are popular and which are associated with achievement among their peers. He believed that the socialization effects of peers in this regard were more *incidental* and that the parental influences were more *intentional*. But both were equally effective in shaping consumer-related decisions that

young people make, and he agreed with other socialization theorists who have contended that peer influence becomes more important than parental influence as children enter adolescence.

A number of researchers have found age and gender to be significant variables in the development of autonomy in early adolescence. Benson et al. (1987) reported significant gender differences in the measure of achievement motivation, higher educational aspirations and prosocial behavior among children in grades five through nine. Cogle and Tasker (1982) found that gender and age of children affected the rate of children's participation in household tasks. Steinberg & Silverberg (1986) reported that autonomy scores increased with age and that girls obtained higher scores of emotional autonomy than boys. To the contrary, Hill (1980) maintained that boys appeared to be more autonomous than girls at any given point during early adolescence, according to a number of indices presumed to measure autonomy.

In summary, early adolescence is a time of industry and experimentation; a time of growing autonomy, but also a time when parental assurances remain crucial. Although researchers report a positive relationship between age and autonomy, they do not agree entirely about the exact process through which autonomy develops. Some researchers stressed the emergent primary role of peers in adolescent autonomy while others stressed the changing, but continuing strong relationship between adolescents and parents. The effects of gender and early employment experiences on the autonomy process remain inconclusive.

The Meaning of Work in the Family and Society

In his treatment of personality development, Erikson (1968) stressed the close relationship between personal identity and communal, societal, and historical developments. This interplay between the personal and social realms is considered extremely important in the consideration of early adolescent development, especially in light of the rapid rate of changes occurring in society that affect the family.

Two notable changes in the United States during the past two decades have been the growth in numbers of families headed by a single parent and the large influx of women into the labor force. Between 1970 and 1984 the number of children under the age of 18 living in families headed by a single female rose from 6.7 million to 10.9 million (U.S. Department of Labor, 1985). During the same period of time, the labor force participation rate of married women with children between the ages of six and 17 rose from 49 percent to 65 percent .

These changes affect the family and children in a number of ways. Economically, families headed by single parents are recognized as some of the poorest in the nation since they depend upon a single income source which often comes from the service or other low-paying sectors of the economy. Quite to the contrary, families with two income sources, especially when both sources are from professional, higher-paying sectors of the economy, have seen their incomes increase as both parents bring home salaries.

Although incomes may differ greatly between single-parent and dual-earner families, the direct amount of time and contact between parents and children has diminished in both of these family forms in comparison to the typical middle-class family of a generation ago when a

full-time homemaker/mother was present. In a study of sixth-graders in Oakland, California, Medrich et al. (1982) found that 27 percent of the families represented in the study did not have an adult at home during after school hours -- a crucial time when "children are often tired, hungry, and in need of adult support and supervision." (p. 106)

The movement of women into the labor force can be understood within the framework of advancing industrialization in which the amount of economic activity taking place within the family setting has diminished (Hoffman, 1984). As fewer economic activities occur at home, the role of children shifts. Hoffman described this shift as one in which children move from being economic assets to being economic liabilities. Medrich et al. (1982) said that children in America are now seen as exclusively future rather than present economic producers. Furthermore, they concluded that children have little knowledge about the way adults earn their living and that, even at home, very little is expected of children.

Hoffman (1984) and Medrich et al. (1982) concurred that childhood and early adolescent experiences strongly influence the socialization process of children. Medrich et al. questioned how today's children will develop positive attitudes toward work and come to regard themselves as competent, productive workers in the future if they are being isolated from such experiences during childhood.

Other researchers point out that individual independence is highly valued in American culture, and that parental absence from the home may offer children the opportunity to assume increased responsibility for their behavior and well-being (Cole & Rodman 1987, Long & Long 1983). In a study of children in Nebraska, White and

Brinkerhoff (1981) found that assignment of and participation in household tasks followed a developmental pattern, beginning at a very early age, and that by ages nine to 10, over 90 percent of children were involved in regular chores.

Any discussion of the meaning of work for children and the family would be incomplete without acknowledging the sociological changes that have occurred in the United States in the past two decades. Yankelovich (1979) noted that during the period between 1945 and 1970, Americans believed that their work had the dual purpose of providing for their needs and comforts, and advancing the goals of the larger society.

Since 1970, however, the union of success and self-fulfillment has become separated for many people. The result, according to Yankelovich, is a new ethic based on duty to oneself and obtaining a "full, rich life" which no longer necessarily includes the traditional ethic of obligation to others. Results of this new ethic include an increased importance of leisure, a new symbolic significance of the paid job, and the insistence that jobs become less depersonalized.

According to Hall (1987), it is this new ethic's influence on early adolescent spending behavior which makes them the new focus of the marketplace. No longer guided by socially-oriented values, today's youths are more likely to desire expensive name brand items and spend the last penny to obtain them.

Income and Work among Early Adolescents

Children having access to money is not a new phenomenon. What is new, according to McNeal (1987), is the way in which children use their money. Prior to the 1950s, children were viewed as savers. They

received allowances as frequently as children do today, but the amount was smaller and parents gave more guidance to the money's use. Parents provided allowances in order to teach their children lessons of thrift, encouraging them to save for some future purchase.

The convergence of the "baby boom" and the economic affluence of the 1950s appears to have changed this former view. The size of allowances has grown since that time and the emphasis has shifted from saving to spending. Based on a 1984 survey, McNeal (1987) estimated that the 30 million U.S. children ages four to 12 had an annual income of $4,729,793,640, roughly $140 per child. They spent $4,245,887,360 of the total and saved only $483,906,280. This spending level was twice as large as the estimated $2 billion spending level of children in 1969.

Early adolescent income sources typically include money from parents, gifts, and payment for jobs done outside of the home. Parents may give money in the form of regular allowances, hand-outs as requested, payment for completing household chores, and as behavioral rewards (Baran & Tarrant, 1981). Estimates based on several studies indicate that about one-half to two-thirds of the early adolescent population receive a regular allowance (Henderson & Goldwasser, 1988; Lacoste & Pershing, 1987; Consumers Union of the United States, Inc., 1983, 1988).

The actual amount of income that youths have at their disposal has been found to be significantly related to several variables -- age, gender, source of income, and family income level. Research by Ward, Wackman, & Wartella (1977) and Penny Power reader surveys (Consumers Union of the United States, Inc., 1983) found that children's incomes increased as children's age increased. Medrich et al. (1982) also found

that children's median weekly earnings from jobs outside of the home were more than double the level of median allowances received from parents. Furthermore, most children with outside jobs also received allowances, often larger than the allowances of children without jobs.

Marshall (1964) reported that the average income of boys in her study was twice as much as that of girls. A 1986 survey of youths ages 12 to 15 reported by Hall (1987), found the same gender pattern, but with a narrower margin between boys' average weekly incomes of $22.40 and girls' incomes of $15.40.

Bachman (1983) attributed any gender-based differences in income levels to the number of hours worked rather than wage levels obtained by boys and girls. Greenberger & Steinberg (1983) also reported insignificant gender-based differences in the wages that youths received for their first jobs since these were often in the informal sector of the economy. But they found that as young people moved on to second and third jobs in more formal work settings, girls earned significantly lower wages than did boys.

Somewhat to their surprise, Medrich et al. (1982) found that an inverse relationship existed between the levels of family income and children's income. They reported that it was the poorer rather than the wealthier parents that gave their children greater access to money. White parents and parents with higher levels of income and education tended to be more restrictive in giving their children money. The latter were more likely to provide money in the form of allowances than on demand. McNeal (1987) and Ward, Wackman & Wartella (1977) also found evidence to support this pattern, but only among younger children. McNeal reported that by age 12 upper class children had the highest

weekly incomes.

Each of these researchers tried to provide an explanation for this inverse relationship. Medrich et al. (1982) suggested that middle- and upper-class parents with secure jobs and incomes may be in a better position to control their children's access to money than are those parents with irregular and precarious income streams. Similarly, McNeal (1987) hypothesized that lower class parents may give relatively large amounts of money to their children in order to provide the instant gratification they seek. Both of these hypotheses are at least indirectly supported by Bronfenbrenner's (1961) finding that lower-class mothers were more likely to give their children material rewards than were mothers of higher social classes.

On the other hand, Medrich et al. (1982) also postulated that poorer parents may be more concerned that their children learn the value of money, precisely because of its scarcity, and may therefore give their children greater access to money at an earlier age. And McNeal (1987) additionally suggested that lower- and middle-class children may be more resourceful than upper-class children in finding ways to earn extra money to supplement the allowances they receive. This thesis finds some support in Ward, Wackman and Wartella's investigations (1977) which found that children from low-status homes had more sources of income than other children.

Early Adolescent Spending Behavior

Just as children obtain their income from a variety of sources, they also dispose of it in a number of different ways. Because early adolescents still rely upon their parents to provide for most of their

basic needs, such as food, clothing, shelter, and transportation, their spending is primarily characterized by its discretionary nature (McNeal, 1987). Nevertheless, several researchers have looked for patterns within children's spending behavior and have examined variables related to those patterns.

In their study of adolescent spending and saving patterns, Pritchard, Myers, and Cassidy (1988) developed three indices for categorizing spending. These included savings (for college and other), necessity (school supplies and contributions to family income) and discretionary (to buy or do for oneself).

Based on information gained through Penny Power reader surveys, Consumers Union of the United States, Inc. (1983) suggested that early adolescents are either "Fun-for-the-Moment Spenders" (spending on snacks or video games), "Something-to-Show-for-My-Money Spenders" (buying durable goods such as clothing, hobby and sports equipment), or "Super Savers" (saving most of their income).

McNeal (1987) found that the largest single expenditure category of children was for snacks and sweets. This was followed by the toys/games/crafts category which included mechanical toys and video game cartridges.

Penny Power reader surveys indicated that there were gender-related differences in the way that children spent their money (Consumers Union of the United States, Inc., 1983, 1985). Girls were more likely to spend money on snacks, clothing, cosmetics, and jewelry. Boys were more likely to spend money on video games, hobby and sports equipment.

Age appears to relate to the way children spend money in

several ways. As children enter early adolescence, they have new needs for and uses of money since they have an increased ability to understand time and are able to project into and plan for the future (Feldman, 1976). Ward, Wackman and Wartella (1977) found that children became more flexible in the use of their money as they grew older. Early elementary school-age children used their money almost exclusively for spending while sixth-grade children reported both spending and saving. McNeal (1987) found that saving per child was highest at age 10; after that the amount saved declined.

Source of income also has been found to influence the amount of money that children spend and the way in which they spend it. Medrich, et al. (1982) found that children who held jobs for pay outside of the home had more money to spend than did children whose only source of income was an allowance. These working children were also more likely than other children to save money or use it for necessities. But even children with paid jobs spent the majority of their income on nonessential items like snacks and candy.

Several researchers have investigated whether spending patterns and consumer knowledge differed between children who received allowances and children who did not. Marshall (1964) found that allowance-receiving children had no more financial knowledge or responsibility than children not receiving allowances. Nevertheless, the parents who gave allowances provided their children with a wider variety of money-use experiences and more clearly explained the purposes of spending money. Furthermore, allowance-receiving children reported spending their money on a wider variety of items.

Contrary to Marshall's findings, Hampton, Bouton & Huggans

(1988) reported that children whose main sources of income were allowances or jobs scored significantly higher on a test of consumer knowledge than did children who primarily received money "as needed."

LaCoste & Pershing (1987) reported that children whose allowances had some parent-imposed spending stipulations scored higher on a money management index than did the children who received a purely discretionary allowance. They also found that larger allowances were associated with lower money management skill scores and postulated that large allowances may be a disincentive to wise spending habits.

The relationship between family's socio-economic status and the way that children and adolescents spend money has not been explained entirely. From their study of adolescent students, Pritchard, Myers, and Cassidy (1988) concluded that the students who ranked high in discretionary spending were from two-parent families with higher incomes and socio-economic status. Students in the same study who spent a large proportion of their money on necessities were from single-parent families with lower incomes and socioeconomic status. In contrast, Medrich et al. (1982) reported that children from the poorest families -- those headed by single, working parents -- were most noteworthy for their spending on nonessentials. Ward, Wackman and Wartella (1977) reported that among sixth-graders, long-term savings behavior increased with social class.

Basic to the issue of early adolescents' spending behavior is the developmental question: How are these early spending experiences preparing youths for their future roles as adult consumers and money managers? Popular notion suggests that giving youths full discretion over their spending decisions and allowing them to learn from spending

successes and failures will help them learn the true value of money. Bachman (1983), however, warned that when youths have relatively large amounts of money from part-time employment, at the same time that their parents still provide for all or most of their basic needs, they may experience "premature affluence." He suggested that developing habits of spending for immediate personal pleasure might impede future needs to "delay gratification" in order to save for the purchase of major durable items and housing.

Summary

Although present research focusing specifically on the economic activities of early adolescents is still limited, the literature pertaining to early adolescent development suggests that obtaining money through allowances or jobs and then gaining some degree of discretion over the spending of that money are activities appropriate to the developmental tasks of autonomy and identity. Furthermore, the increased levels of discretionary income that early adolescents appear to have, coupled with their participation in paid work outside of the home, need to be examined in light of the recent changes occurring in family structures, work patterns and attitudes toward work within the United States.

Researchers who have specifically examined the economic activities of children and early adolescents have found age, gender, source of income, level of family income, and level of family education to be significant variables influencing the amount of money that early adolescents have and the way they spend it.

