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**Consumer Socialization Influences
on Pre-Purchase Financial Processes:
An Investigation of Adolescent
Saving and Borrowing**

by

Paul Rossmann, B.Comm.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfilment of the requirements for
the degree of

Master of Management Studies

School of Business
Carleton University
Ottawa, Ontario
March 23, 1993

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submitted by Paul Rossmann, B.Comm.,
in partial fulfilment of the requirements for
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Thesis Supervisor

Chairman, School of Business

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April 23, 1993

ABSTRACT

Adolescents have significant wealth at their disposal and constitute a recognized current market segment. Recent statistics indicate that North American adolescents each spend up to \$2,300 per year, representing a \$6 billion market in Canada. This thesis describes an investigation into some of the saving and borrowing processes associated with how they manage this money.

The study describes the borrowing and saving behaviour of adolescents and the information sources they use when engaging in this behaviour. Relationships of these variables with other factors that have been found significant in the consumer socialization literature (materialism, consumption motivation, socio-economic status, age, and gender) were analyzed. The study extends a previously neglected area of consumer theory, and will be of value to consumer behaviour researchers, financial institutions, consumer educators, public policy makers, and retailers.

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TABLE OF CONTENTS

	<i>Page</i>
ACCEPTANCE SHEET	ii
ABSTRACT	iii
DEDICATION	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vii
LIST OF APPENDICES	ix
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: RESEARCH PROBLEM	3
CHAPTER 3: LITERATURE REVIEW	4
3.1 Adolescent Income	4
3.2 Consumer Social Learning	7
3.3 Adolescent Saving	9
3.4 Adolescent Borrowing	11
3.5 Adolescent Consumer Behaviour	12
3.6 Conclusions	14
CHAPTER 4. RESEARCH QUESTIONS	15
CHAPTER 5: METHODOLOGY	20
5.1 RESEARCH DESIGN	20
5.1.1 Population	20
5.1.2 Sampling Method	22
5.1.3 Sample Size	23

	<i>Page</i>
5.1.4 Survey Instrument	24
5.1.4.1 Variable Measurement	25
5.1.4.2 Qualitative Issues	28
5.1.5 Pretest	29
5.2 DATA ANALYSIS	29
CHAPTER 6: FINDINGS	31
6.1 Income	31
6.2 Saving and Borrowing	34
6.3 Information Sources	45
6.4 Socio-Economic Status	52
6.5 Age	54
6.6 Gender	58
6.7 Materialism	60
6.8 Consumption Orientation	63
CHAPTER 7: DISCUSSION AND CONCLUSIONS	69
7.1 Income	69
7.2 Saving and Borrowing	71
7.3 Information Sources	73
7.4 Benefits of the Research	77
7.5 Limitations of the Research	80
7.6 Conclusions and Directions for Future Research	80
REFERENCES	82

LIST OF TABLES

Table	Page
1 Description of Ottawa-Carleton School Boards	22
2 Response Rates	24
3 Amounts and Sources of Income (6 months)	33
4 Amounts and Sources of Income (1 month)	33
5 Extent and Methods of Saving	38
6 Reasons for Saving	38
7 Extent and Methods of Borrowing	42
8 Summary of Questions on Credit Card Use	43
9 Reasons for Borrowing (6 months)	44
10 Extent of Information Seeking by Saving and Borrowing Mechanisms . . .	48
11 Extent of Reliance on Saving and Borrowing Information Sources	49
12 Correlation Matrix for Saving and Borrowing Information Sources and Other Select Variables	50
13 Saving and Borrowing Information Needs	51
14 Associations Between Socio-Economic Status and Select Dependent Variables	53
15 Age Distribution	55
16 Associations Between Age and Select Dependent Variables	56

Table	Page
17 Grade Distribution	57
18 Gender Distribution by School	58
19 Associations Between Gender and Select Dependent Variables	59
20 Associations Between Materialism and Select Dependent Variables	62
21 Associations Between Social Motivation for Consumption and Select Dependent Variables	67
22 Associations Between Economic Motivation for Consumption and Select Dependent Variables	68

LIST OF APPENDICES

	<i>Page</i>
Appendix A: Research Questions	90
Appendix B: Survey Instrument	91
Appendix C: Letter of Parental Consent	107
Appendix D: Table of Occupational Social Status	109
Appendix E: Research Schedule	111
Appendix F: Cost Schedule	112

CHAPTER 1: INTRODUCTION

Households have traditionally been viewed as economic earning and consumption units within which resources have been shared equitably between family members. In reality, however, funds are earned and spent by individuals. Only recently have researchers begun to study the distribution of wealth among members of households. Pahl (1989) noted that the topic has been practically unmentioned by researchers, except those who have noted how little we know about it:

We have no data about the flows of income between people within households (Central Statistical Office, 1979, quoted by Pahl, 1989).

We do not know except in the sketchiest fashion how income is distributed between people within families (Young, 1977, quoted by Pahl, 1989).

Since the control of money within families is likely to be a significant variable in family spending patterns, research in the area of the intra-family economy is important. As the impact of working women becomes more marked, so too should the impact of the escalating number of adolescents who have been joining the labour force: it is estimated that up to 80 percent of older adolescents work for pay, and almost all have some form of income. As a review of the literature will reveal, the impact of these changes has not been adequately examined in terms of how they effect the control of resources within the family, especially those processes which precede actual purchase decisions.

Adolescence is defined as the life-cycle stage between puberty and the time when people take on the responsibilities of adults (Greenberger, 1986; Cambell, 1969). Most research studies seem to have operationalized this definition to include those between the ages of about 14 and 19.

This thesis describes a study that examined some of the processes which precede the purchases of older adolescents (i.e., saving and borrowing), and the roles that parents, friends, advertising, salespeople, bank tellers, and other information sources play in influencing those processes. The thesis is divided into 6 chapters. Chapter 2 outlines the research problem, which is further clarified and supported by a review of the relevant literature in Chapter 3, and a statement of the research questions in Chapter 4. The research methodology is outlined in Chapter 5, and is followed by a description of the findings in Chapter 6, and a discussion and conclusions in Chapter 7.

CHAPTER 2: RESEARCH PROBLEM

Adolescents have significant wealth at their disposal and constitute a recognized current market segment. During 1991 Canadian 14-year-olds spent an average \$1,400 each; 15 to 17-year-olds spent \$2,300 each; and 18 to 19-year-olds spent an average of \$4,200 each (*Marketing*, 1991b). There were more than 2.5 million teenagers in Canada in 1992, and they spent an estimated \$6 billion on consumer products annually (*Marketing*, 1991b). This thesis explores the processes preceding adolescent spending decisions in terms of the information sources they use when saving and borrowing.

The study is valuable to a wide range of people: academics interested in consumer behaviour know little about pre-purchase behaviour; financial institutions and retailers, which deal directly with these finances, have an immense stake in this aspect of adolescent behaviour; and consumer educators and public policy makers are concerned about the extent to which adolescents work, and how they behave as consumers. The purpose of the research described in this thesis was to explore adolescent financial behaviour and thereby to identify some of the issues about which these people should be concerned.

CHAPTER 3: LITFRATURE REVIEW

Marketing literature concerning children and adolescents has viewed them in three ways. Firstly, as an influential market, youngsters frequently influence the purchases of their parents. Secondly, as a current market, they have a significant amount of direct spending power. Finally, as a future market, children and adolescents are recognized as being the main consumers of years to come. This study deals with adolescents as a current market.

Recent non-academic literature which illustrates the significance of this market is reviewed first in Section 3.1. Given the vast amounts of money that adolescents control, the importance of questions as to how they manage that money becomes apparent. What is known about this money management is reviewed in the literature on adolescent saving and borrowing in Sections 3.3 and 3.4. Adolescent consumer behaviour literature is then reviewed in Section 3.5. Since much of the aforementioned literature is based on social learning theory, consumer socialization literature is summarized early in the literature review, in Section 3.2.

3.1 Adolescent Income

Economic need formerly drove youngsters to work, and it was mainly lower class adolescents who were employed (Reubens, 1983; Mortimer, 1991; Greenberger and Steinberg, 1986). But in recent years, in spite of the increasing affluence of North American society, adolescents have continued to work, and youth-work has largely become a middle class phenomenon (Mortimer, 1991). There has been considerable

debate about whether the benefits of adolescent work outweigh the drawbacks. Research which extols the virtues of employment for character development (Greenberger, 1983; Greenberger, 1984; D'Amico, 1984) is countered by researchers who claim that work is too much of a burden on the time and energy of adolescents. They claim this time and energy would be better spent on other psychological tasks (Greenberger, 1986; Cole, 1980). Although the debate about the merits and drawbacks of youth-work continues (D'Amico, 1984, Greenberger, 1988), working among North American teenagers has continued to grow more prevalent.

Based on 1986 Census data, Statistics Canada (1989a, Table 3-1) reported that in Canada 48.4 percent of 15-19 year old males and 45.6 percent of females were employed. A rash of recent market research studies indicate that up to 75 percent of adolescents are working. The disparity between the market research estimates and official Statistics Canada statistics deserves some attention.

Estimates of teen-age employment have been found to be higher when measured by self report (Mortimer, 1991; Greenberger, 1986; Bachman, Johnston, and O'Malley, 1987). Greenberger (1986), for example, reports differences of up to 30 percent for self-report versus official statistics. Official statistics measure the numbers of people who are employed *as of* a specific date, instead of over a period of time. The 1986 Labour Market Activity Survey (LMAS) of Statistics Canada, however, reported the number of people who were employed *at any time* throughout the year. This profile of the labour

market experience of Canada's youth (1989c, p.8) reported that almost 80 percent of 16-19 year-olds were employed at some time during the year. The average period of employment was 31 weeks. Bresnick (1984) also described the youth labour market as transitional and temporary.

While these figures are more in-line with other self-report surveys, even they have likely underestimated the true level of working adolescents: the LMAS reported that 96 percent of employed youths were employed in paid-worker jobs, i.e., in jobs "...where the work was done in an employer-employee relationship" (Statistics Canada, 1989c, p.9). Babysitting and other odd jobs that do not conform to this definition would therefore not have been included.

Even valid measures of teenage employment would not truly reflect the amount of money that teenagers have at their disposal. Not only do adolescents receive money from part-time jobs, but they also receive it from their parents. Recent market research studies indicate that up to 40 percent of adolescents have regular allowances, and over 40 percent receive money from their parents "when necessary" (Bachman, 1986; *Marketing*, 1991b; 1989; 1991a). Since most necessities are provided by parents, all of this income is typically available for discretionary spending (Bachman, 1983; Bachman, Johnston, and O'Malley, 1987; *Globe and Mail*, 1989).

These studies revealed that 13-year-olds spend roughly \$25 per week (1,400 per year) and 18 to 19-year-olds spend an average of \$75 dollars per week (4,200 per year). This spending represents over \$40 billion in the United States and over \$6 billion in Canada. Teenage spending in Canada is expected to increase to \$10 billion per year by the end of the decade (Bachman, 1986; *Marketing*, 1991b; 1989; 1991a, *Financial Post*, 1989; *Globe and Mail*, 1991). This literature demonstrates the relevance of research that is directed at gaining an understanding of how adolescents manage and control this vast amount of wealth.

3.2 Consumer Social Learning

Consumer socialization research has mainly focused on children between the ages of 4 and 12, and has tended to address the issues of: 1) What children know and think about the market place, 2) the socialization agents from which children learn consumer behaviour, and 3) the nature and extent of children's consumer behaviour (McNeal and Yeh, 1990). With the work of McNeal in the 1960s, the beginnings of the processes by which children begin to earn, save, and spend money were uncovered. The social learning model upon which this work was based explained learning in terms of various sources of influence known as socialization agents. Agents that were studied included parents, siblings, peers, teachers, advertisements, and stores. Socialization theory assumes that behaviour patterns are formed as a result of socialization agents applying forces or influences to children in various social settings (McNeal, 1987).

Ward, Wackman, and Wartella (1977) followed McNeal's work with a landmark study and synthesis of cognitive development and social learning theory, this theory's application to both information processing and behaviour, and family influences on children's consumer learning.

The work of Ward, et al. and McNeal was closely followed and developed by George Moschis and a number of his colleagues, who, in the late 1970s and throughout the 1980s, published a series of works which focused on middle and high school adolescents. Although cognitive development models suggested that all socialization occurred by the age of 15, social learning models suggested that adolescents in middle and early high school were in the most critical period of consumer socialization (Moore and Stephens, 1975), when they develop social skills, self-concepts, and conceptions regarding decisions and their outcomes (Cambell, 1969).

Consumer social learning literature demonstrated that even very young children were both earners and spenders. Their willingness to spend was apparent from the fact that they spent almost everything that they received (McNeal, 1986; Ward, Wackman, and Wartella, 1977). A large part of the literature dealt with descriptions of children's income and expenses, their attitudes towards brands, advertising, etc.. In an effort to understand how children learn consumer attitudes and behaviour, relationships were sought between these attitudes and behaviours, and interactions with various socialization agents.

Consumer social learning will be discussed further in the contexts of adolescent saving, borrowing, and consumer behaviour.

3.3 Adolescent Saving

Children learn how to save in the late elementary school years, when their incomes grow and the increasingly costly products they desire require saving. By the time children reach adolescent years they are engaging in regular and substantial saving behaviour (Ward, Wackman, and Wartella, 1977). Parents are likely to influence this behaviour significantly. McNeal (1987) reported that half of the savings of 4 to 12 year-olds are put in some sort of savings account (sometimes bonds) for them, while the remainder is kept in the home, presumably for spending.

Long-term (1 month or longer) saving behaviour was found more frequently among younger children than among older children, even though older children were more aware of the value of saving (Ward, Wackman, Wartella, 1977). McNeal (1987) explained saving among younger children as being a function of not having extensive opportunity to spend. He also found that savings as a percentage of income decline with the age of older children, who continually discover new wants and have increased opportunity to spend.

Tootelian and Windeshausen's (1976) replication of a ten year-old study revealed that adolescents saved to a larger extent in 1976 than they did in the previous decade.

Although this study is dated, more recent surveys have found that adolescents are saving more today than ever before. In 1989 children were saving 30 percent of their income (McNeal, 1990). Only 4 years earlier the same group was saving only 11 percent of their income (McNeal, quoted by *Fortune*, 1989). McNeal (1990) noted that the increase was "remarkable," and speculated that parents could be providing children with more money in order to encourage more self-reliant money management at an earlier age.

Increases in levels of saving among adolescents are due to the increasing materialism and expensive tastes of youths, who have been finding that they have to save extensively in order to be able to afford the products that they want to buy (Tootelian and Windeshausen, 1976). It was reported that adolescents save for products such as travel to Europe, cars, stereos, and televisions (*Financial Post*, 1989; Bachman, 1987). Indeed, it has been reported that 47% of teenagers maintain a savings account for big ticket items (*Marketing*, 1989). The extent of savings is highly correlated with age. By the first year of university, reported *Marketing* (1988), 67 percent of students have savings accounts and 90 percent have chequing accounts. Twenty percent these same students owned government savings bonds, and 12 percent owned stock.

On the other hand, Bachman (1983) reported that approximately 50 percent of high school seniors do not do save any of their income for future education, and 50 percent do not save for any other long range purposes. Ten percent were found to save more than half

of their earnings for future education, and 8 percent were found to save more than half for other long range purposes.

While it seems that most adolescents save for short periods, and that the motive for these savings is clearly consumption, the significant amounts that they are saving have drawn the attention of banks: special savings accounts and CDs (certificates of deposit) for youths up to the age of 21 have recently been appearing (*Fortune*, 1989; Schindler, 1989). A bank exclusively for children recently opened in Colorado (Stipp, 1988; Murphy, 1987).

3.4 Adolescent Borrowing

Abramovitch, Freedman, and Pliner (1991) studied the credit versus cash spending of 6-10 year old children. In this experiment, they allowed children to spend 4 dollars on credit in a simulated shopping environment. A control group of children was given 4 dollars in cash. Both groups were told that they could keep the money that they did not spend. These researchers found that children who did not receive allowances spent more in the credit than in the cash situation. No differences in credit and cash spending were found with those children who did receive allowances. Neither age nor any other social variables were found to be significant. Although the children used in this experiment were young, the amount of money they were dealing with was small. The study indicated that the understanding of debt is related to financial experience. It is possible that adolescents, who have more financial experience, but also are likely to deal with more significant levels of debt, might behave similarly along the same variables. Other

variables which usually predict financial experience (age, socio-economic status) are likely to be more significant with older adolescents.

