Relative Influence of Children and Adolescents on Family Purchasing Decisions: A Matched-Pair Analysis

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Abstract

In general, few studies have examined the influence of children and adolescents on family decision-making. This study evaluates the relative influence of children and adolescents on the purchasing decisions of families planning to buy both major/durable and minor/nondurable products. These family products are classified by product type, and the results from a sample of 2,402 children and adolescents and a matched sample of their parents suggest that the influence of children and adolescents on the purchase of products for family use varies according to gender, personal income, and Internet use.

Key Words: Family decision making, family purchasing decision, children, adolescent, family products.

1. Introduction

The period from birth to adolescence involves dramatic developments in cognitive functioning and social maturation (John, 1999). During this period, cognitive and social development becomes a major determinant of consumerist behavior in children (John, 1999). Thus, it is during this period that children and adolescents have greatest influence over the purchasing decisions of families.

Studies have found that the influence of children on family purchasing decisions for certain products increases with age (Jenkins, 1979; Ward and Wackman, 1972; Beatty and Talpade, 1994; Mc Neal and Yeh, 1990). These studies clearly suggest that the influence of older children and adolescents is more profound than that of younger family members. According to Mangleburg (1990), the greater cognitive and social development of older children results in better knowledge of available products and more awareness as consumers. From this perspective, as the child matures, the purchasing behavior of the child towards some products becomes more refined, and this development continues until late adolescence.

However, for some products, as suggested by Ward and Wackman (1972), this effect varies inversely with the age of children. Generally, therefore, the studies have presented contradictory results based on product type (Kaur and Sing, 2006; Martensen and Gronholdt, 2008). In many studies, the sampled population of children is suggested to have influence only on the purchase of products they use. According to Jensen (1995), children have limited influence on major purchasing decisions involving substantial financial outlays, while their influence is greater on minor purchasing decisions, especially those involving a product the child is expected to use. In the literature, such products are reported to be snacks, toys, children's wear, cereals and school supplies (Mangleburg, 1990; Kaur and Singh, 2006). According to Mangleburg (1990), children also influence decisions, albeit to a lesser degree, related to spending related to family leisure time.

However, in studies where adolescents have been sampled, it was found that they have influence over products they use, as well as the entire family (Beatty and Talpade, 1994; Foxman, Tansuhaj and Ekstrom, 1989b; Kim, Lee and Hall, 1991).

McNeal (1992) has classified three different markets influenced by children and adolescents: a primary market in which children spend their own savings/allowances, a secondary market that influences parental spending, and a future market of potential adult consumers (Nicholls and Cullen, 2004). Similarly, Zollo (1995) has also mentioned that adolescents are very important targets for marketers since they influence their parents' spending and tend to be trendsetters expected to spend heavily in the future (Martin and Bush, 2000).

Many studies reporting on the effect of children on family purchasing can be found in the literature (Atkin, 1978; Berey and Polay, 1968; Darley and Lim, 1986; Jenkins, 1979; Hsieh, Chiu and Lin, 2006; Labrecque and Richard, 2001; Mehrotra and Torges, 1977; Szybillo and Sosanie, 1977; Swinyard and Sim, 1987; Ward and Wackman, 1972). However, studies evaluating the effect of adolescents on family purchasing decisions are rare (Beatty and Talpade, 1994; Belch et al., 1985; Foxman et al., 1989a, 1989b; Kim et al., 1991; Kim and Lee, 1997; Lee and Beatty, 2002; Shoham and Dalakas, 2003). Still fewer studies can be found that combine the two, investigating only the products that they, not the family, use (Foxman et al., 1989b). Therefore, this paper aims to evaluate the influence of both children and adolescents on family purchasing for products used by the entire family and classified according to product type. We use both children and adolescents as samples and a matched sample of their parents. The variables include gender, age, and personal income, which are considered in many studies, as well as Internet use. In the first part of the study, a review of the literature is conducted and hypotheses established. The second part addresses the research method, data analysis and results. The third part concludes with a discussion of the findings, managerial implications, limitations, and suggestions for future research.