Chapter 3

PROCEDURES

As stated in the introductory chapter, the overall goal of this research was to learn more about the ways in which early adolescents obtain and spend money. Three objectives were outlined to meet this goal. The first was to estimate the level of income among a sample of early adolescent children and to determine the extent to which that income was received from parents and the extent to which it was earned through jobs outside of the home. The second objective was to show the ways in which early adolescents saved or spent their money. The final objective was to employ statistical methods to determine the manner in which the children's level of income, source of income, and spending behaviors were associated with the independent variables included in the study -- age, gender, source of income, family income level, and place of residence. This chapter describes the procedures used to reach these objectives.

Research Design and Methodology

This study of the income, work, and spending behavior of early adolescent children between the ages of 10 and 14 was carried out by employing secondary analysis on data gathered in the 1987 Michigan Early

Adolescent Survey II (MEAS II).* The MEAS II was a comprehensive survey of Michigan early adolescent children and their parents. It was designed to obtain information about a wide range of topics concerning the children and their families. These included the children's physical, emotional, and social development; the quality of their relationships with parents, siblings, and peers; their involvement in extracurricular activities; and their future career interests. Also included in the survey was a group of questions pertaining to youth income and spending behavior (Appendix A.). The data from this latter group of questions were the central source for this study.

Since existing research relating to the way in which early adolescents obtain and spend money is still limited and relatively recent, an exploratory research design was used. The objective of the study was to obtain a general description of the economic activities of children included in the MEAS II sample and to test hypotheses regarding the relationships between these activities and variables believed to influence them: age, gender, family income level and place of residence.

The MEAS II was a cross-sectional survey of the 10- to 14-year-old cohort of early adolescents and their parents living in Michigan in 1987. The survey method included standardized personal interviews with each of the children while one or both parents completed a self-answered questionnaire. At the close of the interview, the children were also asked to complete a short self-answered questionnaire and return it by

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*1987 Michigan Early Adolescent Survey II, conducted by Joanne Keith, Ph.D. and Christine Nelson, Ph.D., Department of Family and Child Ecology and 4-H Youth Programs, with funding from the Agricultural Experiment Station and Cooperative Extension Service, Michigan State University.

mail to the researchers. Although parents' data were included in order to determine the family income level and place of residence, the unit of analysis was the individual early adolescent between the ages of 10 and 14.

Sample Selection Procedures

The Michigan Early Adolescent Survey II sample included 245 cases drawn from 24 Michigan counties randomly selected to represent the three distinct geographical regions in the state: the southeast metropolitan region (Macomb, Oakland, Wayne); southern Michigan minus the southeast metropolitan region (Barry, Barrien, Calhoun, Cass, Genessee, Ingham, Jackson, Kent, Lapeer, Monroe, Montcalm, Saginaw, Washtenaw); and northern Michigan and the Upper Peninsula (Alpena, Baraga, Marquette, Mason, Montmorency, Ostego, Schoolcraft, Wexford). Equal numbers of individual children and their parents were selected from two school districts in each of these counties.

The criteria used in selecting the cases used in this study were whether or not each case contained valid data for those aspects of the survey pertaining to the economic activities of the children and to the family demographic characteristics. The questions concerning children's jobs and earnings, allowances, and spending behavior were included in the self-answered mail-in youth questionnaire. A number of the children who were interviewed did not return these questionnaires and were therefore excluded. In some cases, although the children had been interviewed and had completed the self-answered questionnaire, they were excluded because no parent data were provided. A total of 168 cases met the criteria for inclusion.

Data Collection Techniques

Data collection for the The Michigan Early Adolescent Survey II began in March 1987 with training sessions for the volunteers who would conduct the personal interviews with the early adolescents. These volunteers were recruited by 4-H county program leaders and program assistants in the counties that participated in the survey. The training was done through intensive one-day sessions in four distinct locations throughout the state of Michigan. During the training sessions the volunteers were sensitized to issues and attitudes of early adolescent children, were familiarized with the interview schedule, were presented guidelines on the interview process including information on nonverbal cues, and were able to critique videotaped interviews and practice the interviewing process. The parent questionnaire was also discussed in these sessions.

At the end of the interviewer training, introductory letters explaining the survey were sent to each potential family. The interviewers then contacted the families by telephone to ascertain family interest and arrange an interview appointment. Interviewers were much the same age as the parents of the early adolescents whom they interviewed. Most were between the ages of 31 and 45. They were likely to have had some college or to be college graduates and to be employed.

The actual interviews were conducted in the homes of the early adolescents. Each early adolescent was interviewed personally by one of the trained volunteers while the parent(s) completed the parent

questionnaire. Each interview lasted about one hour. Before leaving, the interviewer collected the completed parent questionnaires and left an additional seven-page questionnaire with each early adolescent to be completed and mailed to the researchers. Of the 245 children originally interviewed, 189 returned the self-answered questionnaires.

Data Analysis Procedures

The 1987 Michigan Early Adolescent Survey II data set was collected and coded by others, but the data pertaining to youth income, work and spending behavior were first analyzed by this researcher. All statistical analyses were carried out using the Statistical Package for the Social Sciences (SPSS/PC+ V2.0).

The research questions included in this study were answered using descriptive statistics such as frequencies, means, modes, and minimum and maximum values. Scatter plots were used to gain an initial visual picture of the data and to assess the existence of linear relationships between the children's income level and children's age, and between the children's income level and the family's income level. A correlation matrix of the 14 spending variables was used to explore patterns in the spending behavior of the early adolescents.

Each research hypothesis was tested using one of two statistical procedures described below. Although 168 cases were included in the entire sample, the number of cases reported in each of the analyses varied because of missing data for particular variables.

Chi-square Test of Independence

When a dependent and an independent variable are both measured at a discrete level, the Chi-square test of independence is an appropriate procedure for determining whether an association exists between the two variables. By crosstabulating the two variables, a contingency table is produced with frequencies for the combinations of categories contained in each variables. The Chi-square test of independence is used to determine whether the expected and observed frequencies in each contingency table cell differ only by chance -- in which case the two variables are independent -- or because of an association between the two variables. The value of the Chi-square increases as the observed proportions differ among the categories being contrasted.

The null hypothesis stating that the two variables were independent was rejected when the probability rate associated with the value of the Chi-square was $<.10$.

It is recommended that each cell in the contingency table have a minimum expected frequency of five for valid use of the Chi-square statistic. To meet this requirement some of the categories in the independent variables were collapsed, creating fewer categories with increased observations in each.

Oneway Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) is an inferential statistical method used to measure group differences. It assesses the effects of one categorical independent variable upon a continuous dependent variable by simultaneously testing whether one or more group means differ

significantly from one or more of the other means. This procedure was used to test whether children's incomes and the number of ways that children disposed of their income differed by categories contained in the independent variables.

The null hypothesis stating that all population means are equal was rejected when the probability rate associated with the value of the omnibus F-statistic was <.05. Since a significant F-statistic indicates only that the population means are probably unequal, but does not specify where the differences are, multiple comparison tests are used to determine which means are different from each other. These multiple comparison tests use more stringent criteria for declaring differences significant than does the usual t-test.

One of the multiple comparison tests available in SPSS is the Tukey Range Test. In this method the entire set of contrasting means are considered as a family and the probability rate of a type-I error is based on the entire family (Glass and Hopkins, 1984). The Tukey Range Test begins by rank-ordering the means in order of their size and then comparing the largest pairwise difference in the set of means. When a nonsignificant range is encountered with the largest mean, the test proceeds to take the next-largest mean and test it against the smallest mean. This procedure continues as long as significant differences are encountered.

For proper use of the ANOVA procedure, it is assumed that observations are independently selected from normal populations with the same variance. Several methods are available within SPSS to test the homogeneity of variance assumption. One of these is the Cochrans C. If the significance level associated with the value of Cochrans C is rela-

tively small, the hypothesis that the populations have the same variance is rejected and ANOVA should not be used. However, the ANOVA test is not particularly sensitive to violations of equality of variance when all groups have similar sample sizes (Norusis, 1988). Therefore, some of the categories in the independent variables were collapsed during analysis in an attempt to obtain more similar counts within the groups.

Research Questions and Hypotheses

Based on the objectives outlined for this research, on the review of literature, and on the scope of information available in the 1987 Michigan Early Adolescent Survey II data set, a number of research questions and hypotheses were developed. These questions and hypotheses were divided into two parts for data analysis.

Sources and Amounts of Early Adolescents' Income

The first part, based on the first objective regarding the sources and amounts of children's income, included the following questions:

Question 1: What percentage of children reported receiving money from their parents? Of these, what percentage received a regular allowance and what percentage received money when they asked for it?

Question 2: What were the range, median, and mean weekly amounts of regular allowances that children reported?

Question 3: What percentage of children reported earnings from jobs outside of the home? What were the range, median, and mean amounts of their earnings?

Question 4: What were the range, median, and mean amounts of total income (job earnings plus allowances) reported by the early adolescents?

In the data analysis, proportions and ranges were derived from descriptive statistical frequencies. Statistical measures of central tendency were used to provide the means and medians. Both means and medians are often used in describing income. Mean income of a group is derived by summing all individual incomes and dividing the sum by the number of observations in the group. Median income represents the middle income in a group, below which half of the incomes fall. When the distribution of incomes in a group is skewed either with a disproportionate number of high or low incomes, the median provides a more accurate description of income in the group than does the mean.

The hypotheses tested in the first part are stated here, first in the null and then in the working form. Each set of hypotheses is followed by a rationale for the working hypothesis and a statement of the statistical method used to test the null hypothesis.

> Hypothesis 1: Among early adolescents, there is no relationship between level of family income and the likelihood that children receive money from parents.

> Hypothesis 1: Among early adolescents, there is an inverse relationship between family income and the likelihood that children receive money from parents. Children from lower income families are more likely to report receiving money from their parents than are children from upper income families.

The rationale for the expected outcome stated in the working hypothesis was based on the findings of Medrich et al. (1982) that poorer parents gave their children greater access to money than did wealthier parents, and of Bronfenbrenner (1961) that lower-class mothers were more likely to give their children material rewards than were mothers of higher social classes.

The null hypothesis was tested by crosstabulating children's answers to the question "Do you receive money from your parents?" with

the family income variable. The Chi-square was used to determine if these two variables were independent.

Hypothesis 2: Among early adolescents, there is no association between children's age and the likelihood that children have jobs.

Hypothesis 2: Among early adolescents, there is a significant association between children's age and the likelihood that children have jobs. Older children will be more likely to have jobs than younger children.

The working hypothesis is based on the research of Steinberg and Silverberg (1986) and Ward, Wackman and Wartella (1977) who found a positive relationships between children's age and levels of autonomy. One expression of this growing autonomy was increased job participation.

The null hypothesis was tested by crosstabulating the children's responses to the question "Do you have a paid job outside your home that you do at least once a month?" with age. The Chi-square was used to determine if the two variables were independent.

Hypothesis 3: Among early adolescents, there are no differences in the mean incomes obtained by children of different ages.

Hypothesis 3: Among early adolescents, older children will report significantly higher mean incomes than younger children.

The rationale for the expected outcome stated in the working hypothesis was derived from Penny Power reader surveys (Consumers Union of the United States, Inc., 1983) which indicated that the level of children's allowances increased with age, and from the findings of Ward, Wackman, & Wartella (1977) that children's income increased with age as they expanded their sources of income through work.

Oneway analysis of variance was used to test for differences between the average amounts of total income, allowances, and earnings of children in each of the age categories.

Hypothesis 4: Among early adolescents, there are no differences between the mean incomes reported by boys and girls.

Hypothesis 4: Among early adolescents, there is a significant difference between the mean incomes reported by boys and girls. Boys will have higher mean incomes than girls.

The working hypothesis was based on the findings of Marshall (1964) that boys earned twice as much money as girls, and of Hall (1987) that girls earned only two-thirds the amount of boys.

Oneway analysis of variance was used to test for differences between the average amounts of total income, allowances, and earnings of boys and girls.

Hypothesis 5: Among early adolescents, there are no differences in the mean incomes of children from families of varying income levels.

Hypothesis 5: Among early adolescents, there are significant differences between the mean incomes of children from varying income levels. Children from lower income families have higher mean incomes than children from upper income families.

The rationale for the expected outcome stated in the working hypothesis was the finding of Medrich et al. (1982) that poorer parents gave their children greater access to money than did wealthier parents.

Oneway analysis of variance was used to test for differences between the average amounts of total income, allowances, and earnings of children from families of varying levels of income.

Hypothesis 6: Among early adolescents, there are no differences in average total incomes by children's sources of income.

Hypothesis 6: Among early adolescents, there are significant differences in amounts of total income by children's sources of income. Children with job earnings will report higher mean incomes than will children without job earnings.

The basis for this hypothesis was the finding of Medrich et al. (1982) that median weekly earnings from children's jobs were more than two times greater than the median allowances that the children reported.

Oneway analysis of variance was used to test for differences

between children's mean incomes according to their source of income.

Due to the exploratory nature of this study, in addition to testing these hypotheses, the researcher also systematically tested for relationships between each of the dependent variables related to youth income and each of the independent variables of interest: gender, age, level of family income, and place of residence.

