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College Students' Consumer Competence: Identifying the Socialization Sources

**AUTHOR(S):** Marie J. Lachance and Frédéric Legault

**ABSTRACT**

The role of consumer requires the reaching of social expectations, which implies a certain level of performance in relevant activities. Although young people seem to show many deficiencies, we know very little about what sources will help to develop their competence in consumer matters. This exploratory study was applied to a convenience sample of 960 college students who were asked to complete a questionnaire during class time. Once the impact of personal characteristics was controlled, the significant socialization sources on consumer attitudes towards consumption (credit, advertising and commercial practices) were media, peers and school, in decreasing order of importance. For consumer preventive and defensive behaviors, parents, school and peers were the significant socializing sources. Only parents had a significant influence on consumer knowledge. When significant, the influence of parents and school on consumer competence is positive whereas the influence of peers and media is negative. The results are discussed in the light of consumer education and the need to study consumer competence further.

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**Introduction**

The role of consumer decision maker begins at a young age, and individuals are socialized in this role as they develop their knowledge, skills and values throughout their entire life (Moschis 1987). There are, however, many reasons justifying the study of young people's competence as consumers. The most important is that they represent a major commercial target, due to the fact they have money to spend, and most do not have the financial responsibilities of a family. Moreover, many still rely on the financial support of their parents and share with their peers a great desire to consume (Gronhoj 2004). Indeed, youth is a time for many new and important consumer experiences (buying furniture or a car, using credit cards, etc.) (Gronhoj 2004), and for learning consumer preferences, attitudes and behaviors, many of which will persist during the rest of their adult life (McNeal 1992).

Another important reason is that young people seem to show many deficiencies in terms of consumer competence. For instance, they tend to demonstrate certain weaknesses in their decisions concerning the acquisition of durable goods as they establish their homes, especially

regarding information collection and price/quality comparisons (Gronhoj 2004). They also show a propensity to associate higher quality to branded products, and consult consumer organizations' magazines only to a limited extent (Gronhoj 2004). While they do show rather a positive attitude toward credit (Hayhoe, Leach, Turner, Bruin and Lawrence 2000; Warwick and Mansfield 2000), their knowledge of consumer affairs in general and of money management and credit in particular is lacking (Davies and Lea 1995; Mandell 2000; Merrick 1999; Stafford-Smith and Mackey 1989; Warwick and Mansfield, 2000). Many young adults, college students or not, keep an unpaid balance on their credit cards (Consumer Federation of America 1999; FACEF 1998; Canadian Millennium Scholarship Foundation 2003; Lachance, Beaudoin, and Robitaille 2005a; Léger Marketing 2001; Martineau 1995) and have a relatively high level of consumer debt (Consumer Federation of America 1999; Lachance et al. 2005a). Among Canadian young adults, it was found that 40% of 15 to 25 year-olds did not know where to find consumer information or to complain, and that the majority did not read labels before buying products or did so rarely (Rioux, Meunier and Ebnoether 1984). Similarly, another study found that Quebec young adults of the same age group did not budget and could not name even one consumer protection organization (Brochu and Young 1986). More recently, although the majority of young Canadian adults were found to use credit regularly, their knowledge of this matter was deficient (FACEF 2001; Lachance, Beaudoin, and Robitaille 2005b).

Some of the knowledge, attitudes, and behaviors related to consumer competence or abilities seem to be associated with socioeconomic variables such as age, gender, ethnicity, and with other variables such as the number of credit cards or debts, and the level of debts (Lyons 2004; Mandel 1999; Markovich and DeVaney 1997; Stafford-Smith and Mackey 1989). However, we know very little about which sources could help to develop this consumer competence. Thus, the main objective of the research was to assess the relative importance of the main socialization influences on young people's consumer competence.

### **Consumer Competence: Definition and Conceptual model**

Consumption activities not only encompass the economic capacity to buy goods and services but also involve skills, attitudes and knowledge associated with a rational approach to consumption (Royer and Nolf 1980). A competent consumer is expected to be informed, alert, responsive and responsible (President's Committee on Consumer Interests 1970). Despite these propositions, a standard definition of consumer competence does not exist in the literature. Young (1993), from the Quebec Consumer Protection Office, suggested that competent consumers are individuals who consume according to their needs and resources, show attitudes such as being critical towards advertising, and adopt preventive and defensive consumer behaviors, such as searching for information before buying something and complaining when unsatisfied or deceived. This description corresponds to the idea expressed by many authors and researchers who describe consumer capabilities with cognitions, attitudes and behaviors. Correspondingly, they measure elements such as basic knowledge of consumer markets, financial matters, and consumer rights and responsibilities; skepticism towards advertising; control of impulsiveness; budgeting, saving money, and comparing prices, quality and guarantees before buying (Brée 1993; Gronhoj 2004; John 1999; Lachance and Choquette-Bernier 2004; Moschis 1987). Based on these criteria we could define consumer competence as a multi-dimensional concept composed of cognitive, affective and behavioral aspects related to well-advised, prudent and responsible consumer activities.

Many factors are likely to be related to consumer competence, but because we were interested especially in the learning and development of such competence, we chose those relevant to a socialization approach. Consumer socialization is defined as the process by which individuals acquire from their environment those skills, knowledge and attitudes that are relevant to their consumer role (Ward 1974). Moschis and Churchill (1978) proposed a conceptual model of this perspective that, combined with our review of the literature, guided our choice of independent variables (see Figure 1). The socialization perspective requires the review of the learning (socialization) agents involved in the development of the consumer. Socialization agents refer to the persons or institutions directly involved in consumer socialization because of their frequency of interaction, primacy, and control over rewards and punishments made available to developing consumers (Gunter and Furnham 1998). This model also suggests that we study or control socioeconomic variables, considered as antecedent variables.