2. Literature review and Hypothesis

2.1. The relative influence of children and adolescents based on products type

According to Jensen (1995), parental involvement in family purchasing is a function of financial risk, status of family members, and differences in their perception. Children and adolescents are involved in family purchasing decisions to the extent that the purchased product is useful and important to them (Jensen, 1995). Therefore, products are perceived differently by children, adolescents and parents (Kim and Lee, 1997). Moreover, in many studies which investigate family purchasing decisions, the process is divided into three phases: initiation (or problem recognition), search and evaluation, and the final decision (Martinez and Polo, 1999; Szybillo and Sosanie, 1977; Wang, Holloway, Beatty and Hill, 2007). In general, these studies suggest that children and adolescents have influence over family purchasing decisions for different products at different stages of the decision-making process (Beatty and Talpade, 1994; Kaur and Singh, 2006). Therefore, children and adolescents not only perceive products differently from their parents, but their influence over family purchasing depends on the decision-making stage, as just noted. Based on this evidence, we hypothesize the following:

H1: Differential product perception affects family purchasing decisions.
H1a: Based on the perception of children and adolescents;
H1b: Based on the perception of parents.

2.2. Gender

Social development plays a key role in family purchasing decisions. According to Lee and Collins (2000), fathers assume that boys have a more active role in family purchasing decisions than the role undertaken by girls. However, some studies (Atkin, 1978; Moschis and Mitchell, 1986) indicate that female children have stronger influence on family purchasing decisions than male children (Kaur and Singh, 2006; Lee and Collins, 2000). Thus, while differential product perception is a key working concept, product knowledge that arises from social differences, in particular gender, is also an important variable. Based on this evidence, we hypothesize the following:

H2: Differential product perception, which affects family purchasing decisions, differs by gender.
H2a: Based on the perception of children and adolescents;
H2b: Based the perception of parents.

2.3. Internet Use and Mavenism

Nowadays, an individual's purchasing decision is guided by his/her evaluation of product information which can be easily found from many outside resources (Beatty and Smith, 1987).

Such external information is often determinative when personal experience is insufficient (Srinivasan and Ratchford 1991; Sundaram and Taylor, 1998). From this perspective, individuals who can most effectively use such externally derived information will also take the more dominant role in the decision-making process. This influence is more profound in high-risk and high-involvement purchasing situations (Beatty and Smith, 1987).Nowadays, the Internet has gained great importance in family purchasing decisions as such an outside resource (Belch, Krentler and Willis-Flurry, 2005; Holton, 2000). From the results of the Research on ICT Usage in Households and by individuals in Turkey (2004-2010 - Results of the ICT Usage in Households and by individuals, 2004-2010), it was determined that adolescents between the ages 16 and 24 use the Internet with a high involvement level, such as 62.9% (TUİK, 2010). Feick and Price (1987) define consumers as "market mavens," i.e., those who, in a general sense, acquire shopping information from many sources and have a high level of involvement. It is not surprising that the Internet is the tool of choice for such "market maven" behavior (Clark, Goldsmith and Goldsmith, 2008), in particular since adolescents can acquire more detailed up-to-date information in much shorter time. Therefore, Belch et al. (2005) indicate that adolescents, who use the Internet for a wide range of purposes and who enjoy using the Internet, can be named as Internet mavens, and adolescents, who are Internet mavens, are reported to have more influence on the family decision-making process. Moreover, while not every adolescent has ready access to the Internet, those who do are reported to have more influence over family purchasing decisions than those who do not. Therefore, we hypothesize the following:

H3: Differential product perception, which affects family purchasing decisions, differs according to Internet mavenism for high-risk products.

H3a: Based on the perception of adolescents;

H3b: Based on the perception of parents.