Early Adolescents' Spending Behavior

The second part of the study focused on the objective of describing the ways in which early adolescent children disposed of their income through saving or spending activities. The following question and hypotheses, stated in the null and working forms, were used to meet this objective. Each set of hypotheses is followed by a rationale for the working hypothesis and a statement of the statistical method used to test the null hypothesis.

Question 1: What proportion of children reported spending money on each of the saving and spending items listed in the survey instrument?

In the data analysis, proportions were derived from descriptive statistical frequencies.

Hypothesis 1: Among early adolescents, there is no association between children's gender and their spending behavior.

Hypothesis 1: Among early adolescents, there is a significant association between children's gender and their spending behavior.

The working hypothesis was based on findings from Penny Power reader surveys (Consumers Union of the United States, Inc., 1983, 1985) which showed that girls were more likely to spend money on snacks, clothing, cosmetics, and jewelry, and that boys were more likely to spend money on video games, hobby and sports equipment.

To test this hypothesis, children's responses of whether or not they spent money on each of the 14 savings/spending items in the survey instrument were crosstabulated by children's gender. The Chi-square was used to determine if children's responses to each item and gender were independent.

Hypothesis 2: Among early adolescents, there is no association between children's age and their spending behavior.

Hypothesis 2: Among early adolescents, children's age is significantly associated with children's spending behavior.

The working hypothesis is based on the understanding of developmental changes occurring throughout early adolescence. Activities and products of interest to children are expected to change as children grow older. For example, McNeal (1987) found that saving per child was highest at age 10; after that the amount saved declined.

To test this hypothesis, children's responses of whether or not they spent money on each of the 14 savings/spending items in the survey instrument were crosstabulated by children's age. The Chi-square was used to determine if children's responses to each item and age were independent.

Hypothesis 3: Among early adolescents, there is no association between children's work participation and their spending behavior.

Hypothesis 3: Among early adolescents, there is a significant association between children's work participation and their spending behavior. Children with jobs outside of the home are more likely than children without jobs to report spending a portion of their money for essential items, and to report saving a portion of their money.

The rationale for the expected outcome stated in the working hypothesis was based on the finding of Medrich et al. (1982) that children who obtained money through working outside of the home were more likely than children without jobs to spend a portion of their money for

necessities and less likely to spend it on things like candy and treats. The same study found that children with jobs were more likely to save a portion of their money than were children who did not have jobs.

To test this hypothesis, children's responses of whether or not they spent money on each of the 14 savings/spending items in the survey instrument were crosstabulated by whether or not children had jobs outside of the home. The Chi-square was used to determine if children's responses to each item and their work participation were independent.

> Hypothesis 4: Among early adolescents, there are no differences by age in the average number of saving/spending items that children select.

> Hypothesis 4: Among early adolescents, there are significant differences by age in the average number of saving/spending items that children select. Older children will select a greater variety of items than will younger children.

The working hypothesis was based on the reports of Ward, Wackman and Wartella (1977) and Feldman (1976) that children became more flexible in the use of their money as they grew older. According to Feldman, children develop greater needs and uses for money as their ability to understand time and to plan for the future increases.

Oneway analysis of variance was used to test for differences between the average number of saving/spending items that children selected according to each of the age categories.

Again, due to the exploratory nature of this study, in addition to testing these hypotheses, the same statistical procedures were used to systematically test for relationships between children's responses of whether or not they spent money on each of the 14 savings/spending items in the survey instrument and each of the other independent variables of interest: level of family income and place of residence. Children's job participation, a dependent variable in the first part of the study, was

used as an independent variable in this second part.

Operational Definitions

The unit of analysis was the individual early adolescent. For the purpose of this study, early adolescents were defined as children between the ages of 10 and 14.

The following dependent variables were examined:

ALLOWANCES. The survey instrument asked children to specify whether or not they received money from their parents and the form in which they received the money -- in regular allowances, when they asked for it, both through allowances and upon asking, or in some other way. Only those children who received regular allowances were asked to specify the weekly amount received. Therefore, allowances were operationalized as the fixed amount of money received from parents on a regular basis.

WORK. Children were asked whether they had any paid jobs outside of the home which they did at least once a month, and if so, to specify the type of job and the number of times per month they performed each job. Therefore, early adolescents' work participation was operationalized only as the work they reported doing for pay outside of their homes.

EARNINGS. The survey instrument allowed children to specify monthly earnings from one or more jobs that they did outside the home at least once a month. Twenty-nine percent of those who reported having a job listed earnings from at least two jobs each month and nine percent of those who reported having a job listed earnings from three different jobs.

The children, however, did not indicate how many months of the year they did each job, nor, in the cases of multiple job listings, whether they worked all jobs during the same month. In fact, there were some indications that some of these jobs were not done in the same month. For example, several boys listed lawn mowing and snow shoveling as the jobs they did.

Therefore, the income from only one of the children's jobs was included in the operational definition of earnings. The researcher chose to include only the amount children reported from the job they listed first which was assumed to be their primary job.

TOTAL INCOME. A variable representing children's total monthly income was created by combining the nominal amounts that children reported receiving from a regular allowance and/or from the primary job done for pay outside of the home.

This variable has several limitations and likely represents a conservative estimate of children's total income. It was not possible to include all sources of income since children were not asked to estimate the amount of money received from parents in forms other than regular allowances. Neither were they asked to estimate income from gifts.

Secondly, although some children reported more than one job, only earnings from the job listed first were calculated into this variable. As stated previously, the data were ambiguous as to whether the children actually worked each job throughout the entire year, and, in the cases of multiple job listings, whether they worked all jobs during the same month.

SPENDING BEHAVIOR. Spending behavior was operationalized by

presenting the children a list of 14 items and asking whether or not they spent their money on each item. The items contained in this list were: clothing, gifts, cosmetics, records or tapes, school lunches, snacks, movies, video games, comic books or magazines, collectibles (baseball cards, stamps), books, gifts to church or charity, saving for specific large item, and saving for the future.

Two of these 14 variables represented saving activities -- "saving for a specific large item" and "saving for the future". Only one, school lunches, was considered by the researcher to represent an essential item. Clothing is generally categorized as an essential item, but because of the role that clothing plays within the early adolescent subculture, the decision was made to consider clothing a discretionary spending item.

A "spending variety" variable was also created to measure the range of categories on which individual early adolescents reported spending their money. This variable was created by summing the "yes" responses from each of the 14 spending variables included in the instrument. Therefore, potential values for this variable ranged from zero to 14.

Four independent variables were selected for inclusion in this study. The first three, children's age, gender, and family income level, were based on findings in the review of literature. The fourth, place of residence, was included in an attempt to broaden the ecological focus of the research. This variable was discussed rarely, if ever, in existing literature concerning the economic activities of children. It seemed reasonable to assume that conditions influencing the availability of informal sector jobs and opportunities for spending money might vary

according to different geographic settings in which children live.

An additional variable found in the review of literature, parents' education level, was not included. Although education and income levels are often used together to represent socio-economic status, the researcher decided to use just one of these measures, family income level, in order to limit the boundary of the study. Because education levels can vary greatly between spouses, these would have needed to be treated as two separate variables.

CHILDREN'S AGE. This variable was operationalized as single years of age from 10 to 14. During the interview, all respondents were asked to specify their age in years.

GENDER. Each youth respondent was identified as female or male by the interviewer.

FAMILY INCOME LEVEL. Parents were asked to choose one of six income categories closest to that of their family's gross annual income: 1) less than $10,000; 2) $10,001 - 20,000; 3) $20,001 - 30,000; 4) $30,001 - 55,000; 5) $55,001 - 75,000; 6) over $75,000. Because of the small number of cases in the highest income category, the fifth and sixth categories were collapsed into a single category of "over $55,000." Family income was operationalized as the dollar amount reported by the parent(s) within these five categories. It did not include the income reported by the early adolescents.

Since family demographic information from fathers' and mothers' questionnaires was kept separate in the data set, it was necessary to combine the parent data in order to arrive at one family income variable. In cases where the father's and mother's information regarding family income level was not congruent, the larger of the two figures was

chosen based on the assumption that one of the parents might have listed personal rather than family income.

PLACE OF RESIDENCE. Parents were asked to indicate where they lived by selecting one of the following categories: 1) on a farm (40 acres or more); 2) in a rural area but not on a farm (less than 40 acres); 3) in a small town (under 5,000); 4) in a town of 5,000 - 25,000); 5) in a city of 25,000 - 100,000); 6) inside the city limits of a large city over 100,000); 7) in a suburb of a large city over 100,000.

A single place of residence variable was created by combining the information provided by both fathers and mothers. In the cases where the parents' information was not in agreement, a decision was made to use the mother's information. In most of the analyses the seven categories were collapsed into five categories by combining the first two most rural categories and the last two most urban categories.

SOURCE OF INCOME. Source of income was operationalized as a variable with three categories; 1) allowances from parents, 2) earnings from jobs done outside of the home, and 3) allowances and job earnings.

Chapter 4

RESULTS

To meet the research objectives, the analysis of data was carried out in two steps. The sources and amounts of early adolescents' income were analyzed first, followed by an analysis of the ways in which early adolescents reported spending their money. The analysis and results from these two steps will be discussed in this chapter, preceded by a description of the sample.

Description of the Sample

Of the 168 children included in this study, 82 were boys (49%) and 86 were girls (51%). Their division by age was as follows: 15 (9%) were 10 years old; 31 (18%) were 11 years old; 50 (30%) were 12 years old; 37 (22%) were 13 years old; and 35 (21%) were 14 years old. Although the complete sample of 245 was designed to have equal numbers of boys and girls in each age category, some of this equality was lost in selecting the 168 cases. The distribution of boys and girls in each age category is shown in Table 1.

Table 1. Distribution of Boys and Girls by Age.

Gender	Age					Total Count
	10	11	12	13	14	
Boys	6	18	22	17	19	82
Girls	9	13	28	20	16	86
	15	31	50	37	35	168

In comparison to the 1980 State of Michigan census data profile of early adolescents and their families, the early adolescents in this sample came from families that were less racially diverse, lived in more rural areas, and had parents who were slightly older and more educated. Thus, the findings from this study cannot be generalized to all early adolescents and their families living in the state of Michigan, but rather to those who are represented in the sample as described below.

Thirty-eight percent of the families lived on a farm or in a rural area. Thirty-six percent lived in towns of under 25,000. Ten percent lived in cities of between 25,000 to 100,000. Sixteen percent lived in an urban or suburban setting of more than 100,000 people.

Ninety-four percent of the fathers and 90 percent of the mothers who completed a survey questionnaire and provided demographic information were white; just under five percent of the fathers and eight percent of the mothers were black. Less than two percent of the fathers and of the mothers represented a non-white or non-black ethnic background.

The average age of the mothers who completed survey questionnaires was 38 years and the average age of the fathers who completed the survey questionnaires was 41.5 years. With regard to parents' education level, 35 percent of the fathers and 28 percent of the mothers had a college or advanced degree. Thirty-four percent of the fathers and 29 percent of the mothers had had some college. Forty-one percent of the mothers and 26 percent of the fathers had obtained only a high school diploma. Five percent of the fathers and two percent of the mothers had

not graduated from high school.

Forty-three percent of the families in the sample reported an annual family income of between $30,001 and $55,000. Twenty-nine percent reported annual family incomes of $20,001 to $30,000. Eleven percent reported annual family incomes of $10,001 to $20,000. Four percent of the families reported an annual income of less than $10,000. Thirteen percent reported annual family incomes that exceeded $55,000.

Sources and Amounts of Early Adolescents' Income

The first research objective was to estimate the amount of income among 168 early adolescent children included in the 1987 MEAS II sample and to describe the sources of that income. The analyses employed to answer the research questions and to test the hypotheses related to this objective will be presented in this section.

Research Question 1 — What percentage of children reported receiving money from their parents? Of these, what percentage received a regular allowance and what percentage received money when they asked for it?

The information regarding money received from parents was obtained through two interview questions. The children were first asked if they receive money from their parents. Eighty-five percent of the early adolescents replied "yes" to this question.

The children who responded yes were then asked to specify the form in which they received the money. Thirty-one percent of the children who received money from parents were given a regular allowance, 24 percent received money when they asked for it, 33 percent received money both through an allowance and upon request, and 11 percent said they

received money from parents at other times or in other ways. This means that 64 percent of the children who received money from their parents got a regular allowance and 68 percent received at least a part of their money from parents in forms other than allowances.

This finding suggests that while giving allowances is a common practice in families with early adolescent children, many parents also routinely give money to children as the children request it. This can be interpreted in a number of ways. Since half of the children who received allowances said they also received money by asking for it, perhaps some parents give a fixed allowance for the child to manage, but also provide money for special needs that arise.

The fact that 33 percent of the children who received money from parents did not get a fixed allowance might mean that parents want to give close guidance to their children's spending and therefore only give money when children request it for a particular need. It could also be interpreted in a very different way -- that parents are not highly concerned about establishing a fixed amount of money available to their children, but rather allow their children's requests to guide the amount that they give.

Research Question 2 — What were the range, median, and mean weekly amounts of the regular allowances that children reported?

Information regarding the amount of early adolescents' allowance was obtained by asking the children who received a regular fixed allowance to specify the weekly amount received. The average weekly allowance of these children was $6.07 (n=94).

Reports of weekly allowances ranged from $1.00 to $30.00. The

median and modal amounts were both $5.00. Thirty-three percent of the children who specified the amount of their allowance received $5.00 per week. Ninety percent of the children who reported a nominal weekly allowance received $10.00 or less. These findings suggest that there is generally no great disparity in the fixed amounts of allowances that parents give to early adolescents.