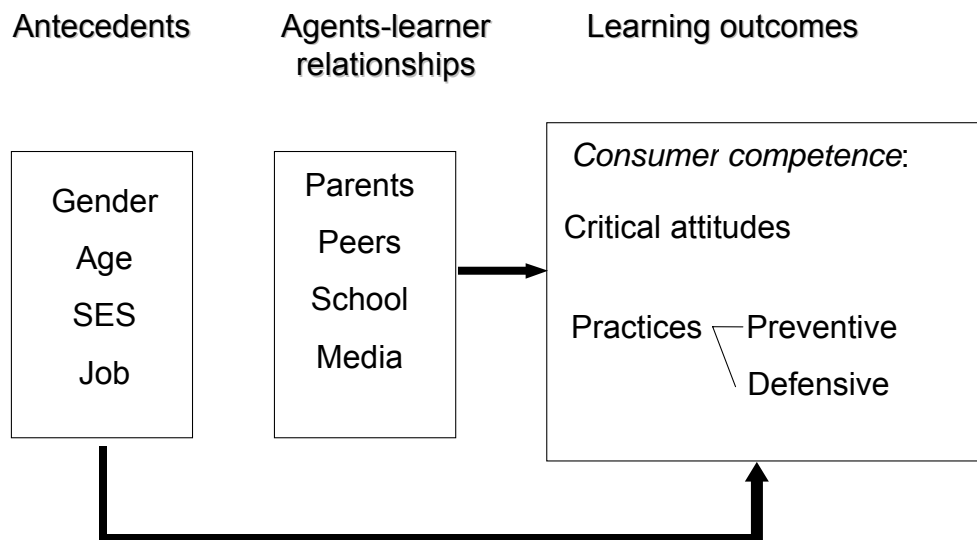


Figure 1. Variables in Moschis and Churchill's (1978) consumer socialization model

### Influence of Socialization Sources

The literature suggests that parents are not only one of the most important sources of consumer socialization but that they are mainly responsible for their offspring's instrumental learning (Brée 1993; Gunter and Furnham 1998; Moschis 1987). They act as role models and teach or reinforce the different abilities related to the functional or rational aspects of consumer roles (John 1999). Preventive and defensive behaviors of young consumers seem to be encouraged by certain styles of parental communication about consumption matters (Lachance, Bujold, and Legault 2000; Moschis, Moore, and Smith 1984). Parental supervision and advice help them acquire behaviors such as managing their own money, doing comparative shopping, and comparing price-quality ratios (Mascarenhas and Higby 1993).

School is the second agent known to be associated with instrumental consumer learning (Brée 1993; Moschis 1987). Although the efficiency of consumer education in school is not well established (Mandell 2001; Moschis 1987), many studies have shown that if they have taken courses in school, students possess better personal finance skills (Credit Union National Association 2002; Lachance et al. 2005b; Stafford-Smith and Mackey 1989).

Peers are mainly recognized for their assistance in developing the expressive aspects of consumer roles rather than the instrumental or rational ones generally associated with competence. They tend, for example, to influence sensitivity and preferences for brands (Lachance, Beaudoin, and Robitaille 2003), the fostering of materialistic values and social motivations for consumption, and they encourage the seeking of social approval (Brée 1993; Gunter and Furnham 1998; Moschis 1987).

The media tend to present diverse socializing influences. Results related to the influence of television exposure on consumer behavior or socialization – which is most often used as a proxy for the influence of TV advertising – concern mostly children or adolescents (e.g., Gunter and MacAller 1997; Halford Gillespie, Brown, Pontin, and Dovey 2004; John 1999). TV exposure is generally related to the expressive aspects of consumer learning, although not exclusively (Brée 1993; Gunter and Furnham 1998; John 1999; Moschis 1987). The review by Buijzen and Valkenburg (2003) for instance tends to show that advertising enhances materialistic values in children and adolescents while in other studies it is linked to a higher level of skepticism among adolescents toward advertising, which is considered an instrumental outcome or a consumer ability (e.g., Mangleburg and Bristol 1998). Newspaper reading has not yet been studied very often. This media has been found to contribute to the acquisition of instrumental skills such as the knowledge of consumer affairs and the ability to manage consumer finances (Moore and Moschis 1981; Moschis and Moore 1978). To our knowledge, no research investigates the influence of magazine reading for certain aspects of consumer competence. Given that adolescents are reported to be reading more magazines than previously (Zollo 2004), it seemed useful to explore this influence with young adults. The Internet is very popular among young people. For instance, in Canada 93% of high school students connect to the Internet (Statistics Canada 2007). In addition to it being used for study and work, we can suppose that it has become an important activity for young people and an actual source of consumer socialization. To our knowledge, however, this media has not been studied in relation to consumer competence or socialization, although there was one qualitative study on adolescents which suggested that it could be useful among adolescents for health education issues, such as sun safety (Peattie 2002).

The majority of Canadian college students have part-time jobs (Canada Millennium Scholarship Foundation 2003; Franke 2003). Although rarely studied in the past, some findings suggest that participation in the workforce would be a socialization source involved in the development of consumer competence, at least for teenagers. Compared to those who received their pocket money from their parents, high school students who receive their income from paid work have been found to be more vigilant consumers (Lachance 1997). One may thus assume that having a job would enhance competence through greater consumer and financial independence, maturity or discussion with colleagues at work. Hence, it seemed relevant to explore the influence of work status on college student consumer competence.

The conceptual model and the review of the literature also suggest that age, gender and socioeconomic status may be related to consumer competence. Indeed, researchers have found

significant differences between younger and older adolescents. For instance, older adolescents possess greater amounts of consumer knowledge, seek information from different sources prior to making decisions and show less favorable attitudes towards advertising (Churchill and Moschis 1979; Moschis and Moore 1980). Other studies, however, have not found any relationship with variables such as credit knowledge (Lachance et al., 2005b), preventive and defensive behaviors (Lachance et al. 2000), vigilant consumer behavior (Moschis and Moore 1980) and credit knowledge (Lachance et al. 2005b).

The results regarding gender differences are mixed as well. For instance, some studies have found that female adolescents tend to compare products before buying more than males, yet they show more positive attitudes towards advertising (Moore and Moschis 1978). Still, they do not appear to adopt more preventive or defensive behaviors than boys (Lachance et al. 2000), and among college students females score lower on consumer knowledge than males (Stafford-Smith and Mackey, 1989). The gender of young adults is not however related to their knowledge about credit matters (Lachance et al. 2005b).

Most often, socioeconomic characteristics have been studied as control variables and generated inconsistent results. For instance, compared with their middle-class counterparts, lower-class youths were found to be less able to filter puffery in advertising and less inclined to use rational criteria when evaluating products (Moschis and Churchill 1979). A positive relationship was found between young adults' credit knowledge and income, but none with their level of education (Lachance et al. 2005b). No significant relationships were found between parents' socioeconomic status and teens' preventive and defensive consumer behaviors (Lachance et al. 2000).

The mixed findings relating to the influence of antecedent variables may be partly explained by age differences between the studied samples and the substantial variations in socioeconomic characteristics and aspects of consumer competence examined. Considering their possible influence, it seemed useful to control these variables when attempting to identify the significant socialization sources of consumer competence.