Recent marketing research studies indicate that at least 12 percent of teenagers have access to a credit card (Hauser, 1986). Credit card ownership was highest (35 percent) among 18 and 19 year-old girls. *Marketing* (1988) reported that by the first year of university, slightly more than one third of Canadian students have their own credit cards. Hauser (1986) reported that credit card use is directly and positively correlated to family income, and that, at least for teenage girls, clothing and health and beauty aids are the major categories of credit card purchase. No studies have indicated the degree to which adolescents use bank loans or other forms of debt (e.g., loans from parents, pawnbroker services).

3.5 Adolescent Consumer Behaviour

Consumer learning theory has been used to a great extent in studies of adolescent consumer behaviour. These studies, noted Moschis (1978a), have typically been of two types: those which examine teenagers responses to *consumption-related variables* and those which focus on teenage *purchasing processes*. A brief summary of each follows.

Consumption-Related Variables

This significant body of research has examined adolescents' consumption-related thoughts and behaviours such as: their attitudes toward spending, prices, brands, and advertising;

and their purchasing habits. The earlier studies (see Cateora, 1963; Phelan, 1969) were mostly exploratory or descriptive and often lacked strong theoretical bases (Moschis, 1978a). The weaknesses in the literature which appeared in the 1960s and 1970s were mitigated by Moschis (1978a) when he described variations in responses to consumption-related variables (brands, stores, salespeople, prices, and advertising) in terms of factors related to theories of consumer socialization, which he borrowed from the work of Ward, Wackman, Wartella, and McNeal. In general, Moschis found age and motivation for purchasing (social motivations and economic motivations) to be the strongest predictor variables of the attitudes he studied.

Purchasing processes

Research on the purchasing processes of adolescents (see Moschis, Moore, and Stephens, 1977; and Gilkison, 1973) has excluded examination of stages in the decision making process preceding the actual purchase (Moschis, 1978a). Instead, it concentrated on purchasing role structures (i.e., individuals involved in the physical act of purchasing products for teenagers) and other aspects of the social environment thought to have an impact on the purchasing process of adolescents (Moschis, 1978a). For example, Tootelian and Windeshausen's (1976) study described sources and amounts of adolescent income as well as the shopping and purchasing habits of adolescents. Gilkison (1973) studied and described the reference sources that were of greatest importance in influencing buying decisions of teenagers. He found that in general the use of parents as a frame of reference in purchases was less prevalent than it had been 10 years earlier,

while the role of peer influence had increased. This, however, was not true of all product classes that were investigated. In a similar study, Moschis, Moore and Stephens (1977) made similar conclusions. They explained family member involvement in adolescent purchases as a function of socio-economic risk (social visibility and price of products) present in each purchasing situation. Tootelian and Windeshausen (1976) also corroborated these findings. Moschis (1978a) investigated the extent to which adolescents seek information before purchasing, and the sources from which it is sought.

3.6 Conclusions

The literature demonstrates that adolescents earn and spend quite significant amounts of money. Existing literature on adolescents is very dated (much is over 10 years old), and there have been no controlled and systematic investigations of how they manage money prior to spending. Yet adolescent saving and borrowing are notable phenomena. While credit card use has been found to be widespread, there have been no investigations of other sources of debt that adolescents might use. Little is known about what information sources adolescents use when borrowing and saving. Insights regarding these neglected aspects of adolescent consumer behaviour could be especially beneficial to consumer behaviour researchers seeking to deepen the understanding of adolescent consumer behaviour, to financial institutions seeking to service this market, to consumer educators seeking to educate this group, and to public policy makers and retailers.

CHAPTER 4. RESEARCH QUESTIONS

The research questions which are put forward here were derived from the void in consumer behaviour literature pertaining to aspects of the adolescent purchasing process preceding actual buying. They are supported, however, by the theory that has been described in the foregoing literature review.

Those studies in adolescent consumer behaviour which focused on adolescent purchasing processes (e.g. Moschis, Moore, and Stephens, 1977; and Gilkison, 1973) dealt with the reference sources, role structures, and information sources that youngsters use when purchasing products. Reference sources were defined in those studies as the perceptual contexts within which adolescents make their purchase decisions. Role structures were defined as those people physically present at the time of purchase (Moschis, Moore, and Stephens, 1977). Information sources were defined as the sources from which adolescents actively seek information before purchasing.

Of interest would be an investigation of these same concepts, but as they relate to borrowing and saving rather than purchasing. These concepts are important because they are likely to influence borrowing and saving behaviour. While the study of all three of these concepts would be valuable, only information sources were investigated in this research study. Information sources were of particular interest because they encompass reference sources and role structures : reference sources and role structures are particular types of information sources.

Information Sources

Knowledge about consumers' exposure to information is important for understanding their interpretation processes – a cognitive phase in the buying process (Peter and Olson, 1987). Exposure to information can be intentional, as when the exposure is the result of their own intentional goal-directed behaviour; or it can be accidental, when information is randomly encountered as consumers move through their environments (Peter and Olson, 1987).

"Information seeking" was identified by Moschis (1978b) as a complex consumer skill. He measured it in terms of the active information search of adolescents. The *information sources* associated with this construct are operationally defined here as *sources from which information is obtained prior to making a borrowing or saving decision in order to help make the decision*. Those influences that have been investigated in the past included parents, friends, salespeople, consumer reports, television ads, and newspaper and magazine ads (Moschis, 1978b). As an extension of past work, the following question was asked:

Q1: Do any of the following serve as information sources for adolescent saving and borrowing: parents, friends, bank tellers or salespeople, brochures, newspaper or magazine ads, television ads, books, or consumer reports?

Consumption Orientation

Moschis, Moore, and Stephens (1977) found that the degree of parental involvement in purchases increased with the socio-economic risk that was present in each purchasing situation. Measures of this risk are not likely to be constant for a given purchase for every teenager. Rather, they are likely to be relative to the predisposition of each individual. For example, while a purchase may represent a high social risk to a person with socially oriented consumption motivations, it may not be for a person whose consumption motivation is more economic. Moschis used the concepts of materialism and consumption motivation (economic vs. social) in order to account for consumer predisposition. He defined these concepts as follows:

Materialism: An orientation emphasizing possessions and money for personal happiness and social progress.

Consumption Motivation:

Social: Cognitive orientations concerning the importance of conspicuous consumption and self expression via conspicuous consumption.

Economic: Cognitive orientations concerning the importance of product functional and economic features, orientation towards comparison shopping, and significant discriminating attributes.

This led to the question of whether predispositions and values affect either borrowing and saving behaviour or the sources adolescents rely upon when seeking information about borrowing and saving.

- Q2: How do **materialist values** affect adolescent borrowing and saving behaviour and information seeking?
- Q3: How do **consumption motivations** affect adolescent borrowing and saving behaviour and information seeking?

Socialization

The socialization perspective that has been taken with adolescent consumer behaviour studies in the past also seemed appropriate for this study. Indeed, many of the variables used in socialization research were likely to be relevant for describing and understanding adolescent borrowing and saving. Analysis of these variables would indicate how this behaviour relates to the factors that have been found significant in investigations of other parts of the purchasing process. Significant differences have been found in consumer behaviour along the variables of gender, age, and socio-economic status. Therefore, the following questions were asked:

- Q4: Are there **gender** differences in adolescent saving and borrowing behaviour or information seeking?
- Q5: Are there **age** differences in adolescent saving and borrowing behaviour or information seeking?

Q6: Are there socio-economic differences in adolescent saving and borrowing behaviour or information seeking?

Borrowing and Saving Behaviour

In order to answer all of the above questions, adolescent borrowing and saving behaviour needed to be described. Therefore the following questions were asked:

Q7: How can adolescent borrowing and saving be described?

- i) Why do adolescents save?**
- ii) Why do adolescents borrow?**
- iii) What is the extent of adolescent saving?**
- iv) What is the extent of adolescent borrowing?**
- v) What saving mechanisms do adolescents use?**
- vi) What borrowing mechanisms do adolescents use?**

The research questions are summarized in Appendix A (page 90).

CHAPTER 5: METHODOLOGY

In order to answer the above questions a cross-sectional, ex post facto field survey was designed. It was administered through the public school system in the Ottawa-Carleton region. The research design is described in Section 5.1. Procedures used in data analysis (frequencies, crossclassifications, and Goodman-Kruskal tests of association) are described in Section 5.2.

5.1 RESEARCH DESIGN

The research design is described here in terms of the population, sampling frame, sample method, sample size, survey instrument, pretest, and fieldwork procedures.

5.1.1 Population

The population from which the sample was selected can be described as follows:

Element:	Students in the 10th through 13th grades
Primary Unit:	Public high schools
Secondary Unit:	"Home room" classrooms
Extent:	Ottawa-Carleton
Time:	November 1992

Advantages of accessing subjects through the school system were that it represented the elements of interest directly and relatively completely. Furthermore, the use of the school

system afforded the opportunity of surveying a large number of people conveniently and at reasonable cost. Disadvantages of using the school system were mainly that some control over data collection was lost, and simple random sampling methods could not be used. The overall advantages of using the school system for accessing respondents outweighed the disadvantages, and the process of collecting data through the school system was initiated.

Research applications were submitted to the four English school boards in the Ottawa-Carleton region (the first 4 boards listed in Table 1). All but the Carleton Roman Catholic Separate School Board approved the research application. The largest two school boards—the Ottawa Board of Education and the Carleton Board of Education—were chosen as the sampling base. Since 70% of all students study under schools under the jurisdiction of these 2 boards, the students of these two school boards were considered more representative of the general population. Data were not collected from the Ottawa Roman Catholic Separate School Board, since it was smaller and the effects of a religious bias were unknown. Minor changes to the cover letter and questionnaire were requested by both school boards, and inclusion of a parental consent form was required by the Ottawa Board for respondents who were less than 18 years old.

Table 1 **Description of Ottawa-Carleton School Boards**

<i><u>Board</u></i>	<i>Number of Students</i>	<i>Number of High Schools</i>
Ottawa Board of Education	12,627 (31.9%)	12
Carleton Board of Education	15,049 (38.0%)	15
Ottawa Roman Catholic Separate School Board	2,510 (6.3%)	3
Carleton Roman Catholic Separate School Board	5,998 (15.1%)	7
Conseil Scolaire De Langue Francaise D'Ottawa-Carleton	3,437 (8.7%)	4
Total	39,621 (100%)	41

5.1.2 Sampling Method

The two participating school boards were asked to randomly identify schools which could be requested to participate in the study. Seven schools were identified by the Carleton Board, and 2 by the Ottawa Board. Vice-principals were contacted and asked to participate: 6 of the Carleton Board schools agreed to participate, and both of the Ottawa Board schools agreed to participate. The one school that declined to participate cited previous commitment to other research studies as the reason for refusal.

Approximately 120 questionnaires were distributed to each of the Carleton Board schools, and one of the Ottawa Board schools; the second Ottawa Board school agreed to take 350 questionnaires. Each school was asked to distribute the questionnaires to one home-room class from each of the 10th, 11th, 12th, and 13th grades. The larger Ottawa Board school was asked to distribute to an equal number of classes from each grade.

Copies of the instrument were distributed by teachers in selected classes of the schools that agreed to cooperate with the study. Respondents were asked by their teachers to return the instruments in class within about 1 week of their receiving them. No control could be maintained over data collection by the researcher once the questionnaires had been delivered to schools. Teachers could not even be asked to remind or encourage students to return the instruments, as the only contact was through the vice-principles, and they were often very difficult to reach.

Cluster sampling is often used for its administrative advantages, although it can result in distortions of statistical tests (Rao and Thomas, 1988). Cluster sampling was needed for this study because the alternative simple random sample design would have placed too much of an administrative burden on the schools.

5.1.3 Sample Size

Approximately 1115 questionnaires were delivered to schools; but only 863 (75%) of the questionnaires that were delivered were actually distributed to students. Secondary sample units (classes) had a size of approximately 25 respondents. The final sample was comprised of 32 classes from a total of 8 schools.

Table 2 summarizes the response rates from each school that participated in the study. An average response rate of 43 percent yielded 371 returns. A lower response rate was expected from the Ottawa Board schools due to its requirement of written parental

consent for each participant. The variance in response rates between schools of the Carleton Board was most likely a function of the commitment each school and more importantly, each teacher gave to the project.

Table 2 Response Rates

	Responses	Response Rate
Carleton Board of Education		
School 1	33	35%
School 2	26	27%
School 3	72	85%
School 4	39	50%
School 5	45	43%
School 6	77	75%
Total	292	54%
Ottawa Board of Education		
School 1	19	21%
School 2	59	29%
Total	78	25%
Total	371	43%

Note: A lower response rate was expected and obtained from the Ottawa Board due to a signed parental consent requirement.

5.1.4 Survey Instrument

A self-administered questionnaire was used for data collection. A copy of the questionnaire is provided in Appendix B (page 91). Tested questions from past studies

were used wherever possible. Specifics of how variables were measured are discussed in Section 5.1.4.1. Issues that were of concern in choosing the data collection instrument included the age of respondents and the nature of the research topic. Each of these issues is discussed in Section 5.1.4.2.

5.1.4.1 Variable Measurement

The major variables that were measured included: saving and borrowing behaviour, information sources used when saving and borrowing, materialism, consumption motivation, socio-economic status, income, age, and gender. Approaches to measurement for each variable are outlined below.

Extent, Method, and Purpose of Borrowing and Saving were measured through a series of closed-ended questions that asked whether or not respondents had borrowed or saved in a variety of ways, and solicited the balances of current savings and debt for each method (questions 9 and 17). The purpose of borrowing and saving was measured by asking respondents what they were saving and borrowing for (questions 12 and 24) .

Information sources that adolescents used when borrowing and saving were measured through 2 questions that were adapted from the questions used by Moschis (1978b) to measure information sources used by adolescents in the purchasing context. Information sources included: parents; friends; bank tellers and salespeople; and books and consumer reports; brochures, and newspaper and magazine ads; and television ads (questions 13 and

23). The questions solicited binary responses about sources used by respondents for information or advice before deciding to borrow and save via each of 12 methods of borrowing and 8 methods of saving.

Materialism was measured with a 6 item index (question 6) that was developed by Moschis (1978b). This materialism index was used because it was short and had been used by Moschis on a similar sample.

Moschis reported that this scale had a reliability coefficient of $\alpha=.60$ for his 1978 study of adolescent consumer behaviour. The reliability coefficient for the present study was found to be slightly lower ($\alpha=.56$).

Economic motivation for consumption was defined and operationalized using Moschis' (1978b) scale; it was adapted by adding the product "stereo" in place of Moschis' "pocket calculator" (question 7). This change was made because calculators are less expensive and more commonplace than they were at the time Moschis did his research. Moschis (1978b) reported a reliability of $\alpha=.69$ for this scale. An α of .87 was found in the present study.

Social motivations for consumption were likewise defined and operationalized using Moschis' 1978(b) scale, with the same aforementioned change of "pocket calculator" to

"stereo" (question 7). Moschis (1978b) reported a reliability of $\alpha=.85$ for this scale. An α of .83 was found in the present study.

Socio-economic Status was measured based on the education, income, and occupational status of parents. The use of these three items is the most common approach of socio-economic status among sociologists (Powers, 1983). Moschis (1978b) used a socio-economic index (the Duncan SEI) which used the same three constructs to measure socio-economic status, but only the father's—and not the mother's—occupation was used. Studies of socio-economic status measurement criticized Duncan's SEI (Featherman and Stevens, 1982; Cooney, Clague, and Salvo, 1982) on this account. Their recommendations vary, however, since women still tend to be concentrated in the middle range of occupations, and since gender differences persist between full- and part-time workers (Powers, 1982). Featherman and Stevens (1982) recommend that a male-based index is the most practical for the time being; while Cooney, Clague, and Salvo (1982) recommend a total labour force based index. Boyd and McRoberts (1982) conclude that the choice of an index for measuring status attainment is "very much up to the discretion of the researcher."

An index of socio-economic status was constructed for this study from the education of each parent, family income, and the occupational status of the parent with the higher status. Mothers had occupations of higher status in 12% of the cases. The occupations of each parent was measured through an open-ended question (question 34), as

recommended by Moschis (1978b), and coded on the 7-point status index of Helitzer (1979). Education was classified into one of 6 categories, ranging from "High school or less" to "Post-graduate degree(s)" (question 33). Family income was measured in 5 broad categories (question 35).