Research Question 3 — What percentage of children reported earnings from jobs outside of the home? What were the range, median, and mean amounts of their earnings?

The information regarding early adolescents' work participation and level of earnings was obtained through several questions. Children first were asked whether they had any paid jobs outside of their homes which they did at least once a month. Just under half (46%) of the early adolescents had at least one money-earning job outside of the home which they did at least once a month. Although a smaller proportion of children reported obtaining income through work than did those who reported receiving money from parents, the fact that nearly half of the children reported having a job suggests that early adolescent children are not entirely isolated from work experiences as feared by Medrich et al. (1982).

The children's jobs were primarily in the informal sector of the economy and ranged from seasonal work such as lawn mowing, selling Christmas trees, and working as a golf caddy, to year-around jobs such as babysitting, paper routes, house cleaning, and odd jobs. Nine percent of the children with jobs reported working in stores, restaurants and offices.

The average monthly earnings of children who reported their job earnings was $40.71 (n=63). Because of missing data, the number of reports of actual earnings was less than the number of children who said they had jobs. Individual monthly job earnings ranged from a minimum of $2.00 to a maximum of $210.00. While this range is very broad, the median monthly earnings of children with at least one job was $25.00 and 89 percent of the monthly earnings were under $100.

The wide range of earnings is no doubt a function of several factors. Because of the five year age span within early adolescence, children at each end of the span have quite different capabilities and opportunities which affect their earning potential. Jobs available to 10-year-old children are almost entirely in the informal sector of the economy and often do not pay an hourly wage. Some 13- and 14-year-old children may have the possibility of finding part-time or seasonal work in businesses that will pay the minimum wage.

Jobs available to early adolescent children, such as babysitting, also tend to be irregular which may mean that individual incomes fluctuate from week to week and month to month. Since children were asked to report their monthly earnings, they may have reported what they recalled earning in the most recent month. This may not have been representative of what they earned the following month.

Research Question 4 — What were the range, median, and mean amounts of total income (job earnings plus allowances) reported by the early adolescents?

A total monthly income figure was calculated by combining children's reports of job earnings and money received through regular

allowances. The average monthly income of the children who specified the nominal amount of their allowances and/or earnings was $38.49 (n=126). Individual incomes ranged from $4.00 to $270.00. The median monthly income was $24.00 and ninety percent of the reported incomes were less than $100.

These findings confirm the reports that early adolescent children have a considerable amount of money at their disposal. Nevertheless, these figures have little meaning until they are placed within the context of how children actually use their money -- which will be discussed in the second part of this chapter.

Research Hypothesis 1 — Among early adolescents, there is no relationship between level of family income and the likelihood that children receive money from parents.

This hypothesis dealt only with the categorical question of whether or not children received money from their parents. Later hypotheses addressed the issue of the amounts of money they received. In order to test this hypothesis, children's responses to the question of whether they received money from their parents were crosstabulated with the family income variable. Results from the contingency table and Chi-square test of independence are shown in Table 2.

When the family income variable was sufficiently collapsed so that all cells in the contingency table had expected frequencies of at least five observations, the percent of children that received money from parents in families with incomes of less than $30,000 (83%) was almost equal to the percent of children that received money from parents in families with incomes of more than $30,000 (85%). Level of family

income was not found to be statistically associated with whether or not children received money from their parents (x^2=.000, p=.99). Thus the null hypothesis was retained as tenable.

Table 2. Percentage of Children Receiving Money from Parents by Gender, Age, Family Income Level and Place of Residence.

Variables	Count	Receive Money		Statistics
		Yes (percent)	No (percent)	
Family Income				
< $30,000	72	83	17	x^2 = .0000
> $30,000	91	85	15	p = .9947
	(163)[1]			df = 1
Gender				
Boy	82	79	21	x^2 = 2.643
Girl	86	89	11	p = .1040
	(168)			df = 1
Age				
10-11	46	89	11	x^2 = 4.4184
12	50	90	10	p = .2197
13	37	78	22	df = 3
14	35	77	23	
	(168)			
10-12	96	90	10	x^2 = 3.527
13-14	72	78	22	p = .060
	(168)			df = 1
Place of Residence				
Rural (<25,000)	123	85	15	x^2 = .000
Urban (>25,000)	43	84	16	p = 1.000
	(166)[1]			df = 1

[1] Because of missing data all group counts do not equal 168.

In order to determine whether any of the other independent variables were significantly associated with the likelihood that children received money from their parents, the children's responses to this question were crosstabulated with gender, age, and place of residence.

The results of these procedures are also shown in Table 2.

A somewhat larger proportion of girls (89%) than boys (79%) reported receiving money from their parents. However, according to the Chi-square test of independence (x^2=2.643, p=.1040) there was no significant association between children's gender and whether or not they received money from their parents

A somewhat larger proportion of the younger children reported receiving money from their parents than did the older children. A statistically significant association (p <.10) between age and whether or not a child obtained money from parents was found, however, only when the groups were combined into two categories of younger children (10 to 12 years) and older children (13 and 14 years). This difference between older and younger children may be a result of the older children's greater access to job opportunities which would reduce their need for income from parents, and would be consistent with the development of autonomy and responsibility during early adolescence.

The seven categories within the place of residence variable needed to be collapsed into just two categories for statistical reasons. As seen in Table 2, place of residence was not found to be significantly associated with whether or not children received money from their parents (x^2=.000, p=1.0), nor was there any practical difference.

Research Hypothesis 2 — Among early adolescents, there is no association between children's age and the likelihood that children have jobs.

A summary of the crosstabulation of children's age and work participation are presented in Table 3. A significant association was

found between children's age and children's work participation (x^2=8.05057 p<.10). Thus, the null hypothesis was rejected.

Table 3. Early Adolescents' Work Participation by Gender, Age, Family Income Level, and Place of Residence.

Variables	Count	Work for Pay		Statistics
		Yes	No	
Age		(percent)		
10	15	40	60	x^2 = 8.05057
11	31	32	68	p = .0897
12	48	38	62	df = 4
13	36	56	44	
14	35	60	40	
	(165)[1]			
Gender				
Boys	81	40	60	x^2 = 1.82384
Girls	84	51	49	p = .1769
	(165)[1]			df = 1
Family Income				
< $20,000	25	48	52	x^2 = 3.397
$20,000 - 30,000	47	55	45	p = .3343
$30,000 - 55,000	68	38	62	df = 3
> $55,000	21	43	57	
	(161)[1]			
Place of Residence				
Farm/Non-farm Rural	61	49	51	x^2 = 4.1178
Small Town (<5,000)	23	61	39	p = .3903
Town (5,000-25,000)	37	40	60	df = 4
City (25,000-100,000)	17	35	65	
Large City/Suburb (>100,000)	26	38	62	
	(164)[1]			

[1] Because of missing data all group counts do not equal 168.

Although the Chi-square statistic does not indicate the strength of an association, the results shown in Table 3 appear to support the expected outcome stated in the working hypothesis that older children would report higher levels of work participation than younger children. Thirty-two to 40 percent of the 10- 11- and 12-year-old

children had jobs in comparison to 56 to 60 percent of the 13- and 14-year-old youths.

This finding supports the developmental theory of the changes that occur in early adolescence. Havighurst (1964) referred to the early adolescent stage of development as a time for "acquiring basic habits of industry," and Hill (1980) identified autonomy and achievement as important developmental tasks that children work at during the early adolescent stage.

One other developmental task that Hill (1980) mentioned was identity. To the extent that youth identity is related to expensive name brand clothes, shoes and music machines (McNeal, 1987; Hall, 1987), a primary reason that children seek employment may be to purchase these items. Increased work participation among older children may then be a function of the increased importance of this task as children move toward middle adolescence.

In order to determine whether any of the other independent variables were significantly associated with the likelihood that children had jobs, children's job participation was crosstabulated with gender, age, and place of residence. The results of these procedures are also shown in Table 3.

Although a larger proportion of girls (51%) than boys (40%) reported having jobs, no significant association was found between children's gender and job participation (x^2=1.8238, p=.1769). This suggests that during early adolescence there is equal motivation and opportunity for both boys and girls to work.

Job participation and family income level were also found to be independent (x^2=3.397, p=.3343), although it appears that slightly

larger proportions of children in the two lower income groups reported having jobs than did the children in the two upper income groups.

Some variation can also be seen in the proportion of children with jobs according to place of residence. It appears that farm, rural, and small town children were more likely to have jobs than children living in more populated areas. Nevertheless, no statistical association was found between these two variables (x^2=4.1178, p=.3903).

These findings suggest that early adolescent work opportunities are considered equally important among families of diverse income levels and that job opportunities do not vary significantly depending on the location where the family lives.

Research Hypothesis 3 — Among early adolescents, there are no differences in the mean incomes obtained by children of different ages.

Oneway analysis of variance was used to test this hypothesis both with regard to children's total income and to the separate components from which that income was derived -- allowances and job earnings. Results from these procedures are presented in Table 4.

Children's average monthly allowances increased incrementally as age increased. Statistically, the means of two of the groups -- the oldest and the youngest -- were found to be significantly different from each other (Tukey Range Test, p<.05). Therefore, the null hypothesis was rejected in favor of the working hypothesis which stated that older children would report higher levels of income than younger children.

Table 4. Average Monthly Allowance, Job Earnings, and Total Income of Early Adolescents by Age.

Age	Count	Average Monthly Allowance	Statistics
1) 10-11	26	16.07	F = 3.7594
2) 12	28	21.28	p = .0136
3) 13	21	26.95	Tukey Range Test:
4) 14	19	37.10	Group 4 > Group 1
	(94)[1]		(p=.05)
		Average Monthly Job Earnings	
1) 10-11	15	19.13	F = 2.6171
2) 12	12	37.00	p = .0593
3) 13	16	50.43	Tukey Range Test:
4) 14	20	51.35	no two groups different at .05 level.
	(63)[1]		
1) 10-12	27	27.07	F = 6.3654
2) 13-14	36	50.94	p = .0143
	(63)[1]		
		Average Total Monthly Income	
1) 10-11	33	21.36	F = 6.319
2) 12	33	31.51	p = .0005
3) 13	30	45.76	Tukey Range Test:
4) 14	30	57.73	Group 4 > Group 1 & Group 2
	(126)[1]		Group 3 > Group 1 (p =.05)

[1] The counts represent only the cases of children who specified nominal amounts of allowances, earnings, and total income.

The children's average monthly job earnings also increased as age increased. Nevertheless, significant differences at the .05 level between the average earnings of children in different age groups only were found when the categories were further collapsed into two groups of younger children (ages 10 to 12) and older children (ages 13 to 14). The 10- to 12-year-old children earned an average of $27.07 per month

compared to the monthly average of $50.94 reported by the 13- and 14-year-old youths ($F=6.3654$, $p<.05$). The null hypothesis was again rejected in favor of the working hypothesis which stated that older children would report higher levels of income than younger children.

The positive increments found in the children's average monthly allowances and earnings as age increased were also found in the relationship between total income and children's age. According to the Tukey Range Test ($p<.05$) three sets of group means were statistically different from each other. The mean income of the 14-year-old children was larger than the mean income of the group of 10- and 11-year-old children, and of the group of 12-year-old children. The mean income of the 13-year-old children was also larger than the mean income of the youngest group. The null hypothesis stating that no differences existed in the levels of income reported by early adolescent children of different ages was therefore rejected.

Practically, the overall increases in average income as children's age increased reflect the developmental changes associated with early adolescence. As children grow older, parents no doubt entrust them with greater responsibility which, in turn, leads to increased activities and opportunities both for earning and for using money.

In the discussion of Hypothesis 1, it was noted that fewer older children received money from their parents than did younger children. This difference was explained as possibly resulting from the older children's growth in autonomy and responsibility which would increase their job opportunities and thereby reduce their need for income from parents. Nevertheless, a large proportion (79 percent) of the oldest youths continued to receive money from their parents. The

larger average allowances they received relative to the younger children suggests that older children are given expanded opportunities for using money.

Research Hypothesis 4 — Among early adolescents, there are no differences between the mean incomes reported by boys and girls.

Oneway analysis of variance was used to test this hypothesis both with regard to children's total income and to the separate components from which that income was derived -- allowances and job earnings. Results from these procedures are presented in Table 5.

Table 5. Average Monthly Allowance, Job Earnings, and Total Income of Early Adolescents by Gender.

Gender	Count	Average Monthly Allowance	Statistics
Boy	48	25.87	F = .4698
Girl	46	22.67	p = .4948
	(94)[1]		
		Average Monthly Job Earnings	
Boy	31	44.51	F = .5839
Girl	32	37.03	p = .4477
	(63)[1]		
		Average Total Monthly Income	
Boy	62	42.29	F = 1.2368
Girl	64	34.81	p = .2682
	(126)[1]		

[1] The counts represent only the cases of children who specified nominal amounts of allowances, earnings, and total income.

On average, boys reported monthly allowances of $3.20 more than those reported by the girls. This difference was not statistically

significant, however, and was likely influenced by the reports of just two boys who had weekly allowances in excess of $25.00 -- the maximum amount reported by a girl. The null hypothesis that no differences exist between levels of income obtained by boys and girls was therefore retained. It would appear that parents of early adolescent children consider the economic needs of their sons and daughters to be similar.