The mixed results reviewed in previous research led us to undertake an exploratory study with the objective of addressing socialization agents' influences on consumer competence among young adults while controlling for socio-economic variables.

## **Method**

### **Procedure and Participants**

The entire questionnaire was composed of 183 items and was administered to students during class at 10 colleges in the Quebec City and Montreal areas, two major urban areas in the province of Quebec (Canada). The colleges chosen represent a variety of socioeconomic contexts. The teachers and administrations were contacted and informed us of which classes would be best to reach students without approaching them more than once. In each selected class, a trained research assistant informed the students of the general objective of the research, the confidentiality and anonymity of their responses, and their freedom to participate in the research. The students who accepted to participate were administered a pencil and paper questionnaire during class. The few who did not participate were asked by their teacher to do

personal work or reading. The resulting sample was composed of 960 French Canadians aged 17 to 25. The various academic programs in which they were enrolled were exclusively non terminal (2 years) and would lead to university studies (e.g., Natural Sciences, Human Sciences, Arts and Literature). Analysis showed that the programs in which the students were enrolled did not influence the results.

Of the 960 subjects, 751 provided complete data on each variable covered by the study. Most respondents who had missing data did not report the occupation of their parents (N = 158), which is information required to identify Blishen's score of related socioeconomic status (Blishen, Carroll, and Moore 1987). Certain others did not complete data on the influence of media (N = 58), or did not give their gender (N = 14). Finally, four had missing data on some attitude scales. The cross-checks of these missing data reveal that a total of 209 participants had missing data. To examine the impact of this sample's attrition on our data, we tested the mean differences for the seven original dependent variables: knowledge, preventive and defensive behaviors, and the four attitudinal variables: attitudes toward compulsive shopping, consumer society, credit, and advertising. There were no significant differences except for the knowledge score. On that variable, respondents with complete data had a mean of 7.00 (S.D. = 2.16), and surpassed significantly those with incomplete data, who had a mean of 6.58 [(S.D. = 2.31):  $t(955) = 2.43$ ,  $p < .05$ ].

Finally, the 751 respondents came from a variety of socioeconomic status levels (Mean Blishen score = 53.33/102; S.D. = 13.94).<sup>1</sup> Their mean age was 18.43 (S.D. = 1.73). Of the group, 58.5% were females and 41.5% were males. A majority was studying full time and 85% lived with their parents. Just over 78% were employed, 72.0% in part-time jobs (M = 15.74 h/week, S.D. = 6.84).

## Measures

Based on Young's definition (1993) and the previous research about consumer competence (Gronhoj 2004; Stafford-Smith and Mackey 1989), our measures took into account knowledge, attitudes and practices related to consumer competence. Table 1 presents the information about the scales.

### Consumer Knowledge

To assess consumer knowledge, a subscale of 15 true or false questions related to three domains was developed: labeling, personal finances, advertising and commercial practices. This instrument was content-validated by six judges who considered these items to be adapted to the level of knowledge expected for people within the targeted age. They were known for their professional reputations or were personally known by members of the research team. There were two high school teachers in consumer education, one academic specialized in consumer education, one professional from the Quebec Consumer Protection Office, one education agent from a well known credit and budget counseling organization, and one graduate student in education and consumer studies. The scale was also tested for clarity and understanding with a

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<sup>1</sup> This score comes from Blishen, Carroll and Moore's socioeconomic index of occupations in Canada (1987). This index is based on the median income and educational level for a specific occupation and weighted by its prestige score.

Table 1. Description of Scales

Scales <sup>1</sup>	Nbr of items	Cronbach $\alpha$	Min-Max	Contributing authors	Examples of items
Consumer knowledge	9	-	0-15	-	"Fees paid by consumers when buying with a debit card are identical for every retailer"
Attitudes toward :					
Consumption	5	.85	5-25	Sigmen (1992)	"I like to buy and possess products"
Credit	3	.74	3-15	Sigmen (1992)	"The use of credit is nowadays a necessity"
Advertising	5	.73	5-25	Sigmen (1992)	"Ads are honest and present true and exact information"
Compulsive shopping tendencies	11	.89	11-55	d'Astous, Maltais, and Roberge (1990)	"For me, shopping is a means of relaxation"
Preventive practices	9	.70	9-45	Sigmen (1992)	"I regularly save money" When I buy a product for the first time, I generally read the information on the wrapping"
Defensive practices	6	.72	6-30	Sigmen (1992)	"In case of problems, what I do not succeed in solving with the retailer, I refer to a relevant organism"
Socialization influences					
Parents	6	.81	6-30		"I often ask my parents' advice before making an important expense"
Peers				Bearden, Netemeyer, and Teel (1989)	"I like to know what brands and products make good impression on others"
Normative	9	.92	9-45		
Informational	3	.83	3-15		"I often consult my friends to help me make the best purchase of a product"
School	6	.81	6-30		"In some high school courses, I learned useful things about the marketplace"
Media					"TV/Internet/ magazines, Newspaper provides me useful information about consumer matters/ trends/what is available on the market"
TV	4	.71	4-20		
Internet	4	.86	4-20		
Newspapers	4	.83	4-20		
Magazines	4	.81	4-20		

<sup>1</sup> Consumer knowledge scale is composed of true/false items. The other scales include items to be answered on a five-point Likert type items from 1 (strongly agree) to 5 (strongly disagree).

sample of 64 students. The correct answers were summed to compose a score. Examples of items from each domain are:

- Labeling: "The "best before" date on food products such as yogurt means that these products are no longer edible after this date". (F)
- Personal finances: "Fees paid by consumers when buying with a debit card are identical for every retailer". (F)
- Advertising and commercial practices: "On TV (in Quebec), it is forbidden to direct advertising to children aged less than 13 years old". (T)

## **Consumer Attitudes**

As suggested by Young's (1993) definition of the competent consumer, we evaluated diverse consumer attitudes. We then adapted three of Sigmen's scales (1992).

*Attitudes towards consumption:* To what extent students value consumption.

*Attitudes towards credit:* Students' degree of approbation of credit.

*Attitudes towards advertising:* Students' perceptions of advertising. A high score reflects a critical attitude toward advertising.

*Compulsive shopping tendencies:* Students' attitudes toward compulsive buying. A high score reflects a lower tendency to buy compulsively. From d'Astous, Maltais, and Roberge (1990), this instrument, largely used in Canada and Europe, was chosen over Faber and O'Guinn's (1992) scale because it was adapted especially for young people and designed to measure tendencies in compulsive shopping instead of identifying extreme compulsive buyers (Cole and Sherrel 1995).