2.4. Personal income

A theoryput forward by Blood and Wolfe (1960) holds that individuals who possess more resources than others in a social unit have greater influence on decisions within the unit (Foxmanet al., 1989b). Such resources include education, occupation and income, all of which affect the potential contribution of family members toward product purchases (Flurry, 2007). In this sense, Foxman et al. (1989b) indicate that adolescents' employment and earnings positively affect their perceived influence across product choices (Beatty and Talpade, 1994). Therefore, we hypothesize the following:

H4: Differential product perception, which affects family purchasing decisions, differs by personal income/resources.

H4a: Based the perception of adolescents;

H4b: Based on the perception of parents.

3. Research Method

3.1. Research Design

The design selected for this research is a cross-sectional survey with random sampling. In order to investigate the effect of children and adolescents on family purchasing decisions, seven products, including televisions, cars, home furniture, vacation/leisure, oil, detergent and milk, were chosen, taking into consideration their exploitation in previous studies (Beatty and Talpade, 1994; Belch et al., 1985; Foxman and Tansuhaj, 1988; Foxman et al., 1989b;Günerivd., 2009; Jenkins, 1979; Kim and Lee, 1997; Shoham and Dalakas, 2003), their use within the whole family unit, inclusion of both durable and nondurable products, and different risk levels (major and minor).

The unit of analysis was matched child/adolescent-parent pairs. In the literature, researchers investigating the effect of children and adolescents on family purchasing decisions studied many different age groups. The age range for children was between 8 and 12, while studies investigating adolescents ranged in age from 13 and above (Foxman et al., 1989b). According Foxmanet al. (1989b), adolescence is not easily defined by physical development, and studies in the literature do not focus on age groups; instead, they investigate the influence of all children living at home with their families.

Moreover, according to the classification of child development in Turkey by DBE (Institute for Behavioral Studies), adolescents are defined as the age range of 12 to18. Therefore, we chose to define children in our study as primary school students at ages 9 to 12 and adolescents as children in highschool and university at ages 12 to 18. Consequently, in this study, the sampling population represents an age range between 9 and 18 and is comprised of those children and adolescents living at home with their parents.

3.2. Data Collection and Sample

In this study, three primary schools from different socioeconomic levels (Classes 4, 5, 6, 7 and 8), three highschools (Classes 9, 10, 11 and 12) and three faculties in Çankırı were chosen randomly. In order for them to participate in the study, the necessary permissions were obtained from the Ministry of National Education and from school administrators. The sample populations representing children were chosen from primary schools, and those representing adolescents were chosen from highschools and universities.

Prior to the surveys, a preliminary study was undertaken with guidance counselors/teachers to formulate the methods to be used. In the framework of the pilot study, which was carried out prior to the survey with five students and their custodians (parents) from each school (45 pairs in total), the applicability of the questionnaire was pretested.

In this study, 1201 parent- child/adolescent pairs are analyzed (n=2402). Only the questionnaires filled out by both the child/adolescent and their parents are taken into consideration. However, the ratio of the questionnaires omitted in the analysis against those collected is less than 10%. The mean age of sampled children/adolescents is 14.84, and the mean of the age of the parents is 41.90. The distribution ratio of the respondents with respect to gender is 56.9 % for females and 43.1 % for males.

Two different questionnaires were respectively designed for children/adolescents and parents. A number and a letter such as -a- and -b- were designated for each questionnaire (Güneri et al., 2009). The questionnaire with the letter -a- was given to students, and those with the letter –b- were given to parents. Thus, names of the respondents were not reported on the questionnaires. For parent questionnaires, either mother (59%) or father (41%) was free to respond. Table 1 presents information on the level of education and income of the parents.

Table 1: Parents' level of education and income

	Parents			
Income level	**n**		**%**	
Low	211		17.56	
Middle-low	475		39.55	
Middle	303		25.22	
Middle-high	121		10.07	
High	91		7.57	
	Mother		**Father**	
Education Level	**n**	**%**	**n**	**%**
Primary school	547	45.55	226	18.81
JuniorHigh school	178	14.82	187	15.57
High school	292	24.31	382	31.8
Vocational school	86	7.16	172	14.32
University	88	7.32	200	16.66
Master's and PhD	10	0.83	34	2.83

For primary school students (n = 563, mean age of 11.03), questionnaires contained items regarding age, gender and product, while those for high school and university students (n= 638, mean age of 16.32), items also asked whether they had such personal resources as part-time jobs, fellowships or scholarships, in addition to questions regarding Internet use. In the questionnaires prepared for the custodians, i.e., parents, individuals were asked to provide information concerning whether they are the mother or the father, their age, level of income and education, as well as questions designed to measure the influence of their children and/or adolescents on purchasing decisions.