Although the average monthly job earnings reported by boys ($44.51) exceeded the amount reported by girls ($37.03), this difference of $7.48 was not statistically significant. The null hypothesis that no differences exist between levels of income obtained by boys and girls was again retained. It is noteworthy, however, that the minimum monthly earnings reported by any boy was $5.00 compared to the minimum earning of $2.00 reported by a girl. The maximum monthly job earnings reported by a boy was $210.00 in comparison to the maximum earnings of $128.00 reported by a girl.

The average total monthly income reported by the boys was $42.29 in comparison to $34.81 reported by the girls. This difference of $7.48 was not found to be significant (p=.268). The maximum individual income report from a girl was $128.00. Two boys had reports above this, of $150.00 and $270.00. Statistically, these two average incomes belong to the same population. The null hypothesis that no significant differences exist between the levels of income of boys and girls was therefore retained.

The nonsignificant differences in the average incomes of boys and girls may be related to the nature of children's jobs. Greenberger & Steinberg (1983) reported nonsignificant gender-based differences in the wages that youths received for their first jobs since these were

often in the informal sector of the economy. They found that as young people moved on to second and third jobs in more formal work settings, that girls earned significantly lower wages than did boys.

Research Hypothesis 5 — Among early adolescents, there are no differences in the mean incomes of children from families of varying income levels.

Oneway analysis of variance was used to test this hypothesis both with regard to children's total income and to the separate components from which that income was derived -- allowances and job earnings. Results from these procedures are presented in Table 6.

The analysis of the differences in children's average allowances, earnings, and total income based on family income level was complicated by the fact that these variables did not meet the equality of variance assumption. Even when the two lowest income categories were combined, the counts within each of the remaining four family income groups varied substantially.

Steps were taken to collapse the children's allowance, earnings, and total income variables into categorical variables in order to carry out the analysis using the Chi-square contingency table procedure. This procedure also failed to provide a satisfactory analysis since some of the cells of the contingency table had expected frequencies of less than five observations.

In spite of these problems, an attempt was made to interpret the data concerning the relationship between the level of youth income and level of family income because of the existing theory in regard to these two variables. This theory suggested that there was an inverse

relationship between family income level and children's access to money. Several studies had shown that children from poorer families received more money from their parents than did children from wealthier families (Medrich et al., 1982; McNeal, 1987; Ward, Wackman & Wartella, 1977).

Table 6. Average Monthly Allowance, Job Earnings, and Total Income of Early Adolescents by Level of Family Income.

Family Income	Count	Average Monthly Allowance	Statistics
< $20,000	11	20.36	Cochrans C = .5605 [2]
$20,001-30,000	21	27.71	p = .000
$30,001-55,000	43	18.02	
> $55,000	16	37.75	
	(91)[1]		
		Average Monthly Job Earnings	
< $20,000	11	44.18	Cochrans C = .5767 [2]
$20,000-30,000	22	30.00	p = .001
$30,000-55,000	21	40.66	
> $55,000	7	66.42	
	(61)[1]		
		Average Total Monthly Income	
< $20,000	19	37.36	Cochrans C = .5870 [2]
$20,001-$30,000	32	38.81	p = .000
$30,001-$55,000	52	31.32	
> $55,000	19	56.26	
	(122)[1]		

[1] Because of missing data in the family income reports, the numbers of children reporting allowances, earnings, and total income are reduced.

[2] Because of the level of significance associated with the value of the Cochrans C and the wide range in group counts, this variable did not meet the assumption of homogeneity of variances necessary for use of ANOVA.

As shown in Table 6, with the exception of the third income group ($30,000 to $55,000), there appears to be a positive linear trend between family income level and children's average monthly allowance. It was noted that this third income group has a disproportionately high number of observations relative to the other three family income categories.

A breakdown of average monthly allowance by family income level and children's age (Table 7) revealed that 10- 11- and 12-year-old children were over-represented in the third income category relative to the other three income categories. Therefore, the lower average monthly allowance associated with the $30,000 to $55,000 family income category may be, in part, a function of the children's age.

Observation of the means presented in Table 7 offers partial, but limited, support for the expected outcome stated in the working hypothesis, that children from families with lower income levels would have larger incomes than children from families with higher levels of income.

Among the youngest children ages 10 and 11, the highest average monthly allowances are reported by children from the lowest family income category and the lowest average monthly allowances are reported by children in the highest income category. This trend is also seen in the three lowest family income categories among 12-year-old children. There are no consistent patterns, however, among the older children. In the two oldest age groups the standard deviations of monthly allowances are considerably larger than are those for the lower age categories, indicating that the older children reported a wider range of allowance levels.

Table 7. Summary of Average Monthly Allowance by Children's Age and Family Income Level.

	Mean	Std Dev	Cases
Entire Population	$24.01	22.67	91
TEN & ELEVEN (group)	16.32	8.30	25
Family Income < $20,000	30.00	14.14	2
Family Income $20,000 - 30,000	16.40	9.42	5
Family Income $30,000 - 55,000	14.87	6.36	16
Family Income > $55,000	14.00	8.48	2
TWELVE (group)	21.28	23.68	28
Family Income < $20,000	20.00	11.02	6
Family Income $20,000 - 30,000	18.00	15.74	6
Family Income $30,000 - 55,000	11.63	5.85	11
Family Income > $55,000	48.00	45.51	5
THIRTEEN (group)	25.80	22.74	20
Family Income < $20,000	14.66	9.23	3
Family Income $20,000 - 30,000	30.00	35.93	6
Family Income $30,000 - 55,000	24.00	15.62	7
Family Income > $55,000	31.00	19.42	4
FOURTEEN (group)	36.94	29.57	18
Family Income $20,000 - 30,000	53.00	33.20	4
Family Income $30,000 - 55,000	26.77	13.65	9
Family Income > $55,000	42.40	44.59	5

Visual analysis of the children's average monthly earnings from their primary job by family income category (Table 6) did not provide support for the expected outcome of an inverse relationship between children's income and family income level as stated in the working hypothesis. Although the average earnings among the children in the lowest family income category exceed the average earnings of children in the second family income category by $14.18, they are roughly equivalent to the average earnings of children in the third family income category, and are $22.24 less than the average earnings of children from families

with the highest income levels. Furthermore, if this lowest income category is ignored, a positive increment in average monthly earnings can be seen as level of family income increases. Therefore it appears that children from families with lower incomes earned money in amounts equivalent to those earned by children from families with mid-range income levels, but less than the amounts earned by children from upper-income families.

Regarding total income, the results presented in Table 6 show that the average monthly incomes of children in the first three family income categories ranged from $31.32 to $38.81, a spread of only $7.49. The average monthly income reported by children in the highest family income category was somewhat higher, $56.26.

While the null hypothesis was neither rejected nor accepted with valid statistical tests, visual analysis of the means did not appear to support the expected outcome of the working hypothesis that youth income would vary inversely with family income level. Neither did there appear to be a positive linear relationship between the two variables. Children from the wealthiest families, with annual incomes of more than $55,000, consistently reported the highest average levels of allowances, job earnings, and total income. But, children in the three lower income categories appeared to have somewhat comparable levels of allowances, earnings, and total income.

This suggests that children from families with income levels ranging from less than $20,000 to $55,000 have relatively equal earning opportunities and receive similar amounts of allowances from parents. In comparison to these children, those from families with incomes that exceed $55,000 appear to receive more generous allowances and also to

have jobs that pay more than children in the lower income levels. It is not clear whether children from the upper income families actually have access to qualitatively different jobs that pay more money. Perhaps by virtue of their parents' social relationships with other families of similar economic status, they are paid more for the same jobs (such as babysitting or mowing lawns) that the other children do for less pay.

Research Hypothesis 6 — Among early adolescents, there are no differences in average total incomes by children's source of income.

Oneway analysis of variance was used to compare the children's average monthly incomes according to their source of income. Results from this procedure are presented in Table 8. The omnibus F-value and probability level from the ANOVA procedure are not reported since these two variables did not meet the assumption of homogeneity of variance (Cochrans C=.5338, p=.002). However, there appeared to be sufficient differences in the means of each category to draw some practical conclusions.

The children whose sole source of income was an allowance from their parents reported total monthly incomes that averaged $25.74 This was $17.19 less than the average amount of monthly income ($42.93) reported by children whose only income source was earnings from work done outside of the home. This difference between allowances and earnings is not as substantial when median levels are compared. The median level of monthly allowance was $20.00 and the median level of monthly earnings was $25.00, a difference of only $5.00. This latter comparison does not concur with the findings of Medrich et al. (1982) that children's median weekly earnings from jobs outside of the home were more

than double the level of median allowances received from parents.

Table 8. Average Total Monthly Income of Early Adolescents by Source of Income.

Source of Income	Count	Average Total Monthly Income	Statistics
Allowance only	63	25.74	Cochrans C = .5371 [1]
Job earnings only	32	42.93	p = .002
Allowance & earnings	31	59.80	
	(126)		

[1] Because of the level of significance associated with the value of the Cochrans C and the wide range in group counts, this variable did not meet the assumption of homogeneity of variances necessary for use of ANOVA.

Half of the children who reported earnings from jobs also reported receiving allowances from their parents. These children with two sources of income -- from allowances and paid jobs -- reported total monthly incomes that averaged $59.80. This was more than double the average amount of income reported by children who only received an allowance and 39 percent more than the average income of children whose total income came from job earnings.

The strongest evidence in this study of what Bachman (1983) termed "premature affluence," would appear to be among these children with two sources of income. Bachman made his warning in the context of an assessment of youth employment and primarily cautioned against the large amounts of money youths obtained through part-time employment, at the same time that parents provide for all or most of their basic needs. The findings in this study suggest that employment is not the only reason for large youth incomes. Parents also contribute to their chil-

dren's "premature affluence" by giving allowances in addition to the children's earnings.

While the null hypothesis could not be rejected nor retained based on a valid statistical test, these conclusions support the expected outcome that children with job earnings would have higher levels of income than children without jobs, as stated in the working hypothesis.

Place of residence was also tested as an independent variable to determine whether the amounts of children's allowances, earnings, and total income varied by where they lived. The results from the oneway analysis of variance tests of these variables are shown in Table 9.

The seven categories in the place of residence variable were collapsed into five categories for these procedures in order to achieve greater balance in the group counts. However the group counts still did not appear to be sufficiently balanced to disregard the significant value resulting from the Cochrans C tests of homogeneity of variance. Therefore, no F-statistics are reported for those two procedures.

The average monthly allowances of children in the first four residential categories are all within a range of $1.97. The average amount reported by children in the most urban location exceeds the average amounts in the first four categories by $10.39 to $12.36. But, no statement can be made regarding the statistical significance of these differences.

Children's average monthly job earnings vary within a range of $21.82 according to place of residence. In comparison to the average allowances, there is greater variation in average monthly earnings by place of residence, but it is the respondents from the middle category

(town of between 5,000 and 25,000) rather than the most urban which report the highest average monthly earnings. Again, no statement can be made regarding the statistical significance of any apparent differences.

Table 9. Average Monthly Allowance, Job Earnings, and Total Income of Early Adolescents by Place of Residence.

Place of Residence	Count	Average Monthly Allowance	Statistics
Farm/non-farm Rural	29	21.17	
Small Town (<5,000)	14	23.14	Cochrans C = .4671 [2]
Town (5,000-25,000)	19	22.84	p = .000
City (25,000-100,000)	16	22.50	
Large City/Suburb (>100,000)	15	33.53	
	(93)[1]		
		Average Monthly Job Earnings	
Farm/non-farm Rural	25	36.12	
Small Town (<5,000)	11	31.09	Cochrans C = .3791 [2]
Town (5,000-25,000)	12	52.91	p = .071
City (25,000-100,000)	5	40.00	
Large City/Suburb (>100,000)	10	48.50	
	(63)		
		Average Total Monthly Income	
Farm/Non-farm Rural	46	32.97	
Small Town (<5,000)	19	35.05	Cochrans C = .4222 [2]
Town (5,000-25,000)	23	46.47	p = .001
City (25,000-100,000)	16	35.00	
Large City/Suburb (>100,000)	21	47.07	
	(125)[1]		

[1] Because of missing data in the place of residence reports, the number of children reporting allowances and total income is reduced.

[2] Because of the level of significance associated with the value of the Cochrans C and the wide range in group counts, this variable did not meet the assumption of homogeneity of variances necessary for use of ANOVA.

Average total monthly incomes reported by children from

farm/rural, small town, and city locations were all within a range of $2.08. Average incomes reported by children in towns of 5,000 to 25,000 and in the most urban locations differed by less than $1.00. There appears to be some practical difference between the average income levels in the latter two categories and the level of income of the former three categories but, no statement can be made regarding the statistical significance of this apparent difference.

Early Adolescents' Spending Behavior

The second major research objective was to show the ways in which the early adolescents included in the 1987 MEAS II sample reported disposing of their income either through spending or saving activities. The analyses employed to answer the research question and to test the hypotheses related to this objective will be presented in this section.

Research Question 1 — What proportion of children reported spending money on each of the saving and spending items listed in the survey instrument?

A rank order listing of the 14 spending/saving items included in the survey instrument, according to the percentage of children that said they spent money on each item, is presented in Table 10. The single most popular way that children used their money, reported by 71 percent of the children, was to save for the purchase of a specific large item. The third most popular use, reported by 59 percent of the children, was to save for the future.