A principal components analysis revealed that these four scales could be gathered into a one-factor solution which explained 44.9 % of the variance. The consumer attitudes score was obtained by calculating the mean of the four attitude scales, following a z-score transformation. A high score means critical attitudes.

## **Consumer Preventive and Defensive Practices**

Consumer preventive and defensive practices were also adapted from two of Sigmen's (1992) scales which were developed previously for a national study made by the Quebec Consumer Protection Bureau. Both contain 5-point Likert-type items.

*Preventive Practices:* Respondents' prudent behaviors like saving money, planning future expenses, comparing prices, asking questions before buying, etc.

*Defensive Practices:* Respondents' propensity to take action when a problem is encountered with products or services that have been bought.

The correlation between defensive and preventive practices was positive and significantly different from zero ( $r = .28, p < .01$ ). Each behavioral score was transformed into a standardized value with a zero mean and a unit standard deviation (Hair, Anderson, Tatham, and Black 1995). The final score was calculated as the mean of the z-scores for the preventive and defensive practices.



## **Socialization Influences**

Among independent variables, only the influence of peers was measured in terms of an existing scale (Bearden, Netemeyer, and Teel 1989). The instruments used to evaluate the influence of parents, school, and media were developed by the authors and tested through a pilot study, with two different samples of over 100 subjects. These scales measure the subjects' perceptions of the influence of each of the specific sources on their consumer behavior. They were constructed on a similar model with the objective being to compare the agents' influences as persuasion agents (e.g., TV/newspaper/magazines/Internet gives me useful information about consumption) and models (e.g., At least one of my parents/one of the adults I met at school has been a model for me).

*Peers' Normative Influence:* This scale includes items that posit consumption as a way to belong to or be accepted by a reference group.

*Peers' Informational Influence:* The propensity of the respondents to seek information on products from their peers.

*Parents' Influence:* This scale taps two components of the construct, the first being the perception of parental verbal influence, and the second being the perception of parents as consumer models for oneself.

*School Influence:* Respondents' perception of whether or not what they learned in school helped them to acquire useful competence within their consumer role.

*Media Influence:* Perception of media influence on consumer behavior includes four scales, each one relating to a media: television, Internet, newspapers, and magazines. A principal components analysis revealed that these scales could be gathered into a one-factor solution which explained 53.4% of the variance. Each media influence score was transformed into a standardized value with a zero mean and a unit standard deviation, and the final score was calculated as the mean of the z-scores for the four scales. The perceived influence of radio was not studied in the research because this traditional media is not popular among the studied population (Bureau de la statistique du Québec 2002).

## **Control Variables**

The questionnaire also included items about demographic variables: employment, gender, age, and socioeconomic status based on the socio-professional status of the parents (Blishen et al. 1987), which were used as control variables.

## Findings

### Descriptive Results

Table 2 lists the means, standard deviations and intercorrelations among substantive variables. Preventive and defensive behaviors were positively correlated with parents, school and media influences, while correlations with peer influences were mixed. Consumer attitudes were negatively correlated with peer normative, peer informative, media and parental influences, while knowledge was negatively correlated with media, peer normative, parental and school influences.

Table 2. Correlations among socialization influences, competence subscales, and personal characteristics

	1	2	3	4	5	6	7	8	9	10	11
1. Parents <sup>1</sup>	--										
2. School	.18**	--									
3. Peers <sup>2</sup>	.05	.11**	--								
4. Peers <sup>3</sup>	.23**	.13**	.37**	--							
5. Media	.13**	.22**	.42**	.29**	--						
6. Behaviors	.31**	.16**	-.10**	.10**	.07*	--					
7. Attitudes	-.08*	-.03	-.44**	-.14**	-.45**	.14**	--				
8. Knowledge	-.07*	-.07*	-.37**	-.15	-.39**	.10**	.74	--			
9. Age	-.06*	-.26**	-.11**	-.09**	-.07*	.16**	.06	.14	--		
10. SES <sup>4</sup>	.03	-.07*	-.01	.00	.03	-.08*	-.02	-.03	-.12**	--	
11. Gender <sup>5</sup>	-.16**	.02	.10**	-.07*	.01	-.06	.08*	.00	-.02	.07*	--
12. Job <sup>6</sup>	.03	.02	.01	.01	.04	.01	-.06	-.05	.12**	-.06	-.03
Mean	3.49	3.06	3.36	2.13	2.72	3.51	3.35	6.96	18.43	53.32	
S.D.	0.85	0.87	0.96	0.88	0.72	0.47	0.59	2.22	1.73	13.95	

<sup>1</sup> Socialization influences (1 to 5) = Numeric values

<sup>2</sup> Normative influence

<sup>3</sup> Informative influence

<sup>4</sup> SES (socioeconomic status) = Numeric values

<sup>5</sup> Gender : 0 = Female; 1 = Male

<sup>6</sup> Job : 0 = No; 1 = Yes

\* p>.05. \*\* p<.01. \*\*\* p<.001.

## Multivariate Results

Three series of hierarchical regression analyses were performed using the three different dimensions of consumer competence as the three dependent variables: consumer knowledge, behaviors and attitudes. The influence of potentially important antecedent variables — age, gender, socioeconomic status and employment — were first entered into each equation in order to predict the final level of outcome. The socialization influences were entered in a second step to assess their relative explanatory importance (Hair et al. 1995).

*Consumer Knowledge.* The first analysis explored whether diverse socialization influences predicted changing levels of consumer knowledge. The global results are non significant [ $F(9, 740) = 1.69, p = 0.09$ ]. Only perceived parental influences and socioeconomic status constitute significant predictors of consumer knowledge (see Table 3).

Table 3: OLS multiple regression results for college students' consumer attitudes and behaviors

	Consumer knowledge			Consumer attitudes <sup>1</sup>			Consumer behaviours <sup>2</sup>		
	Beta	R <sup>2</sup>	R <sup>2</sup>	Beta	R <sup>2</sup>	R <sup>2</sup>	Beta	R <sup>2</sup>	R <sup>2</sup>
Step 1 :									
Personal characteristics									
Age	-.051			.020			.210***		
Gender <sup>3</sup>	.051			.111***			-.005		
SES <sup>4</sup>	-.073*			-.018			-.064		
Job <sup>6</sup>	.031	.010		-.064*	.014*		-.024	.038***	
Step 2:									
Socialization influences <sup>5</sup>									
Parents	.082*			-.030			.262***		
Peers normative	.004			-.336***			-.155***		
Peers informative	-.002			.116***			.121***		
School	-.001			.076*			.157***		
Media	.053	.010	.020	-.350***	.285***	.299***	.056	.142***	.180***

<sup>1</sup> Dependent variable is a composite score of four attitude scales towards consumption, credit, advertising, and commercial practices (a high score indicates a critical attitude).