3.3. Measurement

In many studies on this subject (Davis and Rigaux, 1974; Szybillo and Sosanie, 1977; Martinez and Polo, 1999; Wang et al., 2007), decision making is considered a three-step process: initiation (or problem recognition), search and evaluation, and decision. Therefore, 21 statements that targeted the measurement of perceived effects of the children for the seven products, as noted above, are related to these three decision-making phases. For example, one question asks "who first realizes and asserts the need in your family for purchasing a television".

Another asks "who gathers information about television brands relative to the purchase" and still another asks "who makes the final decision". We used a five-point interval scale for the response of children/adolescents, as follows: 1= Only them (Mother/Father), 2= Mostly them and sometimes me, 3= Both (Mother/Father) and me together, 4= Mostly me and sometimes them, 5= Only me. The questionnaire for the parents was structured as follows: 1= Only Us (My spouse/I), 2= Mostly us and sometimes our child, 3= Us (My spouse/I) and Our Child together, 4= Mostly Our Child and sometimes Us (My Spouse and I), 5= Only Us (My Spouse and I). Coefficient alphas were 0.850 for teens and 0.854 for parents.

The scale for Internet mavenism consisted of five items selected from Belch et al. (2005). A five-point interval scale, ranging from strongly disagree (1) to strongly agree (5), is used. Examples of items include such statements as "I like using information gathered from the Internet to introduce new brands and products to my family and friends," "I like helping my family and friends by using the Internet to provide them with information about various kinds of products and services," "My family and friends often ask me to search the Internet to provide them with information about products and places to shop," "If someone wanted to know which Internet sites had the best bargains on various types of products and services, I could tell him or her," and "My family and friends think of me as a good source of information based on my use of the Internet when it comes to new products, Web site or sales." The coefficient alpha was 0.842 for this scale.

Adolescents are classified as mavens/non-mavens if their Internet mavenism score is above/below the mean on the Internet maven scale [x = 3.105 (0.879)]. Three hundred thirty-one adolescents out of 631 in the sample are classified as Internet mavens (52.37%) and 301 are classified as non-Internet mavens (47.63%).

To determine the personal income of adolescents, we asked if the respondents had a scholarship or a job, requiring only a "yes" or "no choice" response. A total of 170 out of 631 adolescents did have some personal income (26.64%), while 461 did not (73.06%).

4. Analysis and Results

4.1. The relative influence of children and adolescents on family purchasing based on product types

The purpose of this study is to evaluate the influence of children and adolescents on the purchase of products for family use according to product type; as such, differences in the perception of products are evaluated by type of product. According to Rummel (1988: 21), factor analysis is a useful tool for reasoning from data to generalizations about underlying influences causing the discovered patterns. Therefore, we have used factor analysis to determine perception of product type for each of the three phases of decision- making, as noted twice above. Table 2 presents the product groups obtained by factor analysis based on questionnaire responses.