The high position of the two savings items in this rank ordering would appear to counter the assumption that the present generation

of children are no longer savers, only spenders (McNeal, 1987). However, there may be no contradiction. These data do not indicate the amount of money that children saved relative to their expenditures for other items. It may be that many children saved insignificant amounts of money. Furthermore, in light of the fact that half of the children reporting income received only $24.00 or less each month, children may need to be short-term savers in order to purchase the goods or activities they desire. While it is not possible to quantify the amount of money that early adolescent children saved, it would appear that children view themselves as savers as well as consumers.

In addition to saving, the most popular uses of money -- reported by over half of the early adolescents -- were purchases of records and tapes (62 percent), gifts (58 percent), clothes (56 percent) and snacks (55 percent).

Purchases of records, tapes, and clothes are consistent with the developmental task of identity (Hill, 1980) and no doubt reflect the influence of the early adolescent subculture. The purchase of gifts may be a function of the developmental task of intimacy (Hill, 1980) and the growing importance of peer relationships during adolescence.

The one item in this list that represented an essential item was school lunch. Fourteen percent of the respondents reported spending their money for school lunches, making it the least popular way in which the early adolescents spent their money. This finding is consistent with the assumption (McNeal, 1987) that since parents provide for most of the essential needs of children at this age, the children's spending is largely discretionary, for non-essential items.

Table 10. Percentage of Children (in descending order) Who Spent Money on Each Item.

Spending Items	Spend money in this way? (percent answering "yes")	Count
Save for specific large item	71	163[a]
Records or tapes	62	165
Save for the future	59	162
Gifts	58	164
Clothes	56	164
Snacks	55	164
Books	46	164
Movies	41	165
Video games	40	164
Comic books or magazines	39	163
Cosmetics	30	164
Collectibles (baseball cards, stamps)	29	163
Give to church or charity	28	163
School lunches	14	160

[a] Because of missing data, there were not responses from all 168 respondents to each of the 14 spending items.

Research Hypothesis 1 — Among early adolescents, there is no association between children's gender and their spending behavior.

To test this hypothesis, the children's responses to the 14 spending/saving items were crosstabulated by children's gender. A summary of the contingency tables and Chi-square statistics from that procedure are presented in Table 11. Of the 14 spending variables, six were found to be significantly associated with children's gender. The null hypothesis was rejected.

Girls were more likely than boys to spend money on clothes ($p<.001$), cosmetics ($p<.001$), books ($p<.01$), and gifts ($p<.05$). Boys were more likely than girls to spend money on video games ($p<.001$) and collectibles ($p<.05$).

Table 11. Percentage of Children by Gender Who Spent Money on Each Item.

Spending Items	Gender		Chi-square (df = 1)
	Boys	Girls	
	(percent)		
Save for specific large item	73	68	.21616
Records or tapes	60	64	.1456
Save for the future	60	58	.00304
Gifts	49	67	4.80537 *
Clothes	32	79	35.52739 ***
Snacks	54	57	.9087
Books	35	57	7.0867 **
Movies	40	41	.0000
Video games	56	24	15.8472 ***
Comic books or magazines	42	37	.2961
Cosmetics	4	57	35.52739 ***
Collectibles (baseball cards, stamps)	38	19	6.10396 *
Give to church or charity	25	32	.21616
School lunches	9	18	2.3838
Count:[a]	(82)	(83)	

* p<.05
** p<.01
*** p<.001

[a] Because of missing data the actual number of children responding to each spending item varied slightly. The counts for boys ranged from 79 to 82; the counts for girls ranged from 81 to 83.

These results were consistent with reports from other studies regarding associations between children's gender and spending behavior. Penny Power reader surveys (Consumers Union of the United States, Inc., 1983, 1985) found that girls were more likely to spend money on snacks, clothing, cosmetics, and jewelry and that boys were more likely to spend money on video games, hobby, and sports equipment.

Girls' interest in clothes and cosmetics reflects society's strong emphasis on female appearance. Girls' greater interest in gifts may reflect another societal pattern, that of expecting females to be more feelings-oriented and affective.

Many of the video games, especially those found in the video arcades, are oriented toward traditional stereotypic interests of males -- race cars and star wars. It is not surprising that a larger proportion of boys than girls reported spending their money in this way.

The gender association with children's spending on collectibles may have resulted in part because of the descriptive clause that accompanied this item -- baseball cards and stamps. Both of these are items traditionally collected more often by boys than by girls. If other more gender-neutral items had been suggested, for example posters, it may be that a larger proportion of girls would have responded positively.

Research Hypothesis 2 — Among early adolescents, there is no association between children's age and their spending behavior.

Each of the 14 spending variables were crosstabulated with children's age. The results of the Chi-square tests of independence are shown in Table 12. Children's age was significantly associated with children's spending for three spending variables -- movies, cosmetics, and school lunches. The null hypothesis was thus rejected.

Positive increments in the proportion of children who reported spending money on movies ($p<.001$) and school lunches ($p<.05$) can be seen with each successive age category. A somewhat different pattern is seen with regard to children's spending on cosmetics. The youngest children, ages 10 and 11 were least likely to report spending money on cosmetics (16%) and the 13-year-old children were most likely to spend money on cosmetics (44%). Equal proportions (32%) of the 12- and 14-year-old children reported spending money in this way.

Table 12. Percentage of Children by Age Who Spent Money on Each Item.

Spending Item	Age					Chi-square	
	10	11	12	13	14		
			(percent)			(df=4)	
Save for the future	64	55	56	64	58	.90610	
Gifts	46	68	54	64	56	2.85114	
Clothes	46	52	52	57	71	4.01908	
Snacks	57	52	55	57	58	.28930	
Books	69	58	39	43	41	6.08796	
Movies	29	23	31	46	71	20.15656	***
Video games	31	45	44	32	42	2.09438	
Comic books or magazines	23	26	45	42	47	5.38824	
Count:[a]	(15)	(31)	(50)	(37)	(34)		
			10-11	12	13	14	(df=3)	
Cosmetics			16	32	44	32	7.8313	*
Save for specific large item			73	72	64	73	.99512	
Records or tapes			59	54	70	68	3.0427	
Collectibles (baseball cards, stamps)			36	35	14	26	6.04669	
Give to church or charity			40	26	25	18	4.97758	
			10-11	12	13-14		(df=2)	
School lunches			7	8	22		6.9287	*

* p<.05
*** p<.001

[a] Because of missing data the actual number of children responding to each spending item varied slightly.

The association between children's age and their spending for movies may be related to several factors. First, the content of many of the movies shown in theaters is geared toward adult audiences. Parents may not feel that this content is appropriate for the younger children. Second, going to movies is traditionally a popular dating activity. The older children are probably more likely to be involved in formal dating than are the younger children. Finally, paying to see a movie in a theater is quite expensive, especially in comparison to rental fees for videos that can be watched at home. Since older children reported higher incomes, they may be in a better financial position to pay for

movies than are younger children.

The age association related to spending for school lunches, the one essential item among the spending variables, is consistent with the expected growth in responsibility as children move through the early adolescent stage.

A further crosstabulation procedure tested for an interaction of age and gender related to early adolescent children's spending behavior. Table 13 provides a summary of five spending variables (clothes, comic books or magazines, collectibles, books, and give to church or charity) which were not significantly associated with children's age for the entire sample. However, when children's gender was held constant, an age association was found for either boys or girls.

The spending variables associated with age for boys, but not for girls, were clothes, collectibles, and books. Older boys, ages 13 and 14, were more likely to buy clothes than were the younger boys, ages 10, 11, and 12. This suggests that boys' become more interested in clothing as they move through the early adolescent period.

In contrast, younger boys were more likely than older boys to spend money on collectibles and books. Fifty-four percent of the youngest boys bought collectibles compared to only 21 percent of the oldest boys. Similarly, 58 percent of the youngest boys bought books compared to just 21 percent of the oldest boys. This might suggest that boys become less interested in individual activities as they grow older, preferring group activities or activities requiring more physical exercise. It might also mean that insufficient attention has been given to creating books with subject matter of interest to the older early adolescent boys.

Table 13. Percentage of Children by Age and Gender Who Spent Money on Selected Items.

Spending Items	Gender	Age				Chi-square
		10-11	12	13	14	
		(percent)				(df=3)
Clothes	Boys	25	18	31	58	8.31602 *
	Girls	80	79	75	87	(invalid) [1]
Collectibles	Boys	54	50	19	21	8.81322 *
	Girls	15	22	10	33	(invalid) [1]
Books	Boys	58	23	35	21	8.77876 *
	Girls	65	52	50	67	1.7858
Comic books or magazines	Boys	42	50	37	37	.91973
	Girls	5	41	45	60	12.95608 **
Cosmetics	Boys	4	4	0	5	(invalid) [1]
	Girls	30	54	80	67	10.94391 *
		10-11	12	13-14		(df=2)
Give to church or charity	Boys	21	32	23		.85637
	Girls	62	22	21		11.90659 **

* $p<.05$
** $p<.01$

[1] At least one cell in the contingency table had an expected frequency of less than 5.

The two spending variables associated with age for girls, but not for boys, were comics/magazines and giving to church or charity. The percentage of girls who bought comics or magazines rose in positive increments from just five percent of the youngest girls to 60 percent of the oldest girls. This increased proportion of older girls who bought comics or magazines may be related to the importance of fashion magazines among girls during the teen years. In contrast, 62 percent of the youngest girls gave money to church or charity compared to 21 percent of the oldest girls.

Although spending for cosmetics was found to be associated with age for the entire sample (Table 12), it can be seen in Table 13 that this association was derived from the girls' spending reports.

Research Hypothesis 3 — Among early adolescents, there is no association between children's work participation and their spending behavior.

All 14 spending variables were crosstabulated with the job participation variable. The summary of results from the Chi-square tests of independence are presented in Table 14.

Children's spending for six items was found to be significantly associated with job participation. Children with jobs were more likely than those without jobs to save for a specific large item ($p<.10$), to buy records and tapes ($p<.10$), gifts ($p<.05$), clothes ($p<.001$), cosmetics ($p<.01$), and to pay for movies ($p<.001$). The null hypothesis was therefore rejected.

Only partial support was found for the expected outcome stated in the working hypothesis. Previous studies (Medrich et al., 1982) found that children who worked for pay were more likely than those without jobs to save a portion of their income and to spend a portion on essential items, implying a relationship between work and levels of responsibility or long-term planning.

Only one of the two savings items was found to be significantly associated with children's work participation. Seventy-nine percent of the children with jobs saved for a specific large item in comparison to 65 percent of the children without jobs ($p<.10$). Although a somewhat larger proportion of children with jobs (66%) compared to

those without jobs (52%) also reported saving for the future, no significant association was found.

Table 14. Percentage of Children by Job Participation Who Spent Money on Each Item.

Spending Items	Job Participation		Chi-square
	Job	No Job	
	(percent)		
Save for specific large item	79	65	3.33341 *
Records or tapes	70	55	3.12149 *
Save for the future	66	52	2.40529
Gifts	71	50	6.61649 **
Clothes	71	43	11.62341 ****
Snacks	63	49	2.24388
Books	44	35	1.04967
Movies	56	28	11.95589 ****
Video games	36	44	.68845
Comic books or magazines	44	35	1.04967
Cosmetics	41	20	7.16784 ***
Collectibles (baseball cards, stamps)	31	28	.01491
Give to church or charity	29	28	.00000
School lunches	13	15	.04303
Count:[1]	(73)	(89)	

**** p<.001 ** p<.05
*** p<.01 * p<.10

[1] Because of missing data, the actual number of children responding to each spending item varied slightly. The counts for those with jobs ranged from 71 to 73; the counts for those without jobs ranged from 86 to 89.

The crosstabulation of children's job participation with reports of spending on the one essential item in the list, school lunches, revealed that similar proportions of children with jobs (13%) and children without jobs (15%) bought school lunches. Therefore, no support was found for the hypothesized outcome that children with jobs would be more likely to spend money for essential items than children without jobs.

Four of the six items associated with children's job partici-

pation (clothes, records/tapes, gifts, and saving for a specific large item) were popular items purchased by over 50 percent of the entire sample (Table 10). Perhaps the increased income from job earnings simply increases children's potential to buy items already of interest.

The other two items associated with children's job participation (paying for movies and buying cosmetics) were also associated with children's age. Since it has already been shown that children's job participation increased as age increased, the association between work participation and spending for these items may be partially a function of the age of the children with jobs.

Children's spending reports were also crosstabulated with the family income and place of residence variables. Results from the Chi-square tests of independence between spending behavior and family income level are presented in Table 15.

Spending for movies was the only spending variable found to be significantly associated with family income level ($p<.10$). Twenty-five percent of the children in families earning less than $20,000 indicated that they spent money for movies while 62 percent of the children in families with incomes of more than $55,000 reported spending money in this way. This suggests that family economic status does not strongly affect children's spending behavior. However, a different degree of association between these two variables might be seen if it were possible to quantify the amounts of money that children spent on each item, thereby measuring the actual importance of the different items.

Table 15. Percentage of Children by Family Income Level Who Spent Money on Each Item.