<sup>2</sup> Dependent variable is a composite score of preventive and defensive practices subscales.

<sup>3</sup> Gender : 0 = Female; 1 = Male

<sup>4</sup> SES (socio-economic status) = Numeric values

<sup>5</sup> Socialization influences = Numeric values

<sup>6</sup> Job : 0 = No; 1 = Yes

\*  $p > .05$ . \*\*  $p < .01$ . \*\*\*  $p < .00$

*Consumer Attitudes.* Results of the second analysis showed that the linear combination of the variables included in the model was significantly related to consumer attitudes [ $F(9, 717) = 34.39, p < 0.001$ ] and that the model explained 30.2% of the variance. Table 3 also lists the determinants for the students' consumer attitudes. Once the influence of the antecedent variables was controlled, the results allowed us to identify the significant socialization sources: peers' normative and media influences were negatively related to consumer attitudes, while peers' informative and school influences were positively related. We substituted the media variable with its primary elements (TV, magazines, Internet and newspaper influences), and then repeated the regression analysis four times. Each media was negatively related to consumer attitudes, but the greatest coefficients were those involving TV (Beta =  $-.38, p < .001$ ) and magazines (Beta =  $-.33, p < .001$ ), followed by the Internet (Beta =  $-.20, p < .001$ ) and newspapers (Beta =  $-.10, p < .01$ ). Finally, among the antecedent variables employment was negatively related to consumer attitudes and boys' attitudes were more critical than girls'.

*Consumer Behaviors.* Results of the third regression analysis also showed that the linear combination of the socialization sources was significantly related to consumer behaviors [ $F(9, 716) = 18.10, p < 0.001$ ] and that the model explained 18.5% of the variance. Five significant socialization sources were identified: parents, peer informative, school and media had a positive influence on consumer preventive and defensive behaviors, while the peers' normative influence was negatively related to consumer behaviors. The latter is also positively related to age but negatively to socioeconomic status. Only one of the four media variables, newspapers, was significantly and positively related to behaviors (Beta =  $.13, p < .01$ ).

## Discussion

The purpose of this study was to examine the perceived influences of diverse socialization sources on consumer competence for a sample of college students. The results partially confirmed the general hypothesis that consumer attitudes and behaviors were clearly related to many socialization influences, yet this was not the case for consumer knowledge.

### Consumer Knowledge Relatively Unaffected by Socialization Sources

The overall results regarding knowledge were not remarkably strong. Only two modest relations were found: one was the perceived influence of parents and the other their socioeconomic status. Based on our sample of college students, perceived verbal influences and modeling of parent values were the only socialization sources that moderately predicted consumer knowledge. The low but negative relationship between socioeconomic characteristics and consumer knowledge does, however, suggest that acquiring consumer knowledge is partially linked to economic necessities. This is in line with earlier research concerning the influence of socioeconomic status on consumer competence that found that children from lower socioeconomic backgrounds were better advised on certain consumer matters (Moschis and Churchill 1979).

### Consumer Attitudes Mostly Influenced by Media and Peers

First, we observed that the perceived influence of media such as TV and magazines relates positively to favorable attitudes towards consumption, credit and advertising: young people who agree that they are influenced by these media when playing their consumer roles are more likely

to show uncritical attitudes than are their counterparts. This result concurs with the consensus that the role played by the mass media in consumer socialization is generally not instrumental (e.g., Brée 1993; Gunter and Furnham 1998; Moschis 1987). It suggests that being exposed to soaps, music and variety shows – the most popular programs reported in our sample – does not contribute towards developing abilities related to critical attitudes on consumption. TV and magazines are for the most part entertaining, not educational (an observation that is not surprising). Their perceived influence is linked to less competence, and this is of great interest when discussing consumer socialization or education. The fact that respondents recognize that TV has some influence on their consumer behaviors suggests that this media does not represent unconscious pressure on young peoples' consumer abilities. Given that this influential source is so popular among young people, it could most certainly be exploited as a method of educating them.

In this study, the perceived influence of the Internet correlates negatively with critical attitudes. Adolescents and young adults who surf the Internet mainly send and receive e-mails or browse to collect information (Newburger 2001; Statistics Canada 2004). Their Web-consumption activities can be characterized as utilitarian or hedonic (Hartman, Shim, Barber, and O'Brien 2006). In our study this hedonic function seems to be the major motive for their activities.

Even though not often studied in the past, a positive association has sometimes been found among teens between newspaper reading and their level of consumer abilities (Moschis and Moore 1978; Moore and Moschis 1981). In the present research, it seems that college students who stated they were influenced by newspapers in their consumption were no more likely to have critical attitudes towards consumption than others. This difference in results may be partly explained by age of the respondents. For teens, it has been suggested that this relationship is indirect: reading newspapers would initiate discussions with parents who are in turn involved in the development of competence about consumer matters. This may be not the case for young adults.

It was not really surprising to find negative relationships between peer influence and critical consumer attitudes. As stated before, these are generally associated with the social or expressive aspects of consumer socialization (Brée 1993; Gunter and Furnham 1998; Lachance et al. 2003; Moschis 1987). Moreover, it is the normative aspect of this influence that is detrimental: students who want to be like their friends, to be accepted or complimented by them, and to make a good impression on others with the products and brands they buy are less likely to be competent consumers. It suggests that this expressive aspect of the consumer role may be accentuated when basic instrumental skills are lacking. The informative peers' influence is positive, but moderately linked to those critical attitudes that reinforce the idea that peers' information and advice can also contribute to learning consumer skills (Brée 1993; Gunter and Furnham 1998; Moschis 1987).

School influence was linked to more critical attitudes, but this relation was moderate. As with parents, school is known to be instrumental in learning about consumption, and among others is related to abilities and critical attitudes. This moderate relationship, however, is also congruent with affirmations made by some authors that rather than school, it is the parents, peers and mass media which serve as major socialization agents and that influence adolescents' consumer affects and behavior (Ward 1974; Moschis, Moore, and Smith 1984).