5.1.4.2 Qualitative Issues

Helitzer (1979) reported, based on marketing research studies, that lengthy mail questionnaires can be successfully used with older youths. He noted that their patience with interviews is notably longer than that of adults, and that fatigue with long questionnaires seems virtually non-existent. While it has been noted (Pahl, 1989) that the financial arrangement of individuals are among the most private of subjects, it has also been found that youths will express themselves to researchers with a great amount of candour, even on sensitive research topics (Helitzer, 1979).

Neither the age of respondents nor the nature of the research topic were expected to negatively affect the appropriateness of the chosen data collection method: indeed, no evidence of fatigue was found in the completed questionnaires; and the large proportion of questionnaires that were returned in unsealed envelopes (more than 50%) was evidence that respondents did not consider the information that they had volunteered as overly sensitive.

5.1.5 Pretest

The instrument was pretested on students who graduated from high school in the Spring of 1992, and who were enrolled at Carleton University in the fall term of the same year. Two sections of a first year course in the School of Business were chosen for the pretest. Students were asked at the beginning of class if they would volunteer for the pretest, and questionnaires were returned before the following 2 classes. Of the 35 distributed questionnaires, 12 were returned.

One-half of the pretest subjects were debriefed by telephone after the questionnaires had been returned. They were asked about the clarity of questions, the length of the questionnaire, their opinions about how high school students would react to the questionnaire. The pretest and debriefings were positive, and were helpful in surfacing several ambiguities and inconsistencies in the question instructions and format. The instrument was edited following the pretest.

5.2 DATA ANALYSIS

Data were entered and screened for integrity. Screening included checks for wild codes, inconsistent data, and extreme cases. The research questions were addressed with descriptive statistics, frequencies, Spearman correlations, and a series of Goodman-Kruskal tests of association. The Goodman-Kruskal λ as a measure of association was appropriate for this study because it is an asymmetric test (dependent and independent variables can be treated as distinguishable) and it requires only categorical data. Lambda

values fall between 0 and 1, and represent the expected reduction of error in predicting a variable when information about another variable is given. The more closely variables are associated, the more closely does λ approximate 1. A drawback of the λ statistic is that the hypothesis $\lambda=0$ cannot be tested. This peculiarity was circumvented by testing against a value very close to zero (i.e., .001) for unit-normalized λ values; this value was considered to be sufficiently close to zero that it could be treated as equivalent for practical purposes.

Research questions were answered as follows. Income levels, saving and borrowing behaviour (Question 7), and information sources for saving and borrowing (Question 1) were described with frequencies, descriptive statistics, and Spearman correlation coefficients. The independent variable effects (Questions 2 to 6) were analyzed by running cross classification tables and computing Goodman-Kruskal lambda and Spearman correlation values for indicators of income, saving and borrowing behaviour, and information sources for each independent variable.

Analysis of cluster design effects was not possible. In order to guarantee the anonymity and confidentiality of respondents, the Carleton University Ethics Committee required the question which measured the cluster units (classes) to which respondents belonged be removed from the instrument. Individual clusters were therefore not identifiable.

CHAPTER 6: FINDINGS

An overall response rate of 43 percent yielded 371 returned questionnaires from the 8 participating schools. Respondents ranged from 13 to 22 years of age, with 75 percent falling in the age group 15 to 19; the mean age was 17. Grades 10 through 13 were each well represented, with a skew towards the higher two grades. Approximately 54 percent of the sample was female, and 46 percent male. Age, grade, and gender distributions are discussed further in the relevant sections below.

The 8 subsections in this chapter address the research questions presented in Chapter 2. A general description of income, and borrowing and saving behaviour in the first two sections set the stage for an analysis of the effects of the independent variables (information sources, materialism, consumption orientation, socio-economic status, age, and gender) in the subsequent 6 subsections.

6.1 Income

Income was measured by asking respondents to report their incomes and sources of income for the previous 6 month and 1 month periods. The 6 month period included the 1992 summer months (July and August), when it was expected that some respondents would have had held full-time jobs. Since the data were collected in November 1992, the previous month's income was income received during a typical school month.

A summary of respondent incomes is presented in Tables 3 and 4. The distributions followed a positively skewed hyperbolic curve, with averages of \$1846 (median = \$1200) for the previous 6 months, and approximately 1/6 of that (mean = \$250, median = \$200) for the preceding month. Sources of income varied among respondents, and between time frames. Most received a large percentage of their income from one or two sources: indeed, 94% of respondents received more than 50% of their previous month's income from a single source. In the 6 month time frame, 80% of respondents received more than one half of their income from a single source.

Approximately 26% received income during the previous 6 months from full-time summer jobs, 34% from part-time summer jobs, 65% from part-time jobs during the school year, 30% from babysitting, 46% from allowance, 41% from gifts of money, and 18% from other sources. These other sources most notably included parents, odd jobs, and social assistance; but also occasionally reported as sources of income were "business", return on investment, theft, and drug money. During the previous month 57% of respondents reported income from part-time jobs, 19% from babysitting, 40% from allowance, 15% from gifts of money, and 14% from other sources. Approximately 10 percent of respondents reported no earned income during the previous 6 months, and 28 percent no earned income during the previous month.

As a group respondents received most of their income during the preceding 6 months from summer jobs (33% of total income), part-time jobs during school (28% of total

Table 3 Amounts and Sources of Income (6 months)

Source	Mean % of total income from source	% of respondents receiving income from source	Mean income from source	Median income from source	% of respondents receiving > 50% of income from source	% of respondents receiving > 80% of income from source
Full-time summer job	16%	26%	\$1913	\$1500	19%	6%
Part-time summer job	17%	34%	\$788	\$500	14%	5%
Part-time job during school	28%	65%	\$1132	\$900	23%	14%
Babysitting	7%	30%	\$164	\$100	4%	2%
Allowance	15%	46%	\$280	\$200	11%	5%
Gifts of money	9%	41%	\$211	\$100	4%	1%
Other	7%	18%	\$960	\$275	5%	3%

Table 4 Amounts and Sources of Income (1 month)

Source	Mean % of income from source	% of respondents receiving income from source	Mean income from source	Median income from source	% of respondents receiving > 50% of income from source	% of respondents receiving > 80% of income from source
Part-time job during school	53%	57%	\$334	\$300	54%	46%
Babysitting	8%	19%	\$39	\$30	7%	3%
Allowance	24%	40%	\$70	\$40	20%	14%
Gifts of money	7%	15%	\$75	\$50	5%	3%
Other	8%	14%	\$249	\$90	8%	7%

income), and allowance (15% of total income). During the school year the most significant sources of income were part-time jobs (53% of total monthly income) and allowance (24% of total monthly income).

Respondents listed items that they purchased in the previous 6 months that totalled an average of \$800 (median = \$430). Values ranged between \$0 and \$16,490, with a coefficient of skewness of 6.124. It was interesting to note that respondents on average spent an average of 382% more money (median = 230%) than they reported as income in the previous 6 months. Total purchases were included as a dependent variable in the study, and are further discussed in the following sections of this chapter, and in Chapter 7.

6.2 Saving and Borrowing

In order to address the independent variable effects on borrowing and saving behaviour, the question of describing this behaviour must first be addressed:

Q: How can adolescent saving and borrowing be described?

Borrowing and saving are described here in terms of the extent of, methods of, and reasons for this behaviour.

Extent and Methods of Saving.

Saving behaviour was found to be quite prevalent among respondents. The extent and method of their saving behaviour was measured by asking how much money they had saved currently in a variety of different ways. Responses to these questions are summarized in Table 5. The mean savings balance of respondents was \$2415 (median = \$1100). As with income, the frequency distribution of total savings was highly skewed (coefficient of skewness = 1.48), with most respondents falling at the lower end. Indeed, 15% had savings of less than \$100.

The most common method of saving was by far personal savings accounts: approximately 81% of those questioned had a savings account. Bonds and personal chequing accounts were the two next most prevalent mechanisms of saving, with 20% of respondents using chequing accounts and 38% of respondents owning bonds. Other methods of saving included term deposits (owned by 13% of respondents), other bank accounts (12%), mutual funds or other investments (9%), a parent's bank account (8%), and "other" (12%). The most notable other method of saving was a home depository of some sort; it was declared by 7% of respondents.

More sophisticated savings methods, such as bonds, mutual funds and term deposits, were correlated to the magnitude of savings balances. Positive Spearman correlation coefficients between total savings and the balance of funds saved in term deposits, bonds, and mutual funds were .33, .41, and .28 respectively (significant at the .01 level). For

those who saved in these ways the average amounts saved were: \$3086 (median = \$2000) in term deposits, \$2193 (median = \$1000) in bonds, and \$3518 (median = \$1350) in mutual funds. Average amounts saved in bank accounts were: \$817 (median = \$300) in personal savings accounts, \$722 (median = \$292) in chequing accounts, and \$788 (median = \$450) in other accounts.

Personal savings accounts held the highest proportion of total savings for most respondents. Approximately 42% of respondents kept over half of their savings, in their own savings account. Only 21% of those with bonds kept over half of their money there, and less than 10% of respondents had over half of their money saved via any other single mechanism.

When asked the extent to which they regularly put aside a portion of their income for savings, almost 25% of respondents replied that they "always" did. Approximately 60% fell between "sometimes" and "never." Those that did claim to save regularly were slightly more likely to have a higher level of savings (Spearman $r = .16$, $P = .00$), but not significantly more likely to save via any particular saving mechanism.

Approximately 27% of respondents had spent all of their income from the previous month. Around 44% had more than half of their money remaining, and 13% had more than 80% remaining. Those that said they saved regularly were likely to have more of

their previous month's income than were those who said they did not save regularly ($r = .41$, $P_r = .00$).

Reasons for Saving.

When asked if they saved money for specific things, approximately 32% of respondents reported that they sometimes did; 21% reported that they almost always did; and 33% reported that they always did. Only 14% of respondents said that they never or almost never saved for specific things. Reasons for which respondents saved were measured by asking them if they were saving for a variety of thing that the literature indicated adolescent often save for. If they were saving for these reasons, the amounts that they currently had saved for each reason was asked. Responses are summarized in Table 6.

The most common reason for saving was future education, with 34% of respondent saving for that purpose. Other reasons included travel (25% of respondents), clothing (17%), "a rainy day" (14%), and a car or car-related expenses (14%). About 25% of respondents were saving for "other" reasons, most notably Christmas gifts, hobbies, or sports equipment. On average, the most money had been saved for future education (mean = \$2661, median = \$1700); next came a car and car expenses (mean = \$2099, median = \$1000), and travel (mean = \$768, median = \$300).

The amounts which respondents listed they were saving for specific things were in excess of half of their total savings for over 63% of respondents. Some respondents had a large

Table 5 **Extent and Methods of Saving**

Methods of Saving	% of respondents saving via	Mean \$ saved	Median \$ saved	Mean % of total savings	% of respondents saving > 50% via method	% of respondents saving > 80% via method
Parents' Bank Account	8%	\$2055	\$400	3%	3%	1%
Own Savings Account	81%	\$817	\$300	45%	42%	31%
Own Chequing Account	20%	\$722	\$292	7%	5%	3%
Other Bank Account	12%	\$778	\$450	5%	4%	2%
Term Deposits	13%	\$3086	\$2000	7%	8%	2%
Bonds	38%	\$2193	\$1000	23%	21%	13%
Mutual Funds	9%	\$3518	\$1350	4%	4%	2%
Other	12%	\$1655	\$300	6%	5%	3%

Table 6 **Reasons for Saving**

Reason for Saving	% of respondents saving for	Mean \$ saved	Median \$ saved	Mean % of total savings	% of respondents saving > 50% for	% of respondents saving > 80% for
Clothing	17%	\$137	\$80	7%	6%	4%
Car	14%	\$2099	\$1000	12%	11%	9%
Future Education	35%	\$2661	\$1700	34%	28%	17%
Stereo	6%	\$259	\$200	3%	3%	1%
"Rainy Day"	14%	\$294	\$60	7%	5%	6%
Computer	5%	\$383	\$224	3%	3%	2%
Travel	25%	\$768	\$300	17%	14%	10%
Marriage	1%	\$168	\$150	1%	0%	0%
Television	1%	\$150	\$100	1%	0%	0%
Other	22%	\$371	\$100	14%	12%	9%

percentage of their savings dedicated to one specific thing. The reasons for which respondents had dedicated the largest portion of their savings were future education and travel: 38% of those saving for future education had dedicated over half of their savings to that cause. Similarly, 14% of those who were saving for travel had dedicated over half of their savings to that cause.

Extent and Methods of Borrowing.

Borrowing behaviour was measured similarly to saving behaviour. Respondents were asked if they had used specific sources of debt before, and if so, what the current outstanding balances were. Responses are summarized in Table 7.

The majority of respondents had no current debts (58%). Approximately 26% had debts less than \$100, and only 16% owed more than \$100. The frequency distribution for total debt was highly skewed (coefficient of skewness = 7.2), with outstanding debts ranging up to about \$5000. Of those with debts the mean balance was \$515 (median = \$50).

Borrowing was quite common, however. Approximately 67% of respondents had borrowed from friends in the past, and 69% from parents. Less than half of these borrowers had outstanding debts from those sources, even though over 40% of them had borrowed during the previous month. Approximately 33% of respondents owed money to friends, with an average balance of \$54 (median = \$20); 28% of respondents owed money to their parents, with an average balance of \$481 (median = \$97); and 5% of

respondents owed money to "other" sources (mainly siblings and relatives), with an average of \$754 (median = \$50).

When asked if they had borrowed money via credit cards, 77% of the sample reported that they had not. Roughly 10% reported using their parents' major credit cards, 7% their parents' department store cards, and 4% their parents' gas cards. Only 1 to 2% of people claimed to have any debt outstanding from these credit purchases. Few respondents had their own credit cards: 3% had department store cards, 2% had their own major credit cards, and 1% their own gas cards. Amounts of total outstanding debt were highly correlated ($r = .42$, $P = .00$) with the amount that respondents borrowed from their parents.

Further insight into the use of credit cards was sought by asking questions about the frequency of use, payment practices, and other aspects of credit card use. The questions were asked only of those who had used credit cards before. Responses are summarized in Table 8. Respondents indicated that they used both their own and their parents' credit cards relatively infrequently. Most paid their entire bills every month, and used their own money to do so. Most respondents said that they usually would not use a credit card unless they had money to pay the bill. It was also evident that a substantial portion of those who used their parents' credit cards did not pay them back for the money they spent.

Reasons for Borrowing.

Table 9 summarizes the reasons for which adolescents borrow money. Clothing was the single-most prominent item of debt spending: 14% of respondents reported purchasing clothing with a credit card, and 19% with borrowed money, during the previous 6 months. These debt-funded purchases comprised a sizable portion of total purchases: an average of 9% of total clothing purchases were made on credit, and 8% with borrowed money. The average expenditure for those respondents who bought clothing during the previous 6 months was \$370 (median = \$200).

Sports equipment was the next-most significant category on which purchases were financed with debt. Approximately 4% of respondents reported purchasing sports equipment with credit cards, and 6% with borrowed money, during the previous 6 months; an average of 4% of sports equipment purchases were made with credit cards, and 5% with borrowed money. The average expenditure for those respondents who bought sports equipment during the previous 6 months was \$185 (median = \$100).

Audio recordings (records, CDs, tapes) were a commonly purchased item, but relatively fewer people financed their purchases with debt. Approximately 3% of respondents made audio recording purchases with credit cards, and 4% with borrowed money; an average of 2% of audio recording purchases were made with each of credit cards and borrowed money. The average expenditure for those respondents who bought audio recordings during the previous 6 months was \$110 (median = \$50).

Table 7 Extent and Methods of Borrowing

<u>Source</u>	% who have borrowed from source in past	% with current outstanding debt from source	Mean current balance of debt from source	Median current balance of debt from source	Mean amount borrowed from source last month	% who borrowed from source in previous month
Friends	67%	33%	\$54	\$20	\$23	43%
Parents	69%	28%	\$481	\$97	\$72	41%
Parents' Credit Card						
Department Store Card	7%	1%	\$234	\$200	\$304	2%
Visa, Mastercard, Amex	10%	2%	\$167	\$110	\$143	7%
Gas Card	4%	1%	\$35	\$35	\$61	4%
Own Credit Card						
Department Store Card	3%	3%	\$222	\$200	\$185	2%
Visa, Mastercard, Amex	2%	1%	\$693	\$500	\$350	1%
Gas Card	1%	-	\$165	\$165	-	1%
Other	5%	4%	\$754	\$50	\$238	4%

Means and medians calculated for cases where debt from applicable source is > \$0.