Table 2: Factor analysis results for Classification of Product Types

Children and Adolescents*	Factor 1 (α: .77)	A[a]	B[b]	C[c]	Factor 2 (α:.79)	A[a]	B[b]	C[c]	Factor 3 (α:.84)	A[a]	B[b]	C[c]	D[d]
	Car 1	.725	19.590	4.6228	Oil 1	.650	17.696	2.379	Milk 1	.811	13.707	1.662	50.993
	Car 2	.740			Oil 2	.622			Milk 2	.867			
	Car 3	.634			Oil 3	.725			Milk 3	.833			
	TV 1	.618			Det 1	.703							
	TV 2	.710			Det 2	.653							
	TV 3	.655			Det 3	.718							
	Vac 2	.488											
	Vac 3	.448											
Mean	1.89 (0.71)[e]			1.29 (0.50)[e]			2.063 (1.15)[e]						
Parents**	Factor 1 (α: 0.83)				Factor 2 (α: 0.83)				Factor 3 (α: 0.85)				
	Car 1	.656	20.959	5.559	Oil 1	.736	17.518	2.638	Milk 1	.841	11.934	1.885	50.411
	Car 2	.684			Oil 2	.691			Milk 2	.867			
	Car 3	.644			Oil 3	.752			Milk 3	.842			
	TV 1	.609			Det 1	.709							
	TV 2	.757			Det 2	.721							
	TV 3	.716			Det 3	.742							
	Vac 2	.532											
	Vac 3	.510											
	Furn 1	.452											
	Furn 2	.547											
	Furn 3	.501											
Mean	1.29 (0.52)[e]			1.19 (0.43)[e]			1.97 (1.11)[e]						

* Extraction method: Principal component analysis; Rotation method: Varimax with Kaiser Normalization.
* KMO: 0.813; Bartlett's test of sphericity: approximately $x^2 = 8718.033$, d.f. = 210, significance = 0.000)
**KMO: 0.816; Bartlett's test of sphericity: approximately $x^2 = 9970.905$, d.f. = 210, significance = 0.000)
a: Factor loadings; b: Percentage of Variance; c: Eigenvalue; d: Cumulative %; e: Standard Deviations

To examine discriminant validity, correlations among constructs were also calculated. Discriminant validity of all factors was achieved for the correlations between 3 pairs of constructs (3 pairs for children and adolescents and 3 pairs for children for parents), ranging from 0.247 to 0.374, values well below 0.5. Therefore, the factor analysis results demonstrate adequate reliability and discriminant validity.

It can be observed that major/durable products, such as cars, televisions, vacation trips, and furniture, are classified into factor group 1, while minor/nondurable products, including oil and detergent, are classified into factor group 2. However, milk, which is a minor and nondurable product, is separately placed into factor group 3 because in the context of this study, children and adolescents perceive milk differently from other minor/nondurable family products, including oil and detergent, as confirmed by parents.

The three steps of decision-making will now be recalled as 1) initiation, 2) search and evaluation, and 3) final decision. Each product is assigned a number corresponding to a specific phase of the decision-making process; hence, Car1, Car2, and Car3 represent the three phases of purchasing this durable good. By factor analysis of responses from children/adolescents, Car1, Car2, and Car3 do appear in the children/adolescents column simply because responses indicated their involvement in all three phases of this family purchasing decision, while Furn1, Furn2 and Furn3, as well as Vac1, do not appear because no responses indicated their involvement in any phase of furniture expenditures or the first phase of vacation planning. By factor analysis, it can be shown that family products can be classified into the same factor groups for both samples. Therefore, the results of the two samples show that H1, H1a and H1b are supported since the family products in this study fall into the same factor groups with respect to their general features.

In sum, by factor analysis, it can be seen that adolescents and children perceive family products differently when compared to their parents, while at the same time showing some similarity according to the general features of these produces, i.e., durable and nondurable, as well as major or minor risk. Nonetheless, it is differential perception among family members that influences family purchasing decisions, and this is the key argument of this paper.