Two significant but modest relations involved socio-demographic variables. Gender was related to a critical consumer attitude, with boys showing less compulsive buying tendencies than girls, and this in line with many studies (as per d'Astous, Maltais, and Roberge 1990; Roberts 1998; Dittmar 2005). Having a job was also linked to less critical attitudes. Interaction with colleagues seemed to resemble the influence of peers. With our participants it seems possible that the main purpose of a part-time job was to obtain money to finance an active leisure life (Arnett 2007). It would thus be interesting to undertake further studies on the influence that colleagues have as consumer socialization agents at various career stages.

### **Preventive and Defensive Behaviors Mostly Affected by Parental Influences**

The positive parental influence on consumer behavior and knowledge suggests that members of this age group are still affected by their parents in an instrumental manner. The fact that the majority of participants live with their parents may contribute to this relationship. Recent research by Gronhoj (2004) however suggests that even young adults who have lived on their own for five years or more are still influenced by their parents in consumer activities. When teaching or acting as consumer role models, parents are indeed socialization agents and they should be supported in this role.

In this research, school has a more positive influence on the behavioral aspect of consumer competence than on the affective aspect, indicating that school helps to develop more prudent consumer behavior than critical attitudes. Courses taken in high school could be more oriented toward the development of critical attitudes on advertising, credit or over consumption, rather than just on the learning the "how to" skills such as budgeting and comparing guarantees or prices before buying. The small number of course hours devoted to consumer education combined with the nature of the course content are just two of the many factors that might explain the limited efficiency in teaching certain consumer skills (Lévesque 2000; Perrachio 1992; Scott 1990; Tiene 1993). Unfortunately, our data cannot confirm these hypotheses and this finding thus calls for further research.

The same negative peer influences were also found on preventive and defensive behaviors. Normative peer influences were negatively related to preventive and defensive behaviors, while informative influences were positively related to the same behaviors. The social and expressive aspects of consumer socialization could again explain these results.

Although socioeconomics were studied as control variables, it is interesting to observe that consumer preventive and defensive behaviors improved with age. This finding is in line with some earlier research (Churchill and Moschis 1979; Moschis and Churchill 1979; Moschis and Moore 1980; Ward, Wackman, and Wartella 1977). Consumer experience acquired over time would probably account for the major part of this improvement: more experience with consumption in general, involving more products, services and retailers; more opportunities to make consumer decisions; more chances to encounter consumer problems of all kinds; the increasing use of their own money and thus, a tendency to be more concerned with satisfaction, and so on. This finding is reassuring since it confirms that the maturation process has a positive impact on the development of consumer abilities. We must therefore turn to socialization agents in order to find ways to encourage the development of consumer competence.

## **Contributions from Socialization Sources**

The strongest socialization influences in our study came from peers. Normative influences were always more prominent than informative influences. Media were the second most important socialization influence, and they affected attitudes for the most part. Parental influence was also significantly linked to consumer behavior and to a lesser degree to consumer knowledge. This influence that parents have on preventive and defensive behaviors concurs with the points of view expressed by many socialization researchers, such as Arnett (2007) and Grusec (2002), who conclude that parents can assist their children during their emerging adult years in the development of their self-regulation capacity. The influence of school on consumer attitudes and behaviors was moderately present. According to Ahava and Palojoki (2004), students' lack of motivation in studying consumer issues can be explained by their perception that consumer education courses do not correspond to their own lives. For this reason, consumer education needs to include pedagogical renovation based on adolescents' needs and the particular characteristics of their consumerism. Finally, although significant, the influence of parents and school on students' consumer competence was positive whereas that of peers and media was negative. This suggests ways to improve consumer education for young people.

## **Limitations, Conclusions and Recommendations**

The results of this research suggest that older college students who are more influenced by their parents and school, and less influenced by their peers (normative dimension) and media such as television and magazines, are more likely than their counterparts to be competent consumers. These findings, however, result from a convenience sample, and many of the instruments used were developed for a specific geographical area of Canada and for a specific age category. For these reasons, the results should not be generalized to other groups. Also, most measures of sources of influence are newly developed and should have their validity proven.

Furthermore, it is not an easy task to measure consumer competence. Measuring knowledge has to be adapted to every legal and commercial reality of a given country or state, and no normative data regarding abilities has been established for a given category of age. Researchers, educators and government agencies responsible for consumer protection and education have to think this issue over more carefully: how can we define a competent consumer? What abilities do they need to develop and what levels could or should they reach at their various ages, developmental stages or life cycles? We need valid instruments that can be adapted to different countries and can produce the best possible comparable results.

Young people need consumer education more than ever, inasmuch as they have never been as much targeted by marketing and advertising as they are today (Schor 2004). Given the pedagogical means available and the great number of hours that youth spend there, school appears to be a relevant place for this. Our results suggest, however, that the effectiveness of school in consumer education may have to be improved. Also, although parents have an important and positive influence on the consumer education of their offspring, even during their late adolescent or young adult years, the parenting role needs support. According to some studies, even the general population of adults may require consumer education or information, at least in subject areas such as personal finances (e.g., Canadian Banking Association, 2000; FACEF, 2001; Lee and Hogart, 1999). Consequently, it would be important to study adults' needs regarding consumer competence, information and education. In order to provide

consumer education or information for young students and workers, newspapers may represent a useful and interesting tool that could be used a great deal more. Given that newspapers are read by older adults, they serve as an effective means of reaching parents while also making them more aware of their role as consumer educators and offering them information that might help them perform this role for their offspring. Television would also be an efficient tool in consumer education if its content regarding this topic was improved, and above all made more attractive to young people. TV can be fun *and* educative.

Finally, there is a significant need for more research on consumer competence, not only at a theoretical level but at the level of understanding what is needed to contribute to its development and how this can be accomplished. To achieve this, researchers from many disciplines should be encouraged to work together and combine their experience and creativity.

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### **References**

Ahava, Anna-Maija and Palojoki, Päivi (2004), "Adolescent consumers: reaching them, border crossings and pedagogical challenges," *International Journal of Consumer Studies*, 28 (4), 371-378.

Arnett, Jeffrey J. (2007), "Socialization in emerging adulthood," in Joan E. Grusec and Paul D. Harris, eds. *Handbook of socialization. Theory and research* (pp. 208-231), New York : The Guilford Press.

Bearden, William O., Netemeyer, Richard G., and Jesse E. Teel, (1989), "Measurement of consumer susceptibility to interpersonal influence," *Journal of Consumer Research*, 15 (4), 473-381.

Blishen, Bernard R, Carroll, William K, and Catherine Moore (1987), "The 1981 socioeconomic index for occupations in Canada," *Revue Canadienne de Sociologie et d'Anthropologie*, 24 (4), 465-488.