Table 8 Summary of Questions on Credit Card Use

	Never 1	2	Sometimes 3	4	Always 5
*a. I use my own credit cards regularly.	7%	14%	50%	14%	14%
*b. I pay off the entire balance of my credit cards every month.	15%	.	31%	.	54%
*c. I pay my credit card bills with my parents' money.	83%	.	8%	.	8%
c. I use my parents' credit cards regularly.	27%	29%	36%	7%	1%
d. If I were to use my parents' credit cards I would pay them back for the money I spent.	16%	10%	17%	14%	43%
f. I use credit cards only because they are convenient.	19%	14%	35%	19%	12%
g. I use credit cards when I don't have money to pay the bill.	35%	13%	29%	12%	11%

These questions were asked only of the 83 (22%) respondents who had used credit cards before.

* n < 20.

Table 9 Reasons for Borrowing (6 months)

<u>Selected Items</u>	% of respondents who purchased item	% of respondents who purchased item with credit card	% of respondents who purchased item with borrowed \$	% of total purchases made with credit card	% of total purchases made with borrowed \$	Mean amount spent on item	Median amount spent on item
Clothing	83%	14%	19%	9%	8%	\$370	\$200
Stereo Equipment	16%	1%	2%	1%	1%	\$410	\$290
Computer Equipment	12%	1%	1%	1%	1%	\$610	\$100
Records, CDs, Tapes	66%	3%	4%	2%	2%	\$110	\$50
Sports Equipment	36%	4%	6%	4%	5%	\$185	\$100
Jewelry	25%	1%	1%	1%	1%	\$141	\$40
Cosmetics	35%	1%	3%	1%	2%	\$40	\$20
Other	21%	1%	1	1%	3%	\$676	\$200

Means and medians calculated for cases where purchases of applicable items are > \$0.

Stereo equipment, computer equipment, jewelry, cosmetics, and "other" purchases were all made by fewer people, with 1 to 2% of respondents purchasing each of them with credit cards or borrowed money. Approximately 1 to 2% of total purchases of those items were made on credit or with borrowed money. Average amounts spent on these items were \$410 (median = \$290) for stereo equipment, \$610 (median = \$100) for computer equipment, \$141 (median = \$40) for jewelry, \$40 (median = \$20) for cosmetics, and \$676 (median = \$200) for "other" purchases.

6.3 Information Sources

One of the objectives of this research was to extend past studies of consumer socialization to financial stages of the purchasing process. Since information gathering is a stage in this process, and information sources an important variable in past studies of adolescent consumer learning, it was of interest to determine what information sources adolescents use in the saving and borrowing context:

Q: Do any of the following serve as information sources for adolescent saving and borrowing: parents; friends; bank tellers or salespeople; brochures or newspaper and magazine ads; television ads; or books and consumer reports?

Indices representing the extent of information seeking of respondents when saving and borrowing were derived from Moschis' (1978b) index of information seeking, which he used in the purchasing context. Moschis noted the desirability of the measurement

device. It measured the number of sources an adolescent would expressly consult before making a purchase decision. Possible value ranges for the index were 1 to 8; in this study values fell between 1 and 4.43 for the saving index, and between 1 and 6 for the borrowing index. Respondents indicated that they would rely on an average of 1.9 (median = 2.0) sources for information before deciding to save via a particular mechanism, and 1.9 (median = 1.8) before deciding to borrow via a particular debt mechanism (see Table 10). The α -reliability coefficients for these indices were .86 for saving and .91 for borrowing. Moschis (1978b) reported an α of .37 for his index.

The sources from which respondents indicated they would obtain information before saving and borrowing are summarized in Table 11. The sources most often mentioned were parents and bank tellers/salespeople. Approximately 92% of respondents indicated that they would obtain information or advice from their parents about at least one of the listed savings mechanisms before saving in that way; 97% would ask for information or advice from their parents about at least one of the listed debt mechanisms before borrowing in that way. Approximately 73% would consult bank tellers/salespeople before saving, and 79% would consult bank tellers/salespeople before borrowing. Television advertisements were the least consulted source of information, with less than 25% of respondents relying on them for information. Other sources (friends, books and consumer reports; brochures, newspaper and magazine ads) would be consulted only by 30 to 40 percent of respondents, with the exception of friends in the case of borrowing:

this anomaly was due to the fact that 65% of the sample indicated that they would consult friends before using a pawnbroker service.

It was of interest to know whether respondents who said they would use certain sources of information for saving would use the same for borrowing. Each of the information sources for saving was found to be relatively strongly correlated to the corresponding information source for borrowing (see boldface entries in Table 12).

Information that respondents considered important to have before saving or borrowing is summarized in Table 13. Responses indicated that most respondents thought that specific financial information (interest rates, payment terms, service charges) was very important. Most other information, with the exception of information about friends' financial activities, was indicated as at least moderately desirable. A significantly larger proportion of the sample seemed to have greater information needs when borrowing than when saving, most likely due to the fact that saving was in general a more familiar activity than was borrowing.

Table 10 Extent of Information Seeking by Saving and Borrowing Mechanisms

	Mean number of Sources Consulted	Median number of Sources Consulted
<u>Saving Mechanisms</u>		
Parents' Bank Account	1.6	1
Respondent Bank Account:		
Savings account	2.0	2
Chequing account	2.0	2
Other bank account	2.0	2
Term Deposits (CDs, GICs)	2.1	2
Bonds	2.1	2
Mutual Funds, Stocks, etc.	2.3	2
Other	2.1	1
<u>Borrowing Mechanisms</u>		
Respondent Credit Cards		
Department Store	2.3	2
Visa, Mastercard, Amex	2.4	2
Gas Station	2.1	2
Parents' Credit Cards		
Department Store	1.8	1
Visa, Mastercard, Amex	1.9	2
Gas Station	1.8	1
Other Credit Cards	2.2	2
Bank Loans	2.3	2
Pawn Brokers	1.8	2
Friends	1.5	1
Parents	1.4	1
Other	1.9	1

Tables 11 Extent of Reliance on Saving and Borrowing Information Sources

<i>Information Sources</i>	Percent of respondents who would consult source		Mean percent of total information from source		Median percent of total information from source	
	<u>Saving</u>	<u>Borrowing</u>	<u>Saving</u>	<u>Borrowing</u>	<u>Saving</u>	<u>Borrowing</u>
Friends	33%	79%*	7%	15%	-	10%
TV Ads	16%	24%	2%	3%	-	-
Salespeople or Bank Tellers	73%	79%	29%	20%	32%	19%
Parents	92%	97%	45%	47%	42%	44%
Books or Consumer Reports	39%	44%	9%	9%	-	-
Brochures or Magazine Ads	33%	38%	7%	7%	-	-

Note: Tables entries are aggregated across all saving and borrowing mechanisms.

* 65% of respondents indicated that they would consult friends before borrowing via a pawnbroker.

Table 12 Correlation Matrix for Saving and Borrowing Information Sources and Other Select Variables

<i>Information Sources</i>	1	2	3	4	5	6	7	8	9	10	11	12
<i>Saving</i>												
1. Friends	1.00											
2. TV Ads	.18**	1.00										
3. Salespeople or Bank tellers	.01	.03	1.00									
4. Parents	-.01	-.08	-.15**	1.00								
5. Books and Consumer Reports	.07	.23**	.16**	-.22**	1.00							
6. Brochures, Magazine Ads	.05	.29**	.07	-.12*	.39**	1.00						
<i>Borrowing</i>												
7. Friends	.48**	.12*	.00	.06	.08	.05	1.00					
8. TV Ads	.18**	.31**	-.01	-.09	.18**	.14**	.18**	1.00				
9. Salespeople or Bank tellers	-.07	.04	.45**	-.12*	.15**	.11*	-.06	.01	1.00			
10. Parents	-.01	-.05	.02	.41**	-.04	-.01	-.06	-.12*	-.09	1.00		
11. Books and Consumer Reports	.05	-.05	.08	-.09	.52**	.21**	.02	.11	.16**	-.10	1.00	
12. Brochures, Magazine Ads	.04	.16**	.01	-.03	.30**	.48**	-.01	.27**	.17**	-.16**	.33**	1.00

Table entries are Spearman correlation coefficients.

** - Significant at $\alpha=.01$ level.

* - Significant at $\alpha=.05$ level.

Table 13 Saving and Borrowing Information Needs

<i>Is it important to find out...</i>	<i>Very Important</i>			<i>Neutral</i>		<i>Not Important</i>	
	5	4	3	2	1		
1. Where your parents save	24%	27%	26%	6%	17%		
2. Where your friends save	3	12	32	14	38		
3. How friendly bank tellers are	11	30	35	11	13		
4. What the interest rates are	63	23	9	2	3		
5. What the risk of an investment is	55	25	14	3	3		
6. What the service charges are	54	30	11	2	3		
7. Types of accounts of investments that are offered	48	33	13	3	3		
8. What other services are offered	32	38	22	5	3		
9. Reputation of the institution you are saving with	46	33	15	4	2		
10. Type of institution (credit union vs. bank)	28	30	32	6	4		
11. The advertising of the institution	3	12	41	20	24		
12. How convenient it is to save with an institution	42	39	16	2	1		
1. What credit cards your parent use	28%	39%	20%	4%	10%		
2. What credit cards your friends use	6	18	35	13	29		
3. What the interest rates are	71	19	7	2	2		
4. What the payment terms are	77	17	4	1	1		
5. What the service charges are	73	19	7	1	1		
6. Reputation of the credit card company	50	33	13	3	2		
7. How easy it is to get the credit card	30	37	24	6	3		
8. Whether or not you have money to pay the bill	79	13	5	1	2		
9. Advertising of the credit card company	5	12	43	19	21		
1. Where your parents borrow	31%	34%	19%	6%	10%		
2. Where your friends borrow	7	26	35	11	21		
3. What the interest rates are	71	17	7	1	4		
4. What the payment terms are	70	19	6	1	4		
5. What the service charges are	67	21	7	1	4		
6. Reputation of the lender	49	32	14	2	4		
7. How easy it is to borrow the money	39	35	19	3	4		

Note: Table entries are frequencies in percent form.

6.4 Socio-Economic Status

Family socio-economic status was an important variable in past consumer socialization studies. Its effect on the financial behaviour of adolescent was therefore of interest:

Q: Are there socio-economic differences in adolescent saving and borrowing behaviour or information seeking?

Socio-economic status was measured in terms of the education, occupation, and income of respondents' parents, as described in Section 5.1.4.1. Values for the index used to measure socio-economic status ranged from 1.3 to 9.0, with a mean of 5.6, (median = 5.6), variance of 2.7, and coefficient of skewness of -0.164.

Associations between socio-economic status and select dependent variables are summarized in Table 14. A strong negative association was found between socio-economic status and total income ($\lambda=.156$, $\alpha=.01$), and a somewhat weaker negative association with total debt ($\lambda=.063$, $\alpha=.05$). Those of higher socio-economic status were more likely to have higher personal savings account balances ($\lambda=.159$, $\alpha=.01$), were more likely to save regularly ($\lambda=.097$, $\alpha=.01$), and were less likely to save their money for specific things ($\lambda=.176$, $\alpha=.01$), and were more likely to have spent more money during the previous 6 months ($\lambda=.121$, $\alpha=.01$). Furthermore, those of higher socio-economic status were much more likely to use their parents' credit cards frequently ($\lambda=.375$, $\alpha=.01$), and not repay their parents' for the purchases made on their credit cards ($\lambda=.400$, $\alpha=.01$).

Table 14 Associations Between Socio-Economic Status and Select Dependent Variables

Select Dependent Variables	λ	SE	r	P _r
Total Income (6 months)	.156**	.049	-.230	.00
Total Savings	.006	.014	.077	.19
Total Debt	.063*	.034	-.170	.00
Total Purchases (6 months)	.121**	.021	-.045	.44
Save regularly	.097**	.044	.090	.12
Save for specific things	.176**	.039	-.135	.02
Balance of personal savings account	.159**	.039	.163	.01
Use parents' credit cards regularly	.375**	.123	.037	.78
Repay parents for credit card purchases	.400**	.126	-.194	.13
Percent of purchases on credit card	.000	.000	.113	.06
Percent of purchases with borrowed money	.016	.016	.026	.67
Extent of Information Seek - Saving	.120**	.026	.095	.11
Extent of Information Seek - Borrowing	.124**	.027	.124	.04
Information Sources - Saving				
Friends	.020	.032	-.015	.80
Bank Tellers, Salespeople	.141**	.047	-.004	.95
Parents	.018	.042	.186	.00
Books, Consumer Reports	.018	.013	.046	.44
Information Sources - Borrowing				
Friends	.076**	.031	.118	.05
Bank Tellers, Salespeople	.095**	.023	-.002	.97
Parents	.039	.043	-.132	.03
Books, Consumer Reports	.039	.027	.106	.08

* Significant at $\alpha=.05$ level. ** Significant at $\alpha=.01$ level.

Entries are asymmetric Goodman-Kruskal λ values with associated asymptotic standard errors; and Spearman r correlation coefficients with associated significance levels. Significance of λ is based on the hypothesis test $H_0: \lambda=0.01$ for unit-normalized λ values.

Respondents of higher socio-economic status were found to consult more sources for information about saving ($\lambda=.120$, $\alpha=.01$) and borrowing ($\lambda=.124$, $\alpha=.01$). The use of particular information sources was predictable from the socio-economic status of respondents. Friends were cited more often as a source of information for borrowing ($\lambda=.076$, $\alpha=.01$) for those of higher socio-economic status, with pawnshops being the specific debt mechanism for which this information was sought. Associations were also found between socio-economic status and reliance on bank tellers/salespeople as a source of information for saving ($\lambda=.141$, $\alpha=.01$) and borrowing ($\lambda=.095$, $\alpha=.01$). These latter two relationships were bimodal: those with very high or very low socio-economic status could rely either a lot or a little, but not moderately, on bank tellers/salespeople.

6.5 Age

Age is used in consumer socialization studies as a measure of cognitive development, and is expected to be related to financial activity of youngsters. The following research questions were therefore asked:

Q: Are there age differences in adolescent saving and borrowing behaviour or information seeking?

The ages of respondents (see Table 15) ranged from 13 to 22, with a mean age of 16.8 (median = 17), variance of 2.0, and coefficient of skewness of 0.437. Approximately 90% of respondents were between the ages of 15 and 18.

Table 15 Age Distribution

<u>Age</u>	<i>Frequency</i>	<i>Percent</i>
13	1	.5%
14	4	1%
15	69	19%
16	76	21%
17	96	27%
18	80	22%
19	16	5%
20	12	3%
21	3	1%
22	1	.5%
Total	358	100%

Table 16 summarizes associations between select dependent variables and age. Although age was expected to be an important predictor variable in this study, only one significant association was found: age was associated with the balance of savings in personal savings accounts ($\lambda=.122$, $\alpha=.05$). Older respondents tended to have either a very low or a very high balance in their savings accounts, while the savings account balances of younger respondents tended to be more uniformly distributed.

Table 16 Associations Between Age and Select Dependent Variables

<i>Select Dependent Variables</i>	λ	SE	r	P _r
Total Income (6 months)	.052	.036	.459	.00
Total Savings	.000	.000	.064	.24
Total Debt	.000	.000	.107	.04
Total Purchases (6 months)	.015	.009	.157	.00
Save regularly	.009	.016	.048	.37
Save for specific things	.067	.045	.030	.57
Balance of personal savings account	.075*	.035	-.018	.73
Use parents' credit cards regularly	.122	.105	.029	.80
Repay parents for credit card purchases	.047	.072	.080	.49
Percent of purchases on credit card	.041	.029	-.015	.79
Percent of purchases with borrowed money	.014	.014	-.121	.03
Extent of Information Seek - Saving	.008	.018	.116	.03
Extent of Information Seek - Borrowing	.029	.020	.150	.01
Information Sources - Saving				
Friends	.000	.000	.049	.37
Bank Tellers, Salespeople	.038	.026	.065	.12
Parents	.023	.022	-.178	.00
Books, Consumer Reports	.000	.000	.184	.00
Information Sources - Borrowing				
Friends	.000	.000	.046	.42
Bank Tellers, Salespeople	.000	.000	.104	.07
Parents	.025	.018	-.079	.16
Books, Consumer Reports	.000	.000	.130	.02

* Significant at $\alpha=0.05$ level. ** Significant at $\alpha=0.01$ level.