4.2. Gender of children and adolescents

Table 3: Independent *t*-test results for effect of gender

	Children and adolescents				Parents			
Classification of Product Types	Mean	Std. Deviation	t	p	Mean	Std. Deviation	t	p
Factor Group 1								
Female	1.808	.629	4.360	<.001	1.232	.465	4.480	<.001
Male	1.997	.796			1.372	.570		
Factor Group 2								
Female	1.337	.550	-4.164	<.001	1.225	.488	-3.363	<.001
Male	1.221	.406			1.144	.344		
Factor Group 3								
Female	2.160	1.170	-3.272	<.001	2.032	1.121	-2.030	<.042
Male	1.939	1.122			1.899	1.098		

H2 takes up the idea that gender difference affects product perception and, in turn, the extent to which a child or adolescent will then influence the purchase of certain product groups. Table 3 collectively presents the results of the independent sample *t*-test made for this purpose. It was found that gender does, indeed, affect family purchasing decisions. Interestingly, while male children influence the purchase of major and durable products, which fall into the factor 1 framework, female children exercise more influence on minor and nondurable goods, which fall into factor 2 and 3 structures. Thus, it appears that male and female children exert differential influence on product groups and that this influence is also acknowledged by the parents. Hence, H2, H2a and H2b are supported.

4.3. Internet Use and Mavenism

Table 4: Independent *t*-test results for effect of internet mavenism

	Children and Adolescents				Parents			
Classification of Product Types	Mean	Std. Deviation	t	p	Mean	Std. Deviation	t	p
Factor Group 1								
Non-Maven	1.856	.748	-4.499	<.001	1.312	.552	-3.630	<.001
Internet Maven	2.135	.780			1.475	.560		
Factor Group 2								
Non-Maven	1.266	.577	-.151	<.881	1.228	.550	-.246	<.827
Internet Maven	1.272	.442			1.238	.462		
Factor Group 3								
Non-Maven	1.882	1.169	-1.237	<.218	1.819	1.063	-1.741	<.081
Internet Maven	1.994	1.106			1.973	1.137		

The independent sample *t*-test evaluates the effect of Internet mavens or non-mavens for family products, and the results are presented in Table 4.It can be seen that the highest mean belongs to Internet mavens in factor group 1, which involves major/durable products. However, among the other product groups, the mean among Internet mavens falls. Nonetheless, the findings support H3, both by the children (H3a) and by the parents (H3b).

4.4. Adolescents' personal income

Hypothesis 4 (H4) describes the influence of those children and adolescents with personal income on the family purchasing decisions.

According to the results of the independent sample *t*-test, as shown in Table 5, children, adolescents and parents all mention that those minor family members with personal income have more influence on family purchasing decisions. Therefore, H4 is supported for children/adolescents (H4a) and parents (H4b).

Table 5: Independent *t*-test results for effect of personal income

	Children and Adolescents				Parents			
Classification of Product Types	Mean	Std. Deviation	t	p	Mean	Std. Deviation	t	p
Factor Group 1								
With personal income	2.194	.856	3.535	<.001	1.546	.594	4.055	<.001
Without personal income	1.928	.735			1.340	.541		
Factor Group 2								
With personal income	1.427	.659	3.912	<.001	1.363	.644	3.389	<.001
Without personal income	1.212	.432			1.182	.432		
Factor Group 3								
With personal income	2.191	1.153	3.613	<.001	2.260	1.226	4.823	<.001
Without personal income	1.828	1.099			1.748	1.007		

5. Discussion

In this study, we have demonstrated, in a cross-sectional manner, the relative influence of children and adolescents on the purchase of products used by the entire family. To perform an in-depth analysis, we used factor analysis in order to reason from data to generalizations about underlying influences causing the discovered patterns. In this case, we classified products into three factor groups and then applied three stages to the process of family decision-making, initiation, search and evaluation, and final decision, in order to determine predominating perception and participation.

As shown in Table 2, Factor 1 Group includes durable and major risk products, while Factor 2 Group was classified into nondurable and minor-risk family products. Even though milk is a nondurable product and should, therefore, be classified into Factor group 2, it is a product perceived differently among the family members; hence, it is classified separately into Factor Group 3. We will also see that milk, a nondurable good, is, first of all, perceived differently by different family members and classified into Factor 3 group, separately.