Brée, Joël (1993), *Les enfants, la consommation et le marketing*, Paris: Presses Universitaires de France.

Brochu, Marc and Lynda, Young, (1986), *Les habitudes de consommation des jeunes Québécois de 19 à 24 ans*, Québec City, Canada: Office de la protection du consommateur.

Buijzen, Moniek and Patti M., Valkenburg, (2003), "The effect of television advertising on materialism, parent-child conflict, and unhappiness: A review of research," *Applied Developmental Psychology*, 24, 437-456.



Bureau de la statistique du Québec (2002), *Répartition des heures d'écoute de la radio selon l'âge des auditeurs, RMR de Québec*, Available [http://www.stat.gouv.qc.ca/donstat/societe/culture\\_comnc/radio\\_tele/ecoute\\_radio/tab\\_1\\_3\\_radio\\_rmr\\_q.htm](http://www.stat.gouv.qc.ca/donstat/societe/culture_comnc/radio_tele/ecoute_radio/tab_1_3_radio_rmr_q.htm)

Canada Millennium Scholarship Foundation (2003), *Making ends meet. The 2001-2002 student financial survey*. Montréal, Canada. Available [http://www.millenniumscholarships.ca/images/Publications/making\\_ends\\_meet\\_en.pdf](http://www.millenniumscholarships.ca/images/Publications/making_ends_meet_en.pdf).

Canadian Banking Association (2000), *Économie, affaires et technologies. Sondage sur les attitudes des Canadiens*, Available [www.cba.ca](http://www.cba.ca)

Consumer Federation of America (1999). *Credit card on campus: Costs and Consequences for Students*. Washington, D.C.: Consumer Federation of America and USPIRG.

Churchill, Gilbert A. and George P., Moschis (1979), "Television and interpersonal influences on adolescents consumer learning," *Journal of Consumer Research*, 6, 23-35.

Cole, Leslie and Dan Sherrell (1995), "Comparing scales to measure compulsive buying: an exploration of their dimensionality," *Advances in Consumer Research*, 22 (15), 419-27.

Credit Union National Association (2002), *Written statement of the Credit Union National Association (CUNA) on financial literacy presented to the senate committee on banking, housing, and urban affair*, Washington, D.C.: CUNA.

d'Astous, Alain, Maltais, Julie, and Caroline Roberge (1990), "Compulsive buying tendencies of adolescent consumer," *Advances in Consumer Research*, 17, 306-312.

Davies, Emma and Stephen E. G. Lea, (1995), "Students' attitudes to student debt," *Journal of Economic Psychology*, 16 (4), 663-680.

Dittmar, Helga (2005), "Compulsive buying- a growing concern? An examination of gender, age, and endorsement of materialistic values as predictors," *British Journal of Psychology*, 96, 467-491.

Faber, Ronald J. and Thomas C. O'Guinn (1992), "A clinical screener for compulsive buying," *Journal of Consumer Research*, 19, December, 459-469.

FACEF (2001). *Les connaissances et les habiletés des consommateurs canadiens en gestion des finances personnelles*, Montréal, Canada: Fédération des Acef du Québec.

FACEF (1998). *Enquête sur les critères utilisés par les institutions financières canadiennes pour accorder du crédit. Enquête sur les pratiques d'éducation au crédit des institutions financières canadiennes*, Montréal, Canada: Fédération des Acef du Québec.

Franke, Sandra (2003), "Travailler pendant ses études : une charge de plus à l'emploi du temps des jeunes," *Tendances Sociales Canadiennes*, 68, 35-28.

Gronhoj, Alice (2004), *Young consumers' competences in a transition phase: Acquisition of durables and electronic products*. Paper presented at the Pluridisciplinary perspectives on child and teen consumption, Poitiers, France.

Grusec, Joan (2002), "Parental socialization and children's acquisition of values," in Mark H. Bornstein ed., *Handbook of parenting* (pp. 143-168). Mahwah, N.J.: Erlbaum.

Gunter, Barrie and Adrian Furnham, (1998), *Children as consumers*, London: Routledge.

Gunter, Barrie and Jill McAleer (1997), *Children and television*, London: Routledge.

Hair, Joseph F. Jr., Anderson, Rolph E., Tatham, Ronald L., and William C. Black (1995), *Multivariate data analysis*. Fourth edition, Upper Saddle River, N.J.: Prentice Hall.

Halford, Jason C. G., Gillespie, Jane, Brown, Victoria, Pontin, Eleanor E. and Terence M. Dovey (2004), "Effect of television advertisements for foods on food consumption in children," *Appetite*, 42 (2), 221-225.

Hartman, Jonathan B. Shim, Soyeon, Barber, Bonnie, and Matthew O'Brien (2006), "Adolescents' utilitarian and hedonic Web-consumption behavior : Hierarchical influence of personal values and innovativeness," *Psychology and Marketing*, 23, 813-839.

Hayhoe, Celia Ray, Leach, Lauren J., Turner, Pamela R, Bruin, Marilyn J. and Frances C. Lawrence (2000), "Differences in spending habits and credit use of college students," *Journal of Consumer Affairs*, 34 (1), 113-133.

John, Deborah R. (1999), "Consumer socialisation of children: A retrospective look at twenty-five years of research," *Journal of Consumer Research*, 26, 183-213.

Lachance, Marie J. (1997). *Foyers monoparental, biparental et profil d'émancipation des adolescents en matière de consommation*, Unpublished doctoral dissertation. Département de didactique, psychopédagogie et technologie éducative. Université Laval, Quebec City, Canada.

Lachance, Marie J., Beaudoin, Pierre, and Jean Robitaille (2005a), "Les jeunes adultes québécois et le crédit," *Enfances, Familles, Générations*, Spring (2). Available <http://www.erudit.org/revue/efg/2005/v/n2/010918ar.html>

Lachance, Marie J., Beaudoin, Pierre, and Robitaille, Jean (2005b), *Young adults' use and knowledge of credit*, Paper presented at the Institute of Consumer Sciences International Research Conference, Liverpool. U.K.

Lachance, Marie J., Beaudoin, Pierre, and Jean Robitaille (2003), "Adolescents' brand sensitivity in apparel: Influence of three socialisation agents," *International Journal of Consumer Studies*, 27 (1), 47-57.

Lachance, Marie J., Bujold, Nérée, and Frédéric Legault (2000), "One-parent family and adolescent competence in consumer activities," *Journal of Consumer Education*, 18, 14-21.

Lachance, Marie J. and Nadia Choquette-Bernier (2004), "College students' consumer competence: A qualitative exploration," *International Journal of Consumer Studies*, 28 (5), 433-442.