Entries are asymmetric Goodman-Kruskal λ values with associated asymptotic standard errors, and Spearman r correlation coefficients with associated significance levels. Significance of λ is based on the hypothesis test $H_0: \lambda=0.001$ for unit-normalized λ values.

Age was used as a measure of cognitive development, as suggested by Moschis (1978b). Since grade could also be a measure of this same construct, it too was investigated. The 10th through 13th grades were each well represented, with a slight skew towards the higher two grades (see Table 17).

Table 17 Grade Distribution		
<u><i>Grade</i></u>	<i>Frequency</i>	<i>Percent</i>
9	2	.6%
10	76	22%
11	65	18%
12	119	33%
13	97	27%
Total	359	100%

Lambda values that were found between grade and other variables were all smaller and less significant than those that were found for age.

6.6 Gender

Since gender was used in past consumer socialization studies the following research question was asked:

Q: Are there gender differences in adolescent saving and borrowing behaviour or information seeking?

Approximately 54% of the sample was female, and the remaining 46% male. This proportion of genders was not consistent, however, for the 8 schools which participated in the study (see Table 18). The proportion of females in the sample ranged from 76% to 43%, and the proportion of males ranged from 57% to 24%. Possible gender selection bias was controlled in the analysis by examining respondents from each school individually.

Table 18 Gender Distribution by School		
<i>School</i>	<i>Female</i>	<i>Male</i>
1	20 (69%)	9 (31%)
2	19 (76%)	6 (24%)
3	30 (43%)	40 (57%)
4	18 (47%)	20 (53%)
5	22 (49%)	23 (51%)
6	33 (43%)	43 (57%)
7	13 (68%)	6 (32%)
8	39 (68%)	18 (32%)
Total	194 (54%)	165 (46%)

Table 19 Associations Between Gender and Select Dependent Variables

Select Dependent Variables	λ	SE	r	P _r
Total Income (6 months)	.000	.000	.018	.74
Total Savings	.000	.000	.066	.23
Total Debt	.000	.000	.028	.59
Total Purchases (6 months)	.000	.000	.107	.05
Save regularly	.000	.000	.007	.90
Save for specific things	.012	.000	-.061	.25
Balance of personal savings account	.030	.013	.032	.55
Use parents' credit cards regularly	.040	.088	-.075	.52
Repay parents for credit card purchases	.000	.600	.061	.60
Percent of purchases on credit card	.000	.000	.038	.50
Percent of purchases with borrowed money	.000	.000	.024	.67
Extent of Information Seek - Saving	.000	.000	.078	.15
Extent of Information Seek - Borrowing	.000	.000	.104	.06
Information Sources - Saving				
Friends	.000	.000	-.047	.39
Bank Tellers, Salespeople	.000	.043	.058	.29
Parents	.000	.000	-.008	.99
Books, Consumer Reports	.000	.000	.069	.21
Information Sources - Borrowing				
Friends	.000	.000	-.023	.68
Bank Tellers, Salespeople	.000	.000	.069	.22
Parents	.000	.000	.031	.58
Books, Consumer Reports	.000	.000	.131	.02

* Significant at $\alpha=.05$ level. ** Significant at $\alpha=.01$ level.

Entries are asymmetric Goodman-Kruskal λ values with associated asymptotic standard errors; and Spearman r correlation coefficients with associated significance levels. Significance of λ is based on the hypothesis test $H_0: \lambda=.001$ for unit-normalized λ values. Values used: Female = 1, Male = 2.

Lambda values of select dependent variables with gender are presented in Table 19. No significant associations were found between gender and the dependent variables – neither for the sample as a whole, nor for any individual school. All λ values were close to zero and were highly insignificant. This was somewhat surprising given that many past studies reported that females earned slightly less than males (Moschis, 1978b; Reubens, 1983; Statistics Canada, 1989a, 1989c), and that Moschis (1978b) found that females sought more information prior to making purchases (Moschis 1978b). A recent study indicated that credit card use was higher among females (Hauser, 1986), but the study cited data from an older respondent group (i.e., university students). The findings of the present study did, however, corroborate Bachman's (1983) findings of no gender differences in the amounts that adolescents save.

6.7 Materialism

Materialism was an important variable in past studies of consumer socialization; therefore, the following question was asked:

Q: How do **materialist values** affect adolescent borrowing and saving behaviour and information seeking?

Materialism was measured as described in Section 5.1.4.1. The index of materialism was roughly uniformly distributed, with values ranging between 7 and 23, and a mean very close to the midpoint of the scale, of 17.4 (median = 18.0). The scale had a variance of

15.9 and a coefficient of skewness of -.10. The α -reliability coefficient was .56 for this index. Moschis reported a mean of 17.3 and reliability of $\alpha=.60$ in his 1978(b) study. Respondents belonging to families of higher socio-economic status were more likely to be more materialist ($\lambda=.181$, $\alpha=.01$). No relationships were found, however, between materialism and age or gender.

A summary of the associations of materialism with select dependent variables is presented in Table 20. Materialism was not associated significantly with total income, with total savings, or total debt. More materialist respondents, however, were more likely to save their money for specific things ($\lambda=.095$, $\alpha=.05$), and more likely to have spent more money in the previous 6 months ($\lambda=.121$, $\alpha=.01$). This paradox is discussed in Chapter 7.

Materialism was related to the balance in respondents' personal savings accounts ($\lambda=.104$, $\alpha=.01$), but the association was bimodal: highly materialist respondents could have either low or high savings account balances, but those with lower materialism scores tended to have more moderate balances in their savings accounts. Materialist respondents used their parents' credit cards ($\lambda=.340$, $\alpha=.01$) much more frequently than those who were less materialist, and they were much less likely to repay their parents for the purchases made with their credit cards ($\lambda=.200$, $\alpha=.05$).

Significant associations were found between materialism and the number of sources consulted before saving ($\lambda=.053$, $\alpha=.05$), and before borrowing ($\lambda=.064$, $\alpha=.01$); in both

Table 20 Associations Between Materialism and Select Dependent Variables

<u>Select Dependent Variables</u>	λ	SE	r	P _r
Total Income (6 months)	.042	.034	.019	.73
Total Savings	.005	.005	.027	.62
Total Debt	.000	.000	.027	.62
Total Purchases (6 months)	.052**	.015	.070	.10
Save regularly	.056	.041	-.094	.08
Save for specific things	.095*	.044	.098	.06
Balance of Personal Savings Account	.104**	.033	.044	.42
Use parents' credit cards regularly	.340**	.093	.232	.04
Repay parents for credit card purchases	.200*	.095	-.160	.16
Percent of purchases on credit card	.000	.000	-.041	.46
Percent of purchases with borrowed money	.028	.019	-.024	.67
Extent of Information Seek - Saving	.053*	.029	.009	.86
Extent of Information Seek - Borrowing	.064**	.023	-.003	.96
Information Sources - Saving				
Friends	.018	.018	.033	.54
Bank Tellers, Salespeople	.134**	.034	-.027	.62
Parents	.000	.000	-.067	.22
Books, Consumer Reports	.023	.022	.098	.07
Information Sources - Borrowing				
Friends	.006	.006	.073	.19
Bank Tellers, Salespeople	.054**	.022	-.036	.52
Parents	.038	.027	-.037	.50
Books, Consumer Reports	.016	.020	.025	.65

* Significant at $\alpha=05$ level. ** Significant at $\alpha=01$ level.

Entries are asymmetric Goodman-Kruskal λ values with associated asymptotic standard errors, and Spearman r correlation coefficients with associated significance levels. Significance of λ is based on the hypothesis test: $H_0: \lambda=0.01$ for unit-normalized λ values.

cases respondents who had moderate materialism scores tended to consult more information sources. Although Moschis (1978b) found that materialism was related to a reliance on peers as information sources in the purchasing context, this relationship was not found in the saving and borrowing context. Indeed, bank tellers/salespeople was the only source of information which was related to materialism. The relationships were significant for both saving ($\lambda=.134$, $\alpha=.01$) and borrowing ($\lambda=.054$, $\alpha=.01$), although markedly stronger for saving. The associations were clearly bimodal: respondents with either high or low materialism scores tended to have either a high or low, but not moderate, reliance on bank tellers as sources of information.

6.8 Consumption Orientation

Past studies of consumer socialization used consumption orientation (i.e., social motivations for consumption and economic motivations for consumption) in examining adolescent purchasing behaviour. A question aimed at determining the role of consumption orientations in the context of adolescent financial management was therefore asked:

Q: How do consumption motivations affect adolescent borrowing and saving behaviour and information seeking?

Both social and economic motivations for consumption were measured as described in Section 5.1.4.1. Values for the social motivation scale, which had an α -reliability

coefficient of .83, ranged between 0 and 20, with a mean of 3.9 (median = 3.0), variance of 13.3, and a coefficient of skewness of 1.03. Approximately 25% of respondents had a social motivation for consumption score of zero. The economic motivation scale had an α -reliability coefficient of .87, with values ranging from 1 to 25, a mean of 14.9 (median = 15.0), variance of 30.9 and coefficient of skewness of -0.16. A large difference in the means between social and economic consumption motivation was also found by Moschis (1978b), who reported a mean of 6.1 for social motivations and 16.3 for economic motivations.

Associations existed among the independent variables. Those with lower social motivations were likely to also have low economic motivations ($\lambda_{\text{symmetric}}=.06$, $\alpha=.01$). Those respondents belonging to families of higher socio-economic status tended to have higher economic motivations for consumption ($\lambda=.146$, $\alpha=.01$), and higher social motivations for consumption ($\lambda=.100$, $\alpha=.01$). Furthermore, respondents with high social motivations were more materialist ($\lambda=.067$, $\alpha=.001$). A bimodal relationship was found between economic motivations and materialism ($\lambda=.113$, $\alpha=.001$): respondents who were either highly materialistic or minimally materialistic had moderate economic motivation scores.

Associations between consumption orientation and select dependent variables are summarized in Tables 21 and 22. Neither social nor economic consumption motivations were significantly associated with total income, total savings or total debt. Those with

high social motivations had spent more money in the previous 6 months ($\lambda=.053$, $\alpha=.01$). A bimodal relationship was found between economic consumption motivations and total purchases ($\lambda=.053$, $\alpha=.01$): those with either very high or very low economic motivation scores tended to have spent less in the previous 6 months.

No associations were found between consumption motivations and the balances of savings or debt in any specific saving or borrowing mechanism —with the exception of personal savings accounts: respondents with strong social motivations had higher personal savings account balances ($\lambda=.107$, $\alpha=.01$). A bimodal relationship was found between economic consumption motivations and the balance of personal savings accounts ($\lambda=.107$, $\alpha=.01$): those with either high or low economic motivation scores tended to have lower savings balances. Respondents with high economic motivation scores used their parents' credit cards more frequently ($\lambda=.292$, $\alpha=.05$), and repaid parents for purchases made with their credit cards less frequently ($\lambda=.341$, $\alpha=.01$).

Respondents with high economic motivations more regularly put aside a portion of their income as savings ($\lambda=.089$, $\alpha=.05$), were more likely to save their money for specific things ($\lambda=.089$, $\alpha=.01$). Social motivations were associated with the extent to which respondents saved money for specific things ($\lambda=.123$, $\alpha=.05$) —a relationship with a direction only apparent for higher scores: those with higher social motivation scores saved for special things more often.

Those with high economic or social motivations consulted more information sources before both saving and borrowing. The relationships were stronger, however, with economic motivations ($\lambda=.069$, $\alpha=.01$ for saving and $\lambda=.081$, $\alpha=.01$ for borrowing) than with social motivations ($\lambda=.057$, $\alpha=.05$ for saving and $\lambda=.048$, $\alpha=.05$ for borrowing).

The only particular information source to which consumption orientation was found to be related was bank tellers/salespeople. Those with high economic consumption motivations were relied more on bank tellers/salespeople as sources of information for saving ($\lambda=.117$, $\alpha=.01$) and for borrowing ($\lambda=.088$, $\alpha=.01$). Social motivations were associated only in the savings context ($\lambda=.086$, $\alpha=.05$): higher scores on the social motivation scale were identifiable with either high or low reliance on bank tellers/salespeople as information sources, while those with lower scores were more moderate in their reliance on bank tellers/salespeople as information sources.

Table 21 **Associations Between Social Motivation for Consumption and Select Dependent Variables**

<i>Select Dependent Variables</i>	λ	SE	r	P _r
Total Income (6 months)	.011	.020	-.032	.55
Total Savings	.011	.008	.049	.38
Total Debt	.020	.015	.094	.08
Total Purchases (6 months)	.053**	.015	.086	.12
Save regularly	.036	.029	-.053	.32
Save for specific things	.123**	.048	.030	.58
Balance of personal savings account	.107**	.032	.095	.08
Use parents' credit cards regularly	.143	.082	-.126	.28
Repay parents for credit card purchases	.114	.107	-.033	.78
Percent of purchases on credit card	.021	.021	.078	.16
Percent of purchases with borrowed money	.000	.000	.089	.11
Extent of Information Seek - Saving	.057*	.026	.116	.04
Extent of Information Seek - Borrowing	.048**	.020	.093	.10
Information Sources - Saving				
Friends	.000	.000	.143	.01
Bank Tellers, Salespeople	.086*	.049	-.041	.46
Parents	.008	.008	-.047	.39
Books, Consumer Reports	.015	.011	.111	.04
Information Sources - Borrowing				
Friends	.017	.010	.165	.00
Bank Tellers, Salespeople	.009	.009	-.045	.43
Parents	.020	.015	.026	.65
Books, Consumer Reports	.008	.008	-.002	.97

* Significant at $\alpha=.05$ level. ** Significant at $\alpha=.01$ level.

Entries are asymmetric Goodman-Kruskal λ values with associated asymptotic standard errors; and Spearman r correlation coefficients with associated significance levels. Significance of λ is based on the hypothesis test $H_0: \lambda=.001$ for unit-normalized λ values.

Table 22 Associations Between Economic Motivation for Consumption and Select Dependent Variables

Select Dependent Variables	λ	SE	r	P _r
Total Income (6 months)	.033	.025	-.038	.48
Total Savings	.028	.020	-.003	.95
Total Debt	.021	.028	-.030	.58
Total Purchases (6 months)	.053**	.015	-.009	.87
Save regularly	.089**	.036	.125	.02
Save for specific things	.098*	.055	.080	.14
Balance of personal savings account	.107**	.035	.012	.82
Use parents' credit cards regularly	.292*	.119	-.023	.82
Repay parents for credit card purchases	.341**	.100	.031	.79
Percent of purchases on credit card	.000	.000	.117	.04
Percent of purchases with borrowed money	.000	.000	.081	.15
Extent of Information Seek - Saving	.069**	.023	.260	.00
Extent of Information Seek - Borrowing	.081**	.021	.228	.00
Information Sources - Saving				
Friends	.009	.009	-.014	.80
Bank Tellers, Salespeople	.117**	.040	.168	.00
Parents	.008	.021	.052	.35
Books, Consumer Reports	.000	.000	.191	.00
Information Sources - Borrowing				
Friends	.011	.011	-.056	.33
Bank Tellers, Salespeople	.088**	.030	.221	.00
Parents	.033	.034	.042	.46
Books, Consumer Reports	.000	.000	.214	.00

* Significant at $\alpha=.05$ level. ** Significant at $\alpha=.01$ level.

Entries are asymmetric Goodman-Kruskal λ values with associated asymptotic standard errors; and Spearman r correlation coefficients with associated significance levels. Significance of λ is based on the hypothesis test $H_1: \lambda \neq .001$ for unit-normalized λ values.

CHAPTER 7: DISCUSSION AND CONCLUSIONS

A discussion of the results reported in Chapter 6 is presented in this chapter, following which the benefits and limitations of the research are discussed. Conclusions and suggested directions for future research close the chapter.

7.1 Income

It was very evident from this study that most adolescents do work, and that they do have significant amounts of money to spend. Most respondents (90%) earned at least some money for themselves over the previous 6 months. Higher rates of employment among teenagers than reported in official statistics were probably found because official statistics report income only from "paid-worker" jobs. Thus, for example, the babysitting jobs held by 30% of respondents would not be included. Consumer educators are particularly concerned about the number of high school students who are working: an Ontario government commission which studied the high school dropout issue in 1988 warned of a link between part-time work and the increasing number of high school dropouts (*The Financial Post*, 1989). The fact that this study indicates that most adolescents do work therefore has strong implications.