Spending Items	Family Income Level				Chi-square
	<$20,000	20,001- 30,000	30,001- 55,000	>$55,000	(df=3)
	(percent)				
Clothes	54	66	51	52	2.8007
Gifts	64	66	54	52	2.3154
Cosmetics	14	34	27	38	4.0233
Records/tapes	52	64	65	57	1.5198
School lunches	23	11	16	5	3.3582
Snacks	75	56	48	48	5.5231
Pay for movies	25	43	38	62	6.7746 *
Video games	39	34	38	62	4.9744
Comic books/magazines	41	37	38	48	.8150
Collectibles	23	30	32	24	1.0166
Books	48	52	42	48	1.1763
Give to church or charity	48	33	22	24	6.1008
Save - specific large item	64	79	68	71	2.3078
Save for future	61	63	58	52	.7395
Count:[1]	(23)	(46)	(69)	(21)	

* $p<.10$

[1] Because of missing data, the actual number of children responding to each spending item varied slightly.

Results of the crosstabulation of children's spending reports with place of residence are presented in Table 16. Four of the spending/saving items were found to be significantly associated with place of residence ($p<.05$). Smaller proportions of children in the most urban category (over 100,000) reported spending money on gifts and saving for the future than did children in the other residence categories. To the contrary, children in the collapsed urban residence category were more likely than children in the collapsed rural residence category to spend money on school lunch (24% compared to 10%), and to give to church or charity (43% compared to 23%).

Table 16. Percentage of Children by Place of Residence Who Spent Money on Each Item.

Spending Items	Place of Residence					Chi-square
	Farm & Rural	Town of < 5,000	5,000-25,000	25,000-100,000	Over 100,000	(df=4)
Clothes	50	65	57	47	64	2.8602
Gifts	58	74	70	47	36	10.5017 *
Cosmetics	32	39	35	12	24	4.5515
Records/tapes	59	61	65	71	56	1.2488
Snacks	49	59	46	71	68	5.5835
Pay for movies	34	36	51	47	44	3.4846
Video games	37	43	35	71	36	7.4712
Comic books/ magazines	33	36	40	47	48	2.2225
Books	57	45	40	47	28	6.8817
Save for future	73	61	49	65	33	13.1086 *
Count:[1]	(62)	(22)	(37)	(17)	(25)	

	Rural <25,000	Urban >25,000	(df=1)
School lunches	10	24	3.9498 *
Collectibles	27	33	.3552
Give to church/charity	23	43	4.7748 *
Save - specific large item	72	67	.2393
Count:[1]	(121)	(42)	

* $p<.05$

[1] Because of missing data the actual number of children within each residence category responding to each spending item varied slightly.

The meanings of these associations are not clear. Quite similar proportions of children from the urban locations reported spending money on all four items: gifts (36%), save for future (33%), school lunches (24%), give to church/charity (43%). In contrast, the proportions of children in the most rural locations varied substantially according to the four items: gifts (58%), save for future (73%), school lunches (10%), give to church/charity (23%).

Research Hypothesis 4 — Among early adolescents, there are no differences by age in the average number of saving/spending items that children select.

Results from the oneway analysis of variance (ANOVA) used to compare the average number of saving/spending items selected by children in each age category are presented in Table 17.

Although the oldest children selected an average of one more item than the youngest children (6.51 compared to 5.27), no differences in the average spending variety by age of children were found to be statistically significant (F=.6105, p=.6657). The null hypothesis was therefore accepted.

This result was contrary to the expected outcome that older children would spend money on a wider variety of items than younger children. Feldman (1976) reported that children have new needs and uses for money as they enter early adolescence and Ward, Wackman and Wartella (1977) found that children became more flexible in the use of their money as they grew older.

One possible explanation for the contradiction between expected and actual outcome is that expanded uses for money occur in the early stage of early adolescence, but remain relatively stable during the early adolescent years. Whether or not this is true, the findings suggest that while early adolescents' spending interests may change with age, the average number of items that early adolescent children buy does not vary significantly by age.

Table 17. Average Number of Spending Items by Age, Gender, Job Participation, Family Income Level, and Place of Residence.

Variables	Count	Average Number of Spending Items	Statistics
Age			
10	15	5.27	F = .6105
11	31	6.10	p = .6657
12	50	5.96	
13	37	6.35	
14	35	6.51	
	(168)		
Gender			
Boys	82	5.71	F = 3.5618
Girls	86	6.52	p = .0609
	(168)		
Job Participation			
Without job	90	5.49	F = 11.4819
With job	75	6.95	p = .0009
	(165)[1]		
Family Income Level			
< $10,000	7	5.43	F = .7574
$10,001-20,000	18	5.83	p = .5545
$20,001-30,000	47	6.62	
$30,001-55,000	70	5.84	
> $55,000	21	6.43	
	(163)[1]		
Place of Residence			
Farm & Rural	63	5.94	F = 1.0210
Small Town (<5,000)	23	6.57	p = .3982
Town (5,000-25,000)	37	6.03	
City (<100,000)	17	7.18	
Urban (>100,000)	26	5.62	
	(166)[1]		

[1] Because of missing data all group counts do not equal 168.

Consistent with the exploratory nature of this study, the oneway analysis of variance tests were repeated to compare children's average spending variety by gender, work participation, family income level, and place of residence. Results from these procedures are also shown in Table 17. Of these four variables, only job participation was

found to account for a significant difference ($p<.05$) in the number of ways in which children spent their money. Children with jobs selected an average of 6.95 items, significantly more than the average of 5.49 items selected by children without jobs. ($F=11.4819$, $p<.001$).

It was shown earlier that job participation was associated with higher levels of youth income. Therefore, the difference between the spending variety of working and nonworking youths may be a function of the higher incomes of the working youths. One issue this finding cannot address, however, is whether children's spending activity increases as a result of increased income through work or whether children go to work with the specific intention of expanding their spending activity.

Chapter 5

CONCLUSION

This study of the income, work, and spending behavior of early adolescent children was an attempt to gain a more comprehensive understanding of a topic that has been highlighted by the popular press. Early adolescent children are being portrayed as big spenders with money in their pockets and as the target of marketing strategists.

By employing secondary analysis on data that were collected in the 1987 Michigan Early Adolescent Survey, it was possible to obtain a picture of the ways in which a particular sample of 10- to 14-year-old children living in Michigan obtained and disposed of money, to estimate the amount of their income, and to identify some of the variables related to their economic activity.

A review of literature on the topic of children's income, work, and spending behavior revealed that research in this area is still relatively limited and that few of the studies have focused specifically on children in the early adolescent stage. It was therefore deemed appropriate to undertake this study which was primarily exploratory in nature.

Summary

The findings were based on information provided by 168 children ages 10 to 14 and their parents who were part of a larger sample that participated in the 1987 Michigan Early Adolescent Survey. These

children were interviewed personally about a wide range of topics concerning early adolescent development and activities. In addition they filled out a self-answered questionnaire containing questions about how they obtained and spent money. Parents completed a questionnaire providing family demographic information, personal information, and information about their early adolescent children.

The dependent variables were children's allowances, job earnings, total income, work participation, and spending behavior related to 14 spending items. The independent variables were children's age, gender, source of income, family income level, and place of residence.

Sources and Amounts of Early Adolescents' Income

Parents were a primary source of income. Eighty-five percent of the children received money from their parents. Children only reported the nominal amount received in regular allowances, but many indicated that they received additional money in forms other than an allowance.

Children's weekly allowances ranged from $1.00 to $30.00. The median weekly allowance was $5.00 and 90 percent of the weekly allowances were less than $10.00. Older children received higher allowances than younger children, but the proportion of children receiving money from parents decreased slightly as age increased. It was concluded that as children grow older and have other sources of income, dependence on money from parents diminishes for some of them.

Just under half of the children earned money by working outside of the home. Jobs available to children at this age are primarily in the informal sector of the economy -- babysitting, lawn mowing, paper

routes and house cleaning. Nine percent of the children with jobs reported working in stores, restaurants, and offices.

Older children, ages 13 and 14, were more likely to have paid jobs than were younger children which was consistent with theory regarding growth in autonomy and achievement during early adolescence. Girls were as likely as boys to have jobs. Children's monthly job earnings ranged from $2.00 to $210.00, but only 11 percent of the individual reports of monthly earnings exceeded $100.00.

Early adolescents' total income was calculated by combining the amounts children reported from allowances and/or earnings from their primary job. Half of the children who reported income derived the entire amount from allowances and half of the children with jobs also received an allowance. Individual incomes ranged from $4.00 to $270.00, but only 10 percent of the reports of total income exceeded $100 per month.

This total monthly income figure was interpreted as a conservative estimate of children's income since it did not contain all possible sources of income, only the regular allowances and earnings from one job. Some children reported earnings from more than one job, but it was not possible to determine whether these jobs all were done during the same month. Even the estimated earnings from one job during a particular month may not be constant during the entire year.

Differences in average incomes were attributed to children's age and their source of income. Total monthly income increased as children's age increased. Children whose only source of income was an allowance reported average monthly incomes of $25.74. Those whose only source of income was job earnings reported average monthly incomes of

$42.93. Children who received allowances and earnings reported average monthly incomes of $59.80.

No statistical differences were found between the average incomes of boys and girls. However, the maximum levels of both allowances and earnings reported by a boy were higher than the maximum levels reported by a girl.

It was not possible to test statistically the effect of family income level or of place of residence on amounts of children's allowances, earnings, and total income. Practically, it appeared that there was relative income equality among children from families with annual incomes ranging from less than $20,000 to $55,000. The income levels of children from families with annual incomes of more than $55,000 appeared to be substantially higher than the incomes of the other children. There did not appear to be any meaningful differences in the average incomes of children depending upon place of residence.

Early Adolescents' Spending Behavior

Children were presented a list of 14 spending items and were asked to indicate for which items they spent their money. Over half of the children said they used money to save for a specific large item, to buy records or tapes, to save for the future, to buy gifts, to buy clothes, and to buy snacks. Less than half said they bought books, paid for movies, spent on video games, and bought comic books or magazines. Less than one-third bought cosmetics, collectibles, gave to church or charity, and purchased school lunches. The amount of money that children spent on each item was not reported.

Gender and age were associated significantly with children's

spending for particular items. Girls were more likely than boys to buy gifts, clothes, books, and cosmetics. Boys were more likely than girls to spend money on video games and collectibles. Older children were more likely than younger children to spend money on movies, cosmetics, and school lunches.

Some differences were found between boys and girls in the way their spending behavior changed as age increased. Older boys were more likely to buy clothes and less likely to buy collectibles and books than younger boys. Girls' spending on these items was similar at all ages. Older girls were more likely to buy cosmetics and comic books or magazines, but less likely to give to church or charity than younger girls. Boys' spending for these items did not change significantly as age increased.

Children with jobs were more likely than those without jobs to spend money on records or tapes, gifts, clothes, movies, cosmetics, and to save for a specific large item. It was suggested that these associations were a function not only of the increased income resulting from the jobs, but also of children's age since older children were more likely than younger children to have jobs.

Family income level had little affect on children's spending behavior. Only one spending variable, paying for movies, was related to family income level. Four spending variables were associated with place of residence. Children in the most urban areas were less likely to spend money on gifts and to save for the future than children from less urban areas, but more likely to buy school lunches and give to church or charity.

Although children's spending interests varied by gender, age,

and to some extent by place of residence, the average number of ways that they spent their money did not differ by these variables. In general, boys saved or purchased as many different things as did girls and younger children and older children were equally varied in their spending activities. Job participation was the only variable that accounted for a significant difference in the average number of ways that children disposed of their income. Children with jobs reported spending on more of the items listed in the survey than did children without jobs.

Implications and Recommendations

The findings of this study have implications for early adolescent development, for early adolescent and parent education programs, and for future research.

Early Adolescent Development

This study has demonstrated that obtaining and spending money are common activities among early adolescent children. Eighty-five percent of the children received money from their parents and 46 percent received money from work they did outside of the home. Seventy-five percent of the children used their money to save or spend on at least four of the spending items listed in the survey.

Growth in autonomy, achievement, and identity are associated with the early adolescent stage of development (Hill, 1980). Children's economic activities have implications for each of these developmental tasks.

There was evidence that children's work outside of the home

increased their autonomy. Of the children who reported income, one-quarter listed earnings as their only source. Older children were more likely to have jobs and less likely to receive money from parents than younger children, suggesting that as children grow older and have greater access to jobs outside of the home they rely less on their parents for income.

Job earnings do not automatically replace children's dependence on parents for money. Half of the children with job earnings also received allowances. In cases where children's earnings are still quite small, continued dependence on parents seems appropriate. However, the highest average incomes were among children who received allowances in addition to working. The impact on long-term development and growth in responsibility of such large incomes during early adolescence is not clear.

Bachman (1983) warned that early work experiences, by providing young people with ample spending money, may do more to create elevated consumer expectations than to promote "habits of industry" and a realistic understanding of the relative costs of essential goods. The analysis of children's spending behavior in relation to their work participation offered some support for this conclusion.

No association was found between children's work participation and their likelihood to buy school lunches, the one essential item included in the list of spending items. The spending items that were associated with work participation were all discretionary in nature: buying clothes, cosmetics, records and tapes, gifts, paying for movies, and saving for a specific large item. This suggests that early adolescent children who work may not necessarily be assuming more

responsibility for their basic needs, but only increasing their potential for discretionary spending. Thus, while having jobs may be an appropriate activity for exposing children to the world of work, the ways that children spend their earnings may not aid their understanding of the real costs of living, nor promote future financial responsibility.

No significant variation was found in the work participation rate nor in the average incomes reported by boys and girls. It would thus appear that during early adolescence, children of both genders have essentially equal opportunities for growth in autonomy, achievement, and identity.