Lee, Jinhook and Jeanne M. Hogarth (1999), "Do consumers know the price of credit? A comparison of consumers' knowledge of open- and closed-end credit," *Consumer Interests Annual*, 45, 71-76.

Léger Marketing (2001), *Les Canadiens et les cartes de crédit. Rapport*, Montréal, Canada: Léger Marketing.

Lévesque, Jocelyne (2000), *L'éducation à la consommation dans les écoles secondaires du Québec*. Paper presented at the ACFAS Conference, UQTR, Trois-Rivières, Canada.

Lyons, Angela C. (2004), "A profile of financially at-risk college students," *Journal of Consumer Affairs*, 38 (1), 56-80.

Mandell, Lewis (2001), *Improving financial literacy: What schools and parents can and cannot do*, Buffalo: Jump\$tart Coalition for Personal Financial Literacy.

Mandell, Lewis (2000), "American youth are ignorant about debt," *Credit Union Magazine*, 66 (1), 4A-5A.

Mandell, Lewis (1999), "Our vulnerable youth: The financial literacy of American 12th graders-A failure by any measurement," *Credit Union Magazine*, 65 (1), 4A-5A.

Mangleburg, Tamara F. and Terry Bristol (1998), "Socialization and adolescents' scepticism toward advertising," *Journal of Advertising*, 27 (3), 11-21.

Markovich, Carl A. and Mary A. DeVaney (1997), "College seniors' personal financial knowledge and practices," *Journal of Family and Consumer Sciences*, 89 (3), 61-65.

Martineau, Jacques (1995), « La multiplication des cartes , » *Protégez-vous*, 18, 37-39.

Mascarenhas, Oswald A. J. and Mary A. Higby (1993), "Peer, parent, and media influences in teen apparel shopping," *Journal of the Academy of Marketing Science*, 21 (1), 53-58.

McNeal, James (1992), *Kids as customers*, New York: Lexington.

Merrick, Bill (1999), "Teenagers lack financial knowledge," *Credit Union Magazine*, 65 (7), 20.

Moschis, George P. (1987), *Consumer Socialisation. A life-cycle perspective*, Lexington, MA.: Lexington.

Moschis, George P. and Gilbert A. Jr Churchill (1979), "An analysis of the adolescent consumer," *Journal of Marketing*, 43, 40-48.

Moschis, George P. and Gilbert A. Jr Churchill (1978), "Consumer socialization: A theoretical and empirical analysis," *Journal of Marketing*, 15, 599-609.

Moschis, George and Roy Moore (1980), "Purchasing behaviour of adolescent consumers," in Richard P. Bagozzi et al., eds. *Marketing in the 80's: Change and challenges* (89-92). Chicago : American Marketing Association.

Moschis, George P., and Moore, Roy (1978), "An analysis of some consumer competencies among adolescents," *Journal of Consumer Affairs*, 12, 177-191.

Moschis, George P., Moore, Roy L., and Ruth. B. Smith (1984), "The impact of family communication on adolescent consumer socialization," *Advances in Consumer Research*, 11, 314-319.

Moore, Roy L. and George P. Moschis, (1981), "The impact of newspaper reading on adolescent consumers," *Newspaper Research*, 2 (4), 3-8.

Moore, Roy L. and George P. Moschis, (1978), "Teenagers' reaction to advertising," *Journal of Advertising*, 7, 24-30.

Newburger, Eric C. (2001), *Home computers and Internet use in the United States: August 2000*, US Census Bureau, US Department of commerce.

Peattie, Sue (2002), "Using the Internet to communicate the sun-safety message to teenagers," *Health Education*, 102 (5), 210-218.

Perrachio, Laura A. (1992), "How do young children learn to be consumers? A script-processing approach," *Journal of Consumer Research*, 18, 425-440.

President's Committee on Consumer Interests (1970), *Suggested guidelines for consumer education, K-12*, Washington, D.C.: Government Printing Office.

Rioux, Suzanne, Meunier, Suzanne, and Nathalie Ebnoether (1984), *La consommation chez les jeunes de 15-25 ans, un problème?*, Quebec City, Canada: Consommation Corporations Canada.

Roberts, James A. (1998), "Compulsive buying among college students: An investigation of its antecedents, consequences, and implications for public policy," *Journal of Consumer Affairs*, 32 (2) 295-319.

Royer, G., and N. Nolf (1980), *Education of the consumer: A review of the historical development*, Washington D.C.: Consumer Education Resource Network.

Schor, Juliet B. (2004), *Born to buy*, N.Y.: Scribner.

Scott, Charlotte H. (1990), *National survey: The status of consumer education in the United States grades K-12*, Chatham, N.J.: National Coalition for Consumer Education.

Sigmen, Yves (1992), *Enquête sur les habitudes de consommation au Québec. Les comportements d'achat des consommateurs*, Quebec City, Canada: Gouvernement du Québec, Office de la protection du consommateur.

Stafford-Smith, Betty and Mary G. A. Mackey (1989), "A study of consumer knowledge, attitudes, and behaviour in a selected group of Quebec CEGEP students," *Canadian Journal of Home Economics*, 39 (4), 168-174.

Statistics Canada (2004, July), "Household Internet use survey," *The Daily. Government of Canada*. Available <http://www.statcan.ca/Daily/English/040708/d040708a.htm>

Statistics Canada (2007), Recensement à l'école, 2006-2007, *Government of Canada*. Available [http://www19.statcan.ca/04/04\\_0607/04\\_0607\\_028\\_f.htm](http://www19.statcan.ca/04/04_0607/04_0607_028_f.htm)

Tiene, Drew (1993), "Channel one: Good or bad news for our school," *Educational Leadership*, 50, 45-51.

Ward, Scott (1974), "Consumer socialisation," *Journal of Consumer Research*, 1 (2), 1-14.

Ward, Scott, Wackman, Daniel B., and Ellen Wartella (1977), *How children learn to buy*, Beverly Hills, CA.: Sage.

Warwick, Jacquelyn and Phyllis Mansfield (2000), "Credit card consumer: College students' knowledge and attitude," *Journal of Consumer Marketing*, 17 (7), 617-626.

Young, Lynda (1993), *Étude comparative des attitudes des élèves du secondaire face à la consommation 1987-1990*, Quebec City, Canada: Gouvernement du Québec, Office de la protection du consommateur.

Zollo, Peter (2004), *Getting wiser to teens*, Ithaca, N.Y.: New Strategis.