While the incomes reported by respondents were quite notable, the income figures that they reported do not truly reflect the money that they had at their disposal. This conclusion was reached by comparing reported incomes with the total dollar value of the purchases respondents reported as having made during the previous 6 months. The total

of the purchases that they listed exceeded reported incomes in 80% of the cases. On average respondents spent double or triple the money that they reported as income. It is likely that parents give money to their children to spend, and that this money (either cash or license to use credit cards) is not regarded as "income" by respondents.

Overspending is a common problem in our society. Many adults, and federal, provincial, and municipal governments often spend more money than they earn. It might raise some alarm to know that many adolescents also follow this pattern. This "overspending," however, is arguably covered with intra-household money transfers received from families rather than with debt. This study thus raises the interesting questions of how young people view earned income versus income received from their families, and whether or not they will learn to curb future spending to their levels of income.

Respondents belonging to families of higher socio-economic status are more likely to have *lower* earned incomes, but to spend *more* money than others. It appears, therefore, that adolescents in higher socio-economic status families receive more income from families than do others, and that they rely less on earnings. This was consistent with the finding that those of higher socio-economic status less frequently repaid parents for purchases made on their credit cards, and support for the previous supposition that parents give money to their adolescent children for spending, particularly among the higher socio-economic status. Neither gender nor age were related to the amount that adolescents earned or spent.

7.2 Saving and Borrowing

The incidence of adolescent saving was found to be much higher than in past research. Over 93% of respondents had a personal bank account of some kind (savings, chequing, or "other"). Marketing research studies from the late 1980s reported "increases" in teenage saving behaviour as a result of finding that 47% of teenagers had savings accounts (*Marketing*, 1989), and that by the first year of university up to 67% had savings accounts (*Marketing*, 1988). The percentage of respondents in the current study that had saving accounts was markedly higher (81%).

The study showed that many adolescents can be relatively sophisticated in their saving. The frequency of holding bonds was almost double that reported even for first year university students, while the frequency of owning stock was comparable to that reported for first year university students (*Marketing*, 1988). It may be that more sophisticated savings such as bonds are purchased by parents (with Family Allowance cheques, for example) in the name of their children, to be saved for future educational costs. McNeal (1987) reported that some of the savings of 4 to 12 year-olds were sometimes put in bonds for them by their parents. This would explain the high correlation that was found between the amount that respondents had saved in bonds and the amounts that they had saved for future education ($\lambda=.11$, $\alpha=.01$, $r=.32$, $P_r=.00$). Future investigation of the sophisticated savings of adolescents is required.

More sophisticated savings might not be under the direct control of adolescents, as savings accounts are likely to be. This speculation is based on the fact that the balances in personal savings accounts were found to be related to almost all of the independent variables in this study, in many cases when neither total savings nor the balances of savings in other savings mechanism was significant. If the individual characteristics of adolescents (materialism, consumption motivation, age, etc.) are reflected only in balances their personal savings accounts, and not in the balances of their other savings, then they arguably have more control over those savings account balances. The extent to which adolescents directly and independently control their finances needs future investigation.

Credit card use was not prevalent among high school students. Very few respondents had their own credit cards, and only 23% reported ever using a credit card. Approximately 16% listed some item that they had purchased with a credit card in the previous 6 months. Respondents of higher socio-economic status used their parents' credit cards far more frequently than other respondents, and were much less likely to repay their parents for those purchases. This finding was consistent with the fact that those of higher socio-economic status spent far more money than they reported as income. The strong associations found in this study corroborate Hauser (1986), who reported that credit card use was directly correlated to family income.

Borrowing, especially from friends or parents, was found to be very prevalent among high school students. Almost 70% of respondents had borrowed from parents or friends in the

past. No previous studies had indicated how frequently adolescents might be expected to use these sources of debt. Slightly more respondents owed money to friends than to parents (33% vs. 23%), but the amounts owed were substantially lower for friends than for parents (median = \$20 vs. \$97).

An issue that this research did not address was repayment of borrowed money. It would be interesting to know, especially since most of the debt found in this study was of an informal nature (borrowed from family or friends), how much of the money "borrowed" from friends and parents is ever repaid. One might speculate from the previous discussion of credit card repayment, that many respondents would sometimes not repay their debts, especially to parents, in order to finance their high levels of purchasing. Knowledge about payment practices among adolescents is important, for their future creditors might not be as forgiving as they might find their parents to be.

7.3 Information Sources

The number of sources of information that respondents would consult before saving or borrowing was similar to that found by Moschis (1978b) in the purchasing context. On average, adolescents consulted one or two sources of information. This number might be considered low given that adolescents are arguably less informed about financial options and more familiar with product-oriented purchasing situations. Indeed, a consumer knowledge test of high school students in the United States, conducted by the Consumer Federation of America (1991), revealed that students were "particularly uninformed" about

credit, and chequing/savings accounts. Students did most poorly on "items testing specific knowledge of products, especially that related to financial services."

In general, respondents consulted more information sources before saving in more sophisticated ways (i.e., stocks, bonds). Furthermore, those of higher socio-economic status, and those with higher social and economic consumption motivations, tended to consult more information sources. These findings are similar to the purchasing context: adolescents of higher socio-economic status look for more information preceding purchases (Moschis, 1978b), and are less independent in purchasing (Moschis, Moore, and Stephens, 1977; Saunders, Salmi, and Tazier, 1973).

Almost all respondents indicated that they would rely on parents for financial information, and about 75% indicated that they would rely on bank tellers/salespeople. Friends would generally be consulted for information only in the case of borrowing money from a pawn brokerage. All other sources of information would be consulted by between 30 and 40% of respondents.

Respondents of higher socio-economic status were found by Moschis to rely more on parents as sources of information when purchasing because, it was thought, these parents take more care in teaching their children the behaviours that are deemed appropriate to that status (Moschis, 1978b). Parents were a source of information for virtually every

respondent (97%) in this study, so variations by independent variables were not detectable.

Past studies of purchasing reference sources indicated that in general adolescents were becoming less dependant on their parents, and more on their peers (Gilkison, 1973), but this was definitely not the case in the saving and borrowing context. Gilkison's findings, however, varied over the product classes which he investigated. The products which Gilkison examined were: a variety of consumer durable goods (personal clothing, toiletry articles, sports equipment, and small appliances), insurance policies, and forms of transportation. Insurance policies are conceptually closer to borrowing and saving mechanisms than other tangible products, and, not surprisingly, only in the case of insurance policies were parents listed as the strongest, and sales people as the second strongest, frame of reference as was found in here in the saving and borrowing context. Thus Gilkison's (1973) conclusions corroborate the findings of the present study.

It is likely that social pressures are far lower for financial decisions than for purchase decisions, which have more tangible consequences; if so, the need for peer conformity and the associated information requirements need not exist. On the other hand, adolescents may feel that their peers simply do not possess the financial information that they seek. While the reliance of respondents on peers for information about pawnbrokers could be due to the perception that such services are somewhat illegitimate, no conclusion can be supported with the data that were collected.

Age was almost completely unrelated to other variables in this study. It was related only to the balance of personal savings accounts. Past studies of adolescents had shown income to increase with age (Ward, Wackman and Wartella, 1977; McNeal, 1987), and the extent of saving to increase with age. Past studies had also shown that older adolescents tended to actively seek more information before making purchase decisions (Moschis 1978a; 1978b). The absence of some of these relationships in the saving and borrowing context is perhaps understandable given the fact that some of these past studies used samples of younger children (ages 4 to 12). Furthermore, the age distribution in this study was quite heavy-tailed: a very large proportion of respondents fell within the narrow age range of 15 to 18. It is likely that the financial situation of each adolescent does not vary much over the few years that he or she is in high school.

Gender was not a significant variable in this study. Past studies have found significant differences between genders in terms of income, spending, saving, information seeking, and even materialism and consumption motivation, but not one significant relationship was found in this study--neither for the sample as a whole, nor for any particular school. Since no significant differences were found between schools, even though the sampled proportion of male to females varied considerably, a gender selection bias does not seem likely. The fact that gender was not significant may be due to less gender stereotyping among younger generations, and therefore less socialization into typical gender roles of the past. It appears from this study that among high school students gender differences have disappeared, at least along the variables that were considered. This

speculation is by no means conclusive, however, and more research into this area would be needed before reaching a conclusion.

Socio-economic status, materialism, and social and economic motivations for consumption all served as predictors of the dependent variables in this study. At times these relationships were not straightforward. These variables interacted with one another, so as to make it difficult at times to determine which variables were really influencing which. These complex relationships and inter-relationships need to be studied further.

7.4 Benefits of the Research

This study is of benefit to consumer educators, consumer behaviour researchers, financial institutions, public policy makers, and retailers. Consumer education literature has revealed that consumer educators in particular are concerned about the extent to which students work, and about the possible negative effects of the "premature affluence" that is arguably the result of large amounts of money that youths control. This study investigated how teenagers manage the money associated with this work and affluence. It was intended to be of value in identifying some of the issues about which consumer educators should be concerned. There can be no means of designing programs to help educate students without accurate readings of how students actually behave.

A recent consumer knowledge test (Consumer Federation of America, 1991) has indicated that levels of consumer knowledge about financial activities is quite low among high

school students. The level of responsibility that youths are displaying in their financial activities cannot be determined from this research, but consumer educators would be well advised to keep in mind the significant extent to which their students are financially active: earning, saving, and borrowing are extremely prevalent, regardless of how prepared adolescents are for it.

Academics in the fields of consumer socialization and adolescent consumer behaviour can benefit from this research, as it has explored an area that has lacked attention. This study can serve as a foundation for research which explores the socialization agents from which adolescents learn to borrow and save, and for more in depth analysis of what influences this behaviour. Such research is important in gaining an understanding of these learning processes and the means by which these processes can be influenced. Saving and borrowing behaviour and information sources were found in some cases to be similar and in others dissimilar to the purchasing context. These differences and similarities should be kept in mind in future explorations. Furthermore, much of the research from which this study developed is dated, and needs re-examination. Gender did not interact, for example, with other independent variables in this study: whether the same would hold true in a contemporary study of consumer socialization and purchasing remains to be seen.

Financial institutions can benefit from understanding adolescent borrowing and saving behaviour, the reasons for such behaviour, and the extent to which they, and others,

influence it. Already financial institutions are catering to the specific needs of the younger generation, not only with special services, but also, in some cases, with entire banks dedicated to this market segment. Even better services for adolescents could result from studies of which investigate the financial activities of these young clients. Financial institutions might consider that many adolescents have their own savings accounts, and that almost all have a bank account of some sort. Some high school students also demonstrated that they can be quite sophisticated in their savings behaviour: financial institutions should keep this fact in mind when servicing this market.

Retailers can benefit from the knowledge that adolescent saving and borrowing are common: most adolescent saving is intended for specific product purchases, — purchases expected to be worth \$10 billion in Canada by the year 2000. Furthermore, retailers should be aware that a significant percentage of adolescent purchases are made with parents' credit cards.

Public policy makers should consider that fact that most adolescents work, and that many can be very sophisticated in their employment and financial activities. Current policies, such as restrictions on adolescents from participating in traditionally "adult" activities (e.g. starting a business), might be questionable in light of this fact.

7.5 Limitations of the Research

The main weakness of this study is its limited generalizability, both in terms of geography and sample selection. The limited geographical area in which it was carried out and the use of an inexhaustive sampling frame must be noted. Ottawa-Hull is the second most affluent city in Canada, with per capita income 24% above the national average; this fact must be considered if the results of this study are generalized, since socio-economic status was found to be a very significant variable. With this proviso, it is probably safe to generalize the study to the Ottawa area.

7.6 Conclusions and Directions for Future Research

"If the financial arrangements within households could be shown to affect how much is spent, by whom, and on what items, this would be both of great academic and commercial significance" (Pahl, 1986). This study addressed only a small part of an intra-family economy and consumer socialization issue, but, as an attempt to examine some of the variables in the adolescent purchasing process, it was useful in identifying areas deserving of future research.

Future researchers might look more closely at the control that adolescents have over their finances, and intra-family money flows which seem to subsidize the earned incomes of adolescents. A stronger link could then be made to research about intra-family economy and control of income, spending, saving and borrowing within the family unit. Questions about whether adolescents would save to the same extent (e.g., for future education) if it

was left totally up to them could then be addressed. It would also be useful if future researchers could make stronger links to socialization theory in terms of how children and adolescents actually learn to control their money: the examination of variables such as socio-economic status, materialism, and age in the financial context was a valuable first step towards understanding of the financial processes and influencers of these processes among adolescents.

REFERENCES

Abramovitch, Rona, Jonathan Freedman, and Patricia Pliner (1991), "Children and Money: Getting an Allowance, Credit Versus Cash, and Knowledge of Pricing," *Journal of Economic Psychology*, 12 (March), pp. 27-45.

Bachman, Jerald G. (1983), "Premature Affluence: Do High School Students Earn Too Much? *Economic Outlook USA*, (Summer), pp.64-67.

----- (1987) "Adolescence: An Eye on the Future," *Psychology Today* (July), pp.6,8.

-----, Lloyd Johnston, and Patrick O'Malley (1987), *Monitoring the Future: Questionnaire Responses from the Nation's High School Seniors, 1986*, Ann Arbor, MI: Institute for Social Research.

Bivens, Gordon E. (1979), "The Family as an Economic Entity: Some Evolving Observations," *Economics and the Family*, Stephen J. Bahr (ed.), Toronto: Lexington, pp. 1-9.

Boyd, Monica, and Hugh A. McRoberts (1982), "Women, Men and Socio-Economic Indices: An Assessment," *American Association for the Advancement of Science Selected Symposium, 1981*. Boulder, Colorado: Westview Press.

Bresnick, David (1984), *Youthjobs*, Westport, CT: Quorum Books.

Carnell, Earnest, Q. (1969), "Adolescent Socialization," *Handbook of Socialization Theory and Research*, David A. Goslin (ed.), Chicago: Rand McNally and Company.

Cateora, Philip R. (1963), *An Analysis of the Teenage Market*. Austin, Texas: Bureau of Business Research, University of Texas.

Cole (1980), *Working Kids on Working*, New York: Morrow.

Consumer Federation of America (1991), "Student Consumer Knowledge: Results of a Nationwide Test."

Cooney, Rosemary S., Alice S. Clague, and Joseph Jr. Salvo (1982), "Status Attainment of Young White Men and Women: Two Socio-Economic Measures," *American Association for the Advancement of Science Selected Symposium, 1981*. Boulder, Colorado: Westview Press.

D'Amico, R. (1984), "Does Employment During High School Impair Academic Progress?" *Sociology of Education*, 57, pp. 152-164.

Dal Cin, Patrizia (1992), "Decision-Making by Canadian Informal Investors: Findings Regarding the Impact of Experience," *Proceedings from the ENDEC World Conference Entrepreneurship*, Singapore.

Davis, Duane, and Robert Cosenza (1988), *Business Research for Decision Making*. Boston, MA: PWS-Kent Publishing Company.

Douthitt, Robin A., and Joanne M Fedyk (1988), "The Influence of Children of Family Life Cycle Spending Behaviour: Theory and Applications," *Journal of Consumer Affairs*, 22 (Winter), pp. 220-248.

Eiser, Richard J. (1986), *Social Psychology: Attitudes, Cognitions, and Social Behaviour*. Cambridge: Cambridge University Press.

Featherman and Stevens (1982). "A Revised Socio-Economic Index of Occupational Status: Application in Analysis of Sex Differences in Attainment," *American Association for the Advancement of Science Selected Symposium, 1981*. Boulder, Colorado: Westview Press.

Financial Post Daily (1989), "Young money: spending power of teens has rocketed," "Business takes aim at huge market," April 24, pp. 15, 20.

Fortune (1989), "The ABC's of Marketing to Kids," 119 (May 8), pp. 114-120.

Foxman, Ellen R., Patriya S. Tansuhaj, and Karim M. Ekstrom (1989), "Family Member Perceptions of Adolescents' Influence in Family Decision Making," *Journal of Consumer Research*, 15 (March), pp. 482-491.

————— (1989b), "Adolescents' Influence in Family Purchase Decisions: A Socialization Perspective," *Journal of Business Research*, 18 (March), pp. 159-172.