By the average values, we will also see that the mean is higher for children and adolescents than parents at 2.063 and 1.974, respectively. This is consistent with common sense as well as Kaur and Singh (2006) who state that this product is consumed by children and adolescents to a greater degree and is therefore a product on which more value is placed by younger family members. However, aside from factor analysis in this work, explanations for variables are consistent with those found in the literature. For example, many studies (Belch et al., 1985; Flurry, 2007) suggest that the decision to purchase vacation time is one that involves a high level of joint family involvement. Children and adolescents perceive this to be an expenditure from which they will benefit, thus increasing their influence in this purchasing decision.

On the other hand, according to the findings of Betty and Talpade (1994), it can be said that the decision to purchase furniture is a decision type which, generally, does not attract the attention of children and adolescents. In fact, this is supported in our study. Again, looking at Table 2, it can be seen that Furn1, Furn2 and Furn3 only occur in the parents section and not at all, for any phase of the decision-making, in the children/adolescent section.

However, parents still consider the influence of the children and the adolescents on family purchasing decision for this product to be in Factor Group 1, which represents a grouping of major and durable products, such as cars, televisions, and vacations. Based on this evidence, we can confidently conclude that H1, H1a and H1b are supported. The findings obtained from H2, H2a and H2b reveal the effect of gender on family purchasing decisions. Past research (Atkin, 1978; Moschis and Moore, 1979; Moschis and Mitchell, 1986) indicates that the influence of female children and adolescents on family purchasing decisions is generally stronger than that of the male children and adolescents.

Different from these studies, we found that male children/adolescents have more influence over the decision to buy major/durable products, whereas female children/adolescents have more influence over the purchase of minor/nondurable products. This effect, which is also acknowledged by the parents, is indicative of the social roles conferred by society on children and adolescents in the context of products considered for purchase by families.

Our study also focused on the impact of the Internet mavenism with respect to the influence of adolescents on family purchasing decisions for major/durable products. It was found that Internet mavens, in contrast to those adolescents who are non-mavens, have more influence on family purchasing decisions of major/durable products and that this influence is acknowledged by parents (H3, H3a and H3b). The effect is most likely to be observed with products for which more pre-purchase information is needed, thus supporting the work of Belch et al. (2005) who tested the category of spending for vacation time. In parallel with the findings of Belch et al. (2005), our findings also showed that the influence of adolescents on the purchase of high-risk products increases in proportion to their degree of Internet mavenism.

Different from the findings of Betty and Talpade (1994), we determined that those adolescents with personal income have more influence on family purchasing decisions for all product groups than those who have limited or no resources, and this is also acknowledged by parents (H4, H4a and H4b). In this category, adolescents with personal income show increased influence on family purchasing decision for both major/durable and minor/nondurable goods.

5.1. Managerial implications

Unlike other studies in the literature, the sample population in the present study includes children and adolescents representing a wide range of ages. As such, these data should have important implications for marketers. Specifically, we found that children and adolescents seem to have influence over the purchase of major/durable products, even if such influence is minimal and varies with gender, level of personal income and Internet use. Therefore, marketing managers should take into consideration the relative influence of children and adolescents in the family vis-à-vis purchasing decisions and should design their marketing strategies accordingly. Increase in these effects with age is a fundamental indicator showing that the message and strategies, which may be utilized by the marketers, can be tailored for long-term advantage.

5.2. Limitations and future research

This study has some limitations. First, some studies in the literature (Dotson and Hyatt, 2005; Foxman et. al., 1989b; Jenkins, 1979) reveal that levels of income and education form differential parameters in the context of the influence children/adolescents have on the purchasing decisions of families.

However, since the sample in this study includes mostly family groups at middle and middle-low income level, future studies might be designed to include family groups with a higher income level.

Second, to determine Internet mavenism, the Internet maven scale from Belch et al. (2005) was used. However, in the Belch et al. (2005) study, perceptual congruence was obtained from data gathered from adolescents and their family, whereas in the present study, the Internet maven scale was only applied to the sample group of adolescents. Finally, studies (Kaur and Singh, 2006; Wang et al, 2007) which evaluate the influence of the children and the adolescents on family purchasing decisions reveal that this influence differs across national boundaries. In this sense, future studies may be cross-border comparative studies of samples.

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