This finding is noteworthy because of the traditional role differentiation between men and women. It reflects changes that have occurred regarding equal opportunities for women. The long-term implications, however, are not certain. If girls develop an identity of being economically equal with boys during early adolescence, they may insist that the equality continue in adult life and work to ensure that it does. On the other hand, they may be developing consumption patterns that will be difficult to maintain when they become economically independent, especially if they work in some of the lower paying sectors of the economy as most women still do.

While no differences were found in the level of work participation and earning potential between boys and girls, analysis of their spending behaviors showed gender-based differences in some of children's interests at this stage of development. More boys reported spending money on certain items than did girls and vice versa. Furthermore, it was found that some of the changes in children's interests, as they move

through early adolescence, vary according to gender. Some aspects of early adolescent development, therefore, occur distinctly for boys and girls.

Early Adolescent and Parent Education Programs

Parents have a vital role in supporting their children's development during early adolescence. Although peer relationships take on increased importance during this stage of development, they do not replace the influence, nor the responsibility that parents have for children.

Early adolescence is a prime time for teaching money management because of children's increased opportunities for earning and spending money. A number of formal curriculum guides, as well as popular-level educational resources such as Weinstein's Children and Money (1985) and brief articles in parent and family magazines, are available to aid parents and educators in teaching money management skills to children.

These resources typically encourage parents to work with their children in setting goals related to saving, spending, and sharing, and to establish a budget to help reach the goals. It is suggested that allowances be based on such a budget and include money for some essential items like school lunches or bus money.

The findings suggest that many parents are probably not so intentional in teaching money management to their children. Increased demands upon the time of single and dual earning parents may prevent some parents from making optimal decisions regarding their children's use of money. Although 85 percent of the children received money from parents, one-third of these did not receive a regular allowance, and

half of the children who did receive allowances received additional money when they asked for it.

The large proportion of children who reported saving a portion of their income suggests that early adolescents do project and work toward specific goals requiring money. On the other hand, fewer than one-fifth of the children reported buying school lunches and fewer than one-third reported giving to church and charity, which indicates that few early adolescents are gaining experience in paying for essential items or in sharing their money with others. These are important areas in which parents should be encouraged to give their children increased spending opportunities so that they will begin to understand money within a framework of personal and social responsibility and not merely as a source of personal gratification.

Some parents may need to increase the amount of their child's allowance if the current level is rather low, in order to allow for increased experiences in paying for nondiscretionary items. In the cases of the higher income children -- those with incomes from jobs and allowances -- it may be useful for parents to curtail their contribution to the child's income. These parents might also give the children complete or major responsibility for at least one area of essential spending such as school supplies, school lunches, or clothing, or help them save for specific future goals such as education.

Buying clothing is important to early adolescents. At least three-quarters of the girls at all ages and over half of the 14-year-old boys reported spending money on clothes. Although clothing is a basic and necessary item, it was considered discretionary for children because of its symbolic meaning in the adolescent subculture. If parents buy

most of their children's clothes and allow the children to spend their personal money for a few expensive name brand items, the children may not develop a realistic understanding of the actual cost of clothing within the family budget.

Parents and professionals who work with early adolescents and their families should be encouraged to consider seriously the future impact of the income and spending patterns that children develop during early adolescence. Parents may need to make greater efforts to balance personal time constraints with the need to help their children make more conscious decisions about income and spending activities. Public schools and extracurricular youth programs can support parents' efforts by introducing or expanding consumer education programs targeted specifically at the early adolescent population.

Future Research

During the course of this study a number of issues and questions emerged that could not be answered from the available data, but which warrant further investigation.

One of these issues is the need for developing an instrument to estimate more accurately children's incomes and expenditures. The survey depended totally on children's recall to estimate their job earnings from a one-month period. The jobs that are available to early adolescent children are often performed irregularly, however, which may affect children's accuracy in reporting their earnings. No attempt was made to quantify the amount of money children received from parents in forms other than a regular allowance, nor to estimate actual expenditures.

It may be that some form of diary, kept by both parents and

children, would provide more accurate estimates both of the children's income and of the specific amounts of money they save or spend on particular items. Soliciting information from both a parent and child would no doubt increase the reporting accuracy since parents likely are not aware of all of their children's spending activities, but children at this stage still need help in remembering certain information.

A second issue is that of needing to more accurately assess the degree to which early adolescents have opportunities to spend money on "essential" items. Only one such item, school lunches, was included in this study. Additional exploratory research may need to be done to determine other items, such as school supplies or transportation, that should be included in a more comprehensive instrument to measure children's spending behavior.

A third issue, related to the second, concerns the discretionary nature of early adolescents' income. Much of the current literature, and the list of spending items used in this study, have been based on the assumption that children spend all of their income and make little or no contribution to family income. Since the proportion of children growing up in families headed by a single female has increased, it may be important to determine whether early adolescent children in these families are expected to return some of their income to the family or if spending for themselves substitutes for parents' spending.

A final area for future inquiry concerns the process of family decision making with regard to early adolescents' income, work, and spending activities. How do families decide the form in which money is given to children? How do they decide the level of children's allowances? To what extent do children make their own decisions about

how they use their money and to what extent do parents participate in those decisions? What benefits do parents feel their children gain from work experience? Are there reasons, in addition to earning money, that children give for wanting to work outside of the home?

Obtaining answers to these questions would provide a deeper understanding of the meaning and importance of children's economic activities within the family. It would additionally offer a base for making realistic recommendations and designing educational programs to aid families in the task of helping their children learn financial responsibility.

In addition to the diary approach of recording income and expenditures previously mentioned, other qualitative methods may be useful in future research, especially at initial stages. Observation of early adolescents in stores and shopping malls could provide information about their consumer preferences and about the social context in which they make purchases. Case studies of several families with early adolescent children, involving observation and in-depth interviews with the parents and children, could provide insights about the ways that families make decisions regarding early adolescents' income and spending activities. While such findings would have inferential limitations, they would contribute to theory development and to the construction of a survey instrument designed with consideration for the unique characteristics of this topic and of the early adolescent developmental stage.

Limitations and Assumptions

A number of limitations were inherent in this study. Whenever secondary analysis of data is undertaken, the researcher must accept the boundaries of the chosen data base. In this case, the economic activities of early adolescents was just one part of a wide range of topics included in the 1987 Michigan Early Adolescent Survey II. As such, the information obtained was much less specific and less detailed than it might have been if this had been the primary topic of inquiry.

For example, the survey instrument did not ask the children to estimate the amount of money received from parents in forms other than an allowance. Neither did it ask them to indicate the nominal or proportional amounts of money that they saved or spent on particular spending items.

Although survey research is a useful and reliable tool for obtaining standardized measurements and describing the characteristics of large populations, Babbie (1986) outlined several weaknesses inherent in this method of inquiry. Standardized questionnaires tend to be superficial, capturing elements common to many people, but unable to describe complex details of individual experience. Survey research is rarely able to deal with the context of social life or to measure social action. It can also be weak in terms of validity.

The manner in which spending behavior was measured illustrates the problem of validity. The survey instrument contained a list of 14 items, certainly not exhaustive of all the ways that children spend money. For example, it only contained one item that could be classified as essential. Although the list included an "other" category which the children could fill in, it is possible that some spending items

important to early adolescent children were not included.

Another limitation in this particular study involves the accuracy of recall and reporting of children between the ages of 10 and 14. Stipp (1988) said that elementary school age children have poor recall and are not dependable reporters of their behavior and feelings. Although early adolescents are moving into a cognitive stage that includes greater understanding of abstract questions, their reporting accuracy, especially regarding topics such as work and spending activities that may occur irregularly, is still uncertain.

The nature of children's economic activities imposed a further limitation. The jobs that are available to children, such as babysitting, mowing lawns, and shoveling snow, are often irregular and, in some cases, seasonal. Twenty-nine percent of the children with jobs reported earnings from more than one job, but in some cases all jobs would not have been done during the same month. For these reasons, it may be difficult for children to accurately estimate their income from a particular time period, and even if they do, the estimate from one time period may not be representative of other equivalent time periods.

One of the assumptions made in this research was that all income reported by the early adolescents was truly discretionary -- for their own use -- and that none of it was contributed to the family income stream. At earlier points of history children's earnings, both in the factory and on the farm, were often vital to the economic well-being of the family. As a result of the post-World War II economic developments that led to increased affluence for many U.S. families, this has no longer been true during the past few decades. More recently however, with the increased number of households supported by a single

parent, it may be that some children are again contributing to their family's income. If so, the discretionary assumption may not have been completely accurate.

Conclusion

This research was undertaken because of recent interest in the consumer activities of early adolescent children. Unique to this study was the inclusion of place of residence as an independent variable. It was included in an attempt to broaden the study's ecological framework. Place of residence was found to be related to children's spending for several of the spending items, but not to children's work participation nor to amounts of income.

The total findings contribute to the growing field of study about early adolescent children by placing children's economic activities within the framework of human development. Further research is needed to understand more fully the processes of family decision-making regarding children's income, work, and spending behavior, and to assess the lifelong impact of these decisions made during the early adolescent stage.

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APPENDICES

APPENDIX A

SELECTED QUESTIONS FROM THE MICHIGAN EARLY ADOLESCENT SURVEY: YOUTH QUESTIONNAIRE

SELECTED QUESTIONS FROM THE
MICHIGAN EARLY ADOLESCENT SURVEY:
YOUTH QUESTIONNAIRE

The next section is about jobs and money. Follow the directions given with each question.

1. Do you have a paid job outside your home that you do at least once a month? **CIRCLE ONE NUMBER.**

   No
   Yes

IF YOU CIRCLED 0, THEN GO TO QUESTION 2.

IF YOU CIRCLED #1...

a. What kind of paid job or jobs do you have? **WRITE IN.**

_____
_____
_____

b. How many times a month do you do each job? **WRITE IN.**

_____
_____
_____

c. About how much do you earn each month for each job? **WRITE IN.**

_____
_____
_____

2. Let's talk about other money you might have. Do you receive money from your parents/mother/father? **CIRCLE ONE NUMBER.**

No	0
Yes	1

IF YOU CIRCLED 0, THEN GO TO QUESTION 6.

IF YOU CIRCLED #1...

3. Do they give money to you just when you ask for it, or do you get a regular allowance? **CIRCLE ONE NUMBER.**

When ask for it	1
Regular allowance	2
Both	3
Other	4

4. How often do you get your allowance? **CIRCLE ONE NUMBER.**

Once a week	1
Every other week	2
Once a month	3
Other	4

5. How much do you usually get? **CIRCLE ONE NUMBER & WRITE IN.**

$_____per week	1
It varies, no certain amount	2

6. What do you do with your own money. That is, how do you spend it? **CIRCLE 0=NO OR 1=YES FOR EACH.**

	NO	YES
Buy clothes	0	1
Buy gifts	0	1
Buy cosmetics	0	1
Buy records or tapes	0	1
Buy school lunches	0	1
Buy snacks	0	1
Pays for movies	0	1
Video games	0	1
Comic books or magazines	0	1
Collectibles (baseball cards, stamps)	0	1
Books	0	1
Give to church or charity	0	1
Save for specific large item	0	1
Save for the future	0	1
Other (WRITE IN:_____)	0	1

APPENDIX B

SELECTED QUESTIONS FROM THE MICHIGAN EARLY ADOLESCENT SURVEY: YOUTH INTERVIEW

SELECTED QUESTIONS FROM THE MICHIGAN EARLY ADOLESCENT SURVEY: YOUTH INTERVIEW

Now, we would like to ask a few questions about you.

1. How old are you?	Ten	1
	Eleven	2
	Twelve	3
	Thirteen	4
	Fourteen	5
2. What grade are you in?	Fifth	1
	Sixth	2
	Seventh	3
	Eighth	4
	Ninth	5
3. Are you in:	Grade School	1
	Middle School	2
	Junior High School	3

APPENDIX C

SELECTED QUESTIONS FROM THE MICHIGAN EARLY ADOLESCENT SURVEY: PARENT QUESTIONNAIRE

SELECTED QUESTIONS FROM THE MICHIGAN EARLY ADOLESCENT SURVEY: PARENT QUESTIONNAIRE

This next section asks about you, where you live, and your job. Please follow the directions that are given with each question.

1. What is the highest level of school you have completed? CIRCLE ONE NUMBER.

8th grade or less	1
Some high school	2
High school graduate	3
Some college	4
College graduate	5
Graduate or professional school	6

2. What is your age? PLEASE WRITE IN. _____

3. Where does your family live? CIRCLE ONE NUMBER.

On a farm (40 acres or more)	1
In a rural area but not on a farm (less than 40 acres)	2
In a small town (under 5,000)	3
In a town of 5,000-25,000	4
In a city of 25,000-100,000	5
Inside the city limits of a large city over 100,000	6
In a suburb of a large city over 100,000	7

4. Which of the following describes your child?

White	1
Mexican-American	2
Other Spanish-American	3
Black	4
Asian-American	5
American-Indian	6
Other	7
(Specify)_____	

a. Which of the following describes you?

White	1
Mexican-American	2
Other Spanish-American	3
Black	4
Asian-American	5
American-Indian	6
Other	7
(Specify)_____	

5. Please circle the number of the amount that comes closest to your total net family income before taxes last year in 1986. (Include all forms of income.)

Less than $10,000	1
$10,001-20,000	2
$20,001-30,000	3
$30,001-55,000	4
$55,001-75,000	5
Over $75,000	6