Gilkison, Paul (1965), "What Influences the Buying Decisions of Teen-agers?" *Journal of Retailing*, 42 (Fall), pp.25-37.

————— (1973), "Teen-agers' Perceptions of Buying Frames of Reference: A Decade in Retrospect," *Journal of Retailing*, 49 (Summer), pp.25-37.

Globe and Mail (1991), "Teen pockets run deep: Billion dollar market eluding retailers, marketers," March 5, pp. B1, B2.

————— (1989), "Young pleasure seekers born to shop, study says," January 27, p. B6.

Greenberger, E (1988), "Working in Teenage America," *Work Experience and Psychological Development Through the Life Span*, J.T. Mortimer & K.M. Borman (Eds.). Boulder, CO: Westview Press, pp. 21-50.

————— and Laurence Steinberg (1986), *When Teen-agers Work*, New York: Basic Books, Inc., Publishers.

Guber, Selina S. (1987), "The Teenage Mind," *American Demographics*, 9 (August), pp. 42-44.

Hall, Carol (1987), "Tween Power: Youth's Middle Tier Come of Age," *Marketing and Media Decisions*, 22 (October), pp. 56-62.

Hausser, Grady (1986), "How Teenagers Spend the Family Dollar," *American Demographics*, 8 (December), pp. 38-41.

Heisler, Jerry (1990), "From CDs to CDs: Reaching the Teen Market," *Bank Marketing*, 22 (April), pp. 34-35.

Helitzer, Melvin, & Carl Heyel (1971), *The Youth Market*. New York: Media Books.

Kinnear, Thomas C. and James R. Taylor (1987), *Marketing Research: An Applied Approach*. New York: McGraw-Hill Book Company.

Marketing (1986), "New Perspectives on the Teen Market," June 16, p. 9.

(1988), "Students - A Market Growing Up," September 19, p. 10.

(1989), "Teen Consumers," September 4, p. 3.

(1990), "Teenagers: Power In Numbers," February 19, p. 10.

(1991a), "Youth Culture Is Key to a Huge Market," August 5, p. 5.

(1991b), "Teen Market Offers Growing Opportunities," November 18, p. 18.

(1991c), "Teen Loyalty Targeted with a Variety of Promotions," December 16, p.

McNeal, James U. (1969), "The Child Consumer: A New Market," *Journal of Retailing*, 45 (Summer), pp. 15-22.

----- (1979), "Children as Consumers: A Review," *Journal of the Academy of Marketing Science*, 7 (Fall), pp. 346-359.

----- (1987), *Children as Consumers*, Lexington, MA: Lexington Books.

----- (1988), "The Children's Market," *Incentive*, 162 (September), pp. 87-96.

----- (1990), "Children as Customers," *American Demographics*, 12 (September), pp. 36-39.

----- and Chyon-Hwa Yeh (1990), "Taiwanese Children as Consumers," *European Journal of Marketing*, 24 (October), pp. 32-43.

Moore, Roy L. and Lowndes F. Stephens (1975), "Some Communication and Demographic Determinants of Adolescent Consumer Learning," *Journal of Consumer Research*, (September), pp. 80-92.

Moschis, George P. (1978a), "Teenagers' Responses to Retailing Stimuli," *Journal of Retailing*, 54 (Winter), pp. 80-93.

----- (1978b), *Acquisition of the Consumer Role By Adolescents*. Georgia: College of Business Administration, University of Georgia.

----- (1985), "The Role of Family Communication in Consumer Socialization of Children and Adolescents," *Journal of Consumer Research*, 11 (March), pp. 898-913.

----- (1987), *Consumer Socialization: A Life-Cycle Perspective*, Lexington, MA: D.C. Heath & Co.

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PM-1 3 1/2"x4" PHOTOGRAPHIC MICROCOPY TARGET
NBS 1010a ANSI/ISO #2 EQUIVALENT

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PM-1 3 1/2" x 4" PHOTOGRAPHIC MICROCOPY TARGET
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———, Roy L. Moore, & Lorondes F. Stephens (1977), "Purchasing Patterns of Adolescent Consumers," *Journal of Retailing*, 53 (Spring), pp. 17-26, 92.

——— and Roy L. Moore (1978), "An Analysis of the Acquisition of Some Consumer Competencies Among Adolescents," *Journal of Consumer Affairs*, 12 (Winter), pp. 276-291.

Mortimer, Jeylan T. (1991), "Employment," *Encyclopedia of Adolescence*, Richard Lerner, Anne Peterson, & Jeanne Brooks-Gunn (eds.). New York: Garland Publishing Inc., pp. 311-318.

Murphy, Sue (1987), "Generate Services for Each Generation," *Credit Union Magazine*, 53 (October), pp. 50-58.

Pahl, Jan (1989), *Money and Marriage*, London: MacMillan Education Ltd.

Peter, J. Paul and Jerry C. Olson (1987) *Consumer Behaviour: Marketing Strategy Perspectives*. Homewood, IL: Irwin.

Phelan, Gladys K. and Jay D. Schvaneveldt (1969), "Spending and Saving Patterns of Adolescent Siblings," *Journal of Home Economics*, 61 (February), pp. 104-109.

Powers, Mary G. (1982), "Measures of Socio-Economic Status: An Introduction," *American Association for the Advancement of Science Selected Symposium, 1981*. Boulder, Colorado: Westview Press.

Rao, J.N.K. and D. Roland Thomas (1988), "The Analysis of Cross-Classified Categorical Data from Complex Sample Surveys," *Sociological Methodology*, 18, pp. 213-269.

Reubens, Beatrice G. (ed.) (1983), *Youth at Work: An International Survey*, Totawa, NJ: Rowman & Allanheld Publishers.

Sage Publications (1977), "Analysis of Nominal Data," *Quantitative Applications in the Social Sciences*. Beverly Hills, CA: Sage.

(1983), "Measures of Association," *Quantitative Applications in the Social Sciences*. Beverly Hills, CA: Sage.

(1987), "How Many Subjects?" *Quantitative Applications in the Social Sciences*. Beverly Hills, CA: Sage.

Saunders, Josephine R. (1973), "Congruence and Conflict in Buying Decisions of Mothers and Daughters," *Journal of Retailing*, 49 (Fall), pp. 3-18.

Schindler, Martha (1989), "Institutions Tap a Pint-Size Market to Woo Depositors," *Savings Institutions*, 110 (February), pp. 83,85.

Sherif, Muzafer and Carolyn Sherif (1964), *Reference Groups: Exploration into Conformity and Deviation of Adolescents*, New York: Harper and Row.

Sheth, Jagdish N. (1983), "Emerging Trends for the Retailing Industry," *Journal of Retailing*, 59 (Fall), pp. 6-18.

Statistics Canada (1989a), *The Nation—Labour Force Activity*, Catalogue 93-111, Ottawa: Canadian Government Publishing Centre.

(1989b), *The Nation—Total Income: Individuals*, Catalogue 93-114, Ottawa: Canadian Government Publishing Centre.

(1989c), *Canada's Youth: A Profile of their 1986 Labour Market Experience*, Catalogue 71-207, Ottawa: Canadian Government Publishing Centre.

Stipp, Jorst H. (1988), "Children as Customers," *American Demographics*, 10 (February), pp. 26-32.

Tootelian, Dennis, & Nicholas Windeshausen (1976), "The Teen-age Market: A Comparative Analysis, 1964-1974," *Journal of Retailing*, 52 (Summer), pp. 51-60, 92.

Vandermerwe, Sandra (1990), "Youth Consumers: Growing Pains," *Business Horizons*, 33 (May/June), pp. 30-36.

Walker, Robert (ed.), (1985), *Applied Qualitative Research*, Hants, England: Gower.

Ward, Scott, Daniel Wackman, & Ellen Wartella (1977), *How Children Learn to Buy*, Beverley Hills, CA: Sage Publications.

Weinstein, Grace W. (1975), *Children and Money: A Guide for Parents*, New York: Charterhouse.

Appendix A: Research Questions

- Q1:** Do any of the following serve as information sources for adolescent saving and borrowing: parents; friends; salesmen or bank tellers; brochures or newspaper and magazine ads; television ads; or books and consumer reports?
- Q2:** How do **materialist values** affect adolescent borrowing and saving behaviour and information seeking?
- Q3:** How do **consumption motivations** affect adolescent borrowing and saving behaviour and information seeking?
- Q4:** Are there **gender** differences in adolescent saving and borrowing behaviour or information seeking?
- Q5:** Are there **age** differences in adolescent saving and borrowing behaviour or information seeking?
- Q6:** Are there **socio-economic** differences in adolescent saving and borrowing behaviour or information seeking?
- Q7:** How can adolescent borrowing and saving be described?
- i) Why do adolescents save?
 - ii) Why do adolescents borrow?
 - iii) What is the extent of adolescent saving?
 - iv) What is the extent of adolescent borrowing?
 - v) What saving mechanisms do adolescents use?
 - vi) What borrowing mechanisms do adolescents use?

Appendix B: Survey Instrument

Carleton University
Ottawa Canada K1S 5B6

A number of recent marketing research studies have found that high school students earn and control more money today than they ever have done in the past. Very little is known, however, about how students manage their money and make decisions about how to spend it.

I am presently conducting a study for my thesis on how young people manage their money. Specifically, I am interested in the saving and borrowing practices of high school students. Information about how they manage money is important to many people, including high school students themselves, parents, schools, marketers, and even banks and financial institutions. Some banks catering exclusively to the needs of teenagers have opened recently in the United States.

The study requires participation from a comprehensive sample of high school students, so the school board has given me permission to gather data in the schools. You are not required to participate, and your decision of whether or not to participate will not affect your grades. You are free to withdraw from the study at any time. It would be very helpful to me, however, and I would appreciate it very much, if you would take the time to fill in this questionnaire. It will take you approximately 30 minutes to answer all the questions. You can take it home with you and fill it out there. Please seal the questionnaire in the envelope it came in and bring it back to home-room tomorrow or within the next few days and leave it with your teacher.

You can be assured that your answers will be completely confidential. Your name does not appear on the questionnaire, so no one will know which one is yours. Your teacher will NOT read the questionnaires. I will combine answers from all respondents and my thesis will report only on the combined data. Individual responses will NOT be identified.

Many people are interested in the results of research that they participate in. If you would like to receive a brief summary of the research results, you will be able to pick a copy up from your school office. I will leave copies there when I finish the research in January. I would be pleased to answer any questions that you might have. My phone number is on the front cover of the questionnaire.

Thank you very much for your help.

Sincerely,

Paul Rossmann

M.M.S. Student, School of Business

School of Business - 11 Faculty of Social Sciences - 11 Duntton Tower
(613) 788-7396 Fax: (613) 788-2532 Fax: (613) 788-4427

Carleton University
Ottawa, Canada, K1S 5B6

Please answer all the questions, seal the questionnaire in the provided envelope, and deposit the sealed envelope in the larger envelope that your teacher has for the purpose.

Please return the questionnaire tomorrow or within the next few days, but no later than ____.

All information will be completely anonymous and confidential.

Thank you for your help.

**Paul Rossmann, B.Comm.
Graduate Student
School of Business
Carleton University
526-1243**

**Judith Marshall, Ph.D.
Thesis Supervisor
School of Business
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788-6654**

SECTION A: INCOME

The following questions relate to your income and the sources of your income. When answering the questions please think about **ALL** of the money that you receive: allowances or money that your parents give to you, money earned from part-time jobs, babysitting and other odd jobs, cash gifts, etc..

1. What was your income from all sources for the last 6 months? \$ _____

2. How much of this money did you get from the following places?

a. Full-time summer job	\$ _____
b. Part-time or temporary summer job	\$ _____
c. Part-time job during school year	\$ _____
d. Babysitting	\$ _____
e. Allowance	\$ _____
f. Gifts of money	\$ _____
g. Other (specify): _____	\$ _____
h. Other (specify): _____	\$ _____
i. Other (specify): _____	\$ _____

3. What was your income last month (October)? \$ _____

4. Where did your income for last month come from?

a. Part-time job	\$ _____
b. Babysitting	\$ _____
c. Allowance	\$ _____
d. Gifts of money	\$ _____
e. Other (specify): _____	\$ _____
f. Other (specify): _____	\$ _____
g. Other (specify): _____	\$ _____

5. How much of last month's income do you still have? \$ _____

SECTION B: BUYING BEHAVIOUR

The following questions relate to your buying behaviour. The first part of this section asks about some of your general attitudes about money and buying; and the second part asks about what things you consider when buying different products.

6. For each of the following statements please circle the number to show the extent to which you agree or disagree.

	Strongly agree 		Neutral 		Strongly disagree
a. It is really true that money can buy happiness.....	1	2	3	4	5
b. My dream in life is to be able to own expensive things.....	1	2	3	4	5
c. People judge others by the things they own.....	1	2	3	4	5
d. I buy some things that I secretly hope will impress other people.....	1	2	3	4	5
e. Money is the most important thing to consider in choosing a job.....	1	2	3	4	5
f. I think others judge me as a person by the kinds of products and brands I use.....	1	2	3	4	5
g. I really don't think it's right for others to judge me as a person by the kinds of products and brands I use.....	1	2	3	4	5

7. This question contains a list of 5 products, as well as a list of things that may or may not be important for you to know before buying each of the products. For each item that you read on the list check whether YOU think it is important to know about it before buying a bicycle, a watch, a camera, a stereo, or a hair dryer. (FOR EACH ITEM THAT YOU READ YOU MAY CHECK AS MANY PRODUCTS AS YOU WANT, OR NONE OF THE PRODUCTS.)

Before buying a: Bicycle Watch Camera Stereo Hair dryer

It is important to know:

a. What friends think of different brands or products	_____	_____	_____	_____	_____
b. Guarantees on different brands	_____	_____	_____	_____	_____
c. What kinds of people buy certain brands or products	_____	_____	_____	_____	_____
d. The name of the company that makes the product	_____	_____	_____	_____	_____
e. Whether any brands are on sale	_____	_____	_____	_____	_____
f. What others think of people who use certain brands or products	_____	_____	_____	_____	_____
g. Kinds of materials different brands are made of	_____	_____	_____	_____	_____
h. What brands or products to buy to make good impressions on others	_____	_____	_____	_____	_____
i. Quality of the store selling a particular brand	_____	_____	_____	_____	_____

SECTION C: SAVING

The following questions are about how much of your money you save, where you save, what information you want in order to decide how to save, and where you get this information from. Please answer all questions as directed.

8. How much money do you currently have saved IN TOTAL, counting all of your personal savings and investments?

\$ _____

9. Do you save in the following ways? Check YES or NO for each item, and enter the balance of your savings (as of today) for each item that you have checked YES.

- a. Your parents' bank account ☐ No ☐ Yes ==> \$ _____
- b. Your own bank account
- Savings account ☐ No ☐ Yes ==> \$ _____
- Chequing account ☐ No ☐ Yes ==> \$ _____
- Other bank account ☐ No ☐ Yes ==> \$ _____
- c. Term deposits (GICs, CDs) ☐ No ☐ Yes ==> \$ _____
- d. Bonds ☐ No ☐ Yes ==> \$ _____
- e. Mutual funds, stocks,
 or other investments ☐ No ☐ Yes ==> \$ _____
- f. Other (specify): _____ ☐ No ☐ Yes ==> \$ _____

10. During the last month, did you put any money aside specifically for saving?

☐ No
☐ Yes ==> How much? \$ _____

11. Please circle the number that best describes the extent to which you do the following things:

	Never		Sometimes		Always
	1	2	3	4	5
a. I regularly put aside a portion of the income that I receive as savings	1	2	3	4	5
b. When I save money, I save it for specific things	1	2	3	4	5

12. Below are listed some of the things that you might save for. Check next to each item if you are currently saving for it, and write how much you have saved for it so far.

ITEM	AMOUNT SAVED
_____ a special item of clothing.....	\$ _____
_____ a car.....	\$ _____
_____ future education.....	\$ _____
_____ a stereo.....	\$ _____
_____ "a rainy day".....	\$ _____
_____ a computer.....	\$ _____
_____ travel.....	\$ _____
_____ marriage.....	\$ _____
_____ a television.....	\$ _____
_____ other (specify): _____	\$ _____
_____ other (specify): _____	\$ _____

13. Below are listed some of the ways that people save money. For each one check those people or other information sources that you would rely on most for INFORMATION OR ADVICE before deciding to save money in that way. (YOU MAY CHECK MORE THAN ONE ANSWER IN EACH ROW).

	Sources of Information					
	Friends	TV ads	Salespeople, bank tellers	Parents	Books Consumer reports	Brochures Newspaper or magazine ads
Places to Save						
a. Parents' bank account	_____	_____	_____	_____	_____	_____
b. Your own bank account:						
Savings account	_____	_____	_____	_____	_____	_____
Chequing account	_____	_____	_____	_____	_____	_____
Other bank account	_____	_____	_____	_____	_____	_____
c. Term deposits (GICs, CDs)	_____	_____	_____	_____	_____	_____
d. Bonds	_____	_____	_____	_____	_____	_____
e. Mutual funds, stocks, or other investments	_____	_____	_____	_____	_____	_____
f. Other:						
(specify): _____	_____	_____	_____	_____	_____	_____

Appendix B (continued)

99

14. Have you ever tried to open an account at a financial institution and been refused?

☐ No
☐ Yes ==> Where? _____

15. Below are listed some of the things that people might want to consider before saving their money at a particular bank or financial institution. For each one check how important it would be for you to find out about it before deciding to save your money there. When deciding how important each is, think about how hard you would try to get the information if you did not have it.

	Very Important To Find Out		Neutral		Not Important To Find Out
	1	2	3	4	5
a. Where your parents save.....	1	2	3	4	5
b. Where your friends save.....	1	2	3	4	5
c. How friendly bank tellers are.....	1	2	3	4	5
d. What the interest rates are.....	1	2	3	4	5
e. What the risk of an investment is.....	1	2	3	4	5
f. What the service charges are.....	1	2	3	4	5
g. Types of accounts or investments that are offered.....	1	2	3	4	5
h. What other services are offered.....	1	2	3	4	5
i. Reputation of the institution you are saving with.....	1	2	3	4	5
j. Type of institution (e.g. credit union vs. a chartered bank).....	1	2	3	4	5
k. The advertising of the institution.....	1	2	3	4	5
l. How convenient it will be to save with an institution.....	1	2	3	4	5

SECTION D: BORROWING

The following questions relate to how much money you borrow, from whom, what information you want before borrowing, and from where you get this information.

16. How much money do you currently owe, IN TOTAL, counting all of your outstanding debts?

\$ _____

17. Have you ever borrowed in the following ways? Answer YES or NO for each item, and enter the amount you still owe (as of today) for each item for which you check YES.

Amount Owed

a. Your friends	____ No	____ Yes ==>	\$ _____
b. Your parents	____ No	____ Yes ==>	\$ _____
c. Your parents' credit cards:			
Department store cards	____ No	____ Yes ==>	\$ _____
Visa, Mastercard, Amex	____ No	____ Yes ==>	\$ _____
Gas station cards	____ No	____ Yes ==>	\$ _____
d. Your own credit cards:			
Department store cards	____ No	____ Yes ==>	\$ _____
Visa, Mastercard, Amex	____ No	____ Yes ==>	\$ _____
Gas station cards	____ No	____ Yes ==>	\$ _____
e. Other credit cards:			
(specify): _____	____ No	____ Yes ==>	\$ _____
f. Bank loans	____ No	____ Yes ==>	\$ _____
g. Pawn brokers	____ No	____ Yes ==>	\$ _____
h. Other (specify): _____	____ No	____ Yes ==>	\$ _____

If you have never used a credit card (neither your own nor your parents') please check here _____. Skip questions 18 and 19, and go directly to question 20 on page 9.

18. Did you buy anything for yourself with a credit card last month (October)?
 Answer YES or NO for each item, and enter how much you spent for each item
 for which you check YES.

a. Your parents' credit cards

Department store cards	___ No	___ Yes ==>	\$ ___
Visa, Mastercard, Amex	___ No	___ Yes ==>	\$ ___
Gas station cards	___ No	___ Yes ==>	\$ ___

b. Your own credit cards

Department store cards	___ No	___ Yes ==>	\$ ___
Visa, Mastercard, Amex	___ No	___ Yes ==>	\$ ___
Gas station cards	___ No	___ Yes ==>	\$ ___

c. Other (specify) _____ ___ No ___ Yes ==> \$ ___

19 Please circle the number that best describes the extent to which you do the things
 listed below. If the statement is not applicable to you circle N/A.

	Never 		Sometimes 		Always 	
a. I use my own credit cards regularly.....	1	2	3	4	5	N/A
b. I pay off the entire balance of my credit cards every month...	1	2	3	4	5	N/A
c. I use my parents' credit cards regularly.....	1	2	3	4	5	
d. If I were to use my parents' credit cards I would pay them back for the money I spent....	1	2	3	4	5	
e. I pay my credit card bills with my parents' money.....	1	2	3	4	5	N/A
f. I use credit cards only because they are convenient.....	1	2	3	4	5	
g. I use credit cards when I don't have money to pay the bill.....	1	2	3	4	5	

20. Below are listed some of the things that you might want to consider before using a credit card of your own. For each item, check how important it would be for you to find out about it before deciding to use a credit card. When deciding how important each is, think about how hard you would try to get the information if you did not have it. (YOU CAN ANSWER THIS QUESTION EVEN IF YOU DO NOT HAVE YOUR OWN CREDIT CARD NOW.)

	Very Important To Find Out 		Neutral 		Not Important To Find Out
a. What credit cards your parents use.....	1	2	3	4	5
b. What credit cards your friends use.....	1	2	3	4	5
c. What the interest rates are....	1	2	3	4	5
d. What the payment terms are..	1	2	3	4	5
e. What the service charges are...	1	2	3	4	5
f. Reputation of the credit card company.....	1	2	3	4	5
g. How easy it is to get the credit card.....	1	2	3	4	5
h. Whether or not you will have the money to pay the bill....	1	2	3	4	5
i. Advertising of the credit card company.....	1	2	3	4	5

21. Please check whether you borrowed any money last month (October), from the following sources. If you did, please write down how much you borrowed.

			Amount Borrowed
a. Your friends	___ No	___ Yes ==>	\$ _____
b. Your parents	___ No	___ Yes ==>	\$ _____
c. Bank loans	___ No	___ Yes ==>	\$ _____
d. Pawn brokers	___ No	___ Yes ==>	\$ _____
e. Other (specify): _____	___ No	___ Yes ==>	\$ _____

22. Below are listed some of the things that people might want to consider before borrowing money from a particular place or from particular people (excluding credit cards). For each item, check how important it would be for you to find out about it before deciding to borrow. When deciding how important each is, think about how hard you would try to get the information if you did not have it.

	Very Important To Find Out		Neutral		Not Important To Find Out
	1	2	3	4	5
a. Where your parents borrow.....	1	2	3	4	5
b. Where your friends borrow.....	1	2	3	4	5
c. What the interest rates are.....	1	2	3	4	5
d. What the payment terms are.....	1	2	3	4	5
e. What the service charges are.....	1	2	3	4	5
f. Reputation of the lender.....	1	2	3	4	5
g. How easy it is to borrow the money..	1	2	3	4	5

23. Below are listed some of the places from which people may borrow money. For EACH ONE (whether you have borrowed from that source or not) check those people or things that you would rely on most for INFORMATION OR ADVICE before borrowing money in that way. (YOU MAY CHECK MORE THAN ONE ANSWER IN EACH ROW).

<u>Sources of Information:</u>							
		Friends	TV ads	Salespeople Bank tellers	Parents	Books Consumer reports	Brochures Newspaper ads Magazine ads
<u>Sources of Debt</u>							
a. Your own credit cards							
Dept. store cards	_____	_____	_____	_____	_____	_____	_____
Visa, Mastercard, Amex	_____	_____	_____	_____	_____	_____	_____
Gas cards	_____	_____	_____	_____	_____	_____	_____
b. Your parents' credit cards							
Dept. store cards	_____	_____	_____	_____	_____	_____	_____
Visa, Mastercard, Amex	_____	_____	_____	_____	_____	_____	_____
Gas cards	_____	_____	_____	_____	_____	_____	_____
c. Other credit cards	_____	_____	_____	_____	_____	_____	_____
d. Bank loans	_____	_____	_____	_____	_____	_____	_____
e. Pawn brokers	_____	_____	_____	_____	_____	_____	_____
f. Your friends	_____	_____	_____	_____	_____	_____	_____
g. Your parents	_____	_____	_____	_____	_____	_____	_____
h. Other (specify):	_____	_____	_____	_____	_____	_____	_____

24. Below are listed some of the things that people might borrow money to buy. Write next to each item how much you have spent on it within the last 6 months, and estimate the amount that you spend for each item on a credit card and with other borrowed money. ENTER 0 IF YOU HAVE NOT BOUGHT THE ITEM WITHIN THE LAST 6 MONTHS.

Item	Total amount spent	Amount spent on credit card	Amount spent with borrowed money
a. Clothing	\$ _____	\$ _____	\$ _____
b. Stereo equipment	\$ _____	\$ _____	\$ _____
c. Computer equipment	\$ _____	\$ _____	\$ _____
d. Records, CDs, tapes	\$ _____	\$ _____	\$ _____
e. Sports equipment	\$ _____	\$ _____	\$ _____
f. Jewelry	\$ _____	\$ _____	\$ _____
g. Cosmetics	\$ _____	\$ _____	\$ _____
h. Television	\$ _____	\$ _____	\$ _____
i. Other (specify): _____	\$ _____	\$ _____	\$ _____
j. Other (specify): _____	\$ _____	\$ _____	\$ _____

SECTION F: DEMOGRAPHICS

We need some demographic information about you to help us interpret this questionnaire. To answer the following questions please check the answer which best describes you or fill in the information requested.

25. What is your sex? _____ Female _____ Male
26. How old are you? _____ years
27. What grade are you in? _____10 _____11 _____12 _____13
28. What percentage of the time does your mother live with you? _____ Percent
29. What percentage of the time does your father live with you? _____ Percent
30. How many brothers and sisters do you have? _____

31. What is your religion?

- ☐ No religion
- ☐ Catholic
- ☐ Protestant
- ☐ Jewish
- ☐ Other

32. How important is your religion to you?

Very
Important

|

1

2

|

3

4

Not
Important

|

5

N/A

33. Please check the answer that BEST describes:

**Your MOTHER'S
educational background**

- ☐ High school or less
- ☐ Community college
- ☐ Some university
- ☐ A university degree
- ☐ Professional designation
after university
- ☐ Post-graduate degree(s)

**Your FATHER'S
educational background**

- ☐ High school or less
- ☐ Community college
- ☐ Some university
- ☐ A university degree
- ☐ Professional designation
after university
- ☐ Post-graduate degree(s)

34. Please describe what your parents do for a living. The more specific you can be the better. If they are no longer working, please describe what they did before they stopped working.

MOTHER

FATHER

35. Please check the answer that best describes your annual family income (before taxes).

☐ less than 30,000
☐ 30,000 to 59,999
☐ 60,000 to 89,999
☐ 90,000 to 119,000
☐ 120,000 and over
☐ Don't know

Thank you for your help in filling out this questionnaire. Your cooperation is very much appreciated.

Appendix C: Letter of Parental Consent

Carleton University
Ottawa, Canada K1S 5B6

November 9, 1992

Dear Parent/Guardian:

High school students earn and control more money today than they ever have done in the past. Very little is known, however, about how students manage their money and make decisions about how to spend it. As a result, we are presently conducting a master's thesis study on how young people manage their money. Specifically, we are interested in the saving and borrowing practices of high school students. Information about how they manage money is important to many people, including high school students themselves, parents, schools, marketers, and even banks and financial institutions: some banks catering exclusively to the needs of teenagers have opened recently in the United States.

Since the study requires participation from a comprehensive sample of high school students, the Research Advisory Committee of the Ottawa Board of Education and the Principal have given us permission to gather data. We would appreciate it very much if you would allow your son or daughter to participate in the study. It will take approximately 30 minutes to fill out the questionnaire, and it can be done at home. The questions relate to the money earned, saved, borrowed, and spent by your son or daughter; attitudes toward money and buying; information used when borrowing and saving; and -- for classification purposes only -- some general family demographics (age, sex, family size, family education background, family income).

Please do allow your son or daughter to participate. While his or her participation is not mandatory, and can be withdrawn from the study at any time, your cooperation will be very helpful. Participation in the study will not be related in any way to school grades.

You may be assured that all information given will be completely confidential. Names do not appear on the questionnaire, so no one will be able to tell who filled which one out. Answers of all respondents will be combined and the final thesis will report only on the combined data. Individual responses will NOT be identified. We would be pleased to answer any questions that you might have.

Sincerely,

Paul Rosenbaum
Paul Rosenbaum, B.Com.
Graduate Student
526 1243

Judith Marshall
Judith Marshall, Ph.D.
Thesis Supervisor
788 - 6654

CONSENT:

This information is confidential and is protected under the Freedom of Information and Protection of Privacy Act, 1989 (R.S. 49).

I have read and understood the request for my son/daughter to participate in the study: "An Investigation of Adolescent Saving and Borrowing". I have discussed this with my son/daughter and:

☐ I give permission for my son/daughter to participate.
☐ I do NOT give permission for my son/daughter to participate.

NAME OF STUDENT: _____ DATE: _____

SIGNATURE OF PARENT OR GUARDIAN: _____

SIGNATURE OF STUDENT, IF 18 OR OVER: _____

School of Business ☐ Faculty of Social Sciences ☐ Dutton Tower
(613) 788-2388 Fax: (613) 788-2532 Fax: (613) 788-4427

Appendix D: Table of Occupational Social Status

Appendix F: Table of Occupational Status

Rate	Professional	Businesses	White Collar	Blue Collar	Service	Agriculture
7.	Lawyers; judges; doctors; engineers; professors; school superintendents; et al.	Top executives of corporations, banks, or public utilities, etc.	CA's; newspaper or magazine editors; executive secretaries of status companies			Gentlemen farmers or landholders who do not directly supervise their property
6.	High school teachers, librarians, and others with a 4-year degree	Assistants; office and department managers or supervisors; manufacturers' agents	Accountants; insurance real estate or stock brokers; editorial writers			Land operators who supervise properties and have an active urban life
5.	Grade school teachers; registered nurses; ministers; others without 4-year degree	Managers of small branches; buyers and salesmen of known merchandise	Bank clerks; automobile salesman; postal clerks; agents and supervisors	Small contractors who work at or supervise their own jobs		Farm owners with "hired help"; operators of leased property
4.		Stenographers; bookkeepers; ticket agents; salespersons in department stores, et al.		Foreman; master carpenters, electricians.	Police captains, tailors, railroad conductors, jewellers	Small landowners, operators of rented property with hired hands
3.		Dime-store clerks, grocery clerks; telephone operators and beauty operators, et al.		Apprentices to skilled trades; repairman; semi-skilled workers	Policemen; barbers; practical nurses; etc.	Tenants on good farms; foremen; owners of farms who "hire out"
2.			Semi-skilled factory and production workers; assistants in skilled trades; warehouseman, watchman		Taxi and truck drivers; waiters and waitresses; gas station attendants	Sharecroppers; established farm labourers
1.	"Reputed lawbreakers"		Heavy labour; odd-jobs men; or mill hands, unskilled workers		Domestic help; bus boys; janitors	Migrant workers; "squatters"

Source: From Hellizer "The Youth Market" (1971). The table was originally found in Carson McGuire and George D. White's *The Measurement of Social Status* (Research Paper in Human Development No. 3 rev., Austin: Department of Educational Psychology, University of Texas, 1955)

Appendix E: Research Schedule

Tasks	Time
Proposal Preparation	June 22 - September 15, 1992
Proposal Submission	September 15
Questionnaire Pretest	September 15 - 30
Data Analysis Preparation	September 15 - November 15
Proposal defense	October 2
High School Clearance	October 15
Sample Selection	October 16 - November 15
Sampling	November 5 - 31
Data Entry	November 17 - December 7
Data Analysis	November 28 - December 14
Thesis writing	January 14 - April 30
Draft 1 Submission	March 10
Draft 2 Submission	March 20
Final Draft Submission	March 28
Thesis Defense	April 23, 1993

Appendix F: Cost Schedule

Literature review	75.00
Proposal reproduction	25.00
Ethics Committee application	20.00
School board applications	50.00
Questionnaire reproduction	800.00
Data collection	130.00
Thesis reproduction	100.00
Participant feedback	<u>25.00</u>
Total	<u>\$1225.00</u>

END

1 6 - 1 2 - 9 3

FIN