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The Influence of Children on Family Purchasing Decisions in Turkey

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Abstract: This research focuses on the influence of children on family purchasing decision-making in Turkey, a country with distinct cultural characteristics. The study provides empirical evidence based on data, collected from 849 families. The general findings of this study suggest that the children's influence on family decision-making in Turkey is limited to products of direct use to children. Findings also reveal that the children are more influential on need recognition, where to buy, when to buy and which to buy sub-decisions. On the other hand, the parents perceive children to have very little influence on family-decision making, as they state themselves as the most influential units of family decision-making. This study suggests that parents underestimate the role of their children on family buying decisions.

Key words: Family decision-making, consumer decision-making process, children's influence

INTRODUCTION

Purchase decision-making is a complex and multistage process, which is undertaken not only by the purchaser himself, but under the impact of other parties as well. Family decision-making constitutes an important area to explore. This importance is frequently highlighted by marketing practitioners as well as scholars studying the area. Here, this study emphasizes on family decision making.

There mainly exist two streams in family decision making studies: Dyadic studies investigate the effects of wife and husband on family decision making, whereas triadic studies include children to this dyad as a decision making unit in family consumption. However, the majority of scholarly works are dyadic, whereas the studies incorporating the effect of children on family decision-making are relatively scarce. Additionally, most of the studies in the area are based on US data, which generates a need for the analysis of the subject in other cultural settings to allow the researchers make better comparisons and generalizations.

Here, the study aims to identify the extent of influence of children on family purchasing decision-making in Turkey and factors that has an impact on this influence. This research offers the researchers and marketers an opportunity to see how demographics and cultural differences affect the role of children on family purchasing decisions. The findings of the study are expected to provide marketing strategists and scholars with a better understanding of the causes and consequences of children's role in family consumption. Such an understanding not only allows delivering more effective marketing strategies but also will help guide the development of future strategies.

In recent years, there has been tremendous increase in attention paid to children and adolescents as a distinguished market segment both by the academics and practitioners. This was partly due to worldwide population increase in segment, as well as the fact that children and adolescents now hold significantly more buying power as compared to previous decades. Only in the US, it is reported that teenagers hold more than \$153 billion in buying power (Taylor and Cosenza, 2002).

In global terms, Lindström and Seybold (2002) estimated that children between 8-14 spend and influence a market of \$1.88 trillion worldwide. It should be noted that earlier research covered a wide range of age groups, from very young children to late adolescents. For practical purposes, individuals younger than 18, i.e., who has not reached adulthood, will be referred as children.

Other than the buying power they have, children are extremely important for marketers and consumer researchers as they influence the present and future consumption trends in a number of ways. As McNeal (1992) stated, besides acting as buyers with their own money to spend, children directly or indirectly influence the purchase of a large amount of household items and they constitute a future market of a larger variety of products. As a result, marketing practitioners are increasing their efforts to grasp this market, whereas consumer researchers are striving to identify the mechanisms underlying the influence of children on household purchase decisions.

Although the studies investigating the mechanisms under family decision making date back to 1960s, research focusing on the effect of children on this process is relatively scarce compared to the effect of other members of the family, i.e., the spouses. This dyadic model to explain family decision-making process was heavily criticized starting from early 80s, recommending children to be taken into account in household purchase decision-making studies (Dunsing and Hafstrom, 1975; Burns and Granbois, 1980) and increasing the amount of empirical research on children's influence on family decision making.

Most of the studies in this period regarding the interaction of the child and other family members in consumer context investigated the consumer socialization process, which could be defined as the process of learning consumer related skills, knowledge and attitudes (Mehrotra and Torges, 1976). In this process, the family is viewed as the dominant socializing agent, by which the child learns consumption skills. However, consumer socialization in families is a two-way process, that is, the child also acts as a medium to socialize the parents by influencing the family purchase decisions. In such a reverse socialization context, the influence of children on family purchase decision showed up in only a few studies until 1980s. In one of the earliest attempts to examine children's influence, Berey and Pollay (1968) investigated child-assertiveness and mother's child-centeredness as factors explaining the children's impact on purchases and found that child's assertiveness had no significant relationship with the purchase, whereas the mother's child-centeredness had a negative impact. Later studies focused on several variables that are suggested to explain the relationship, such as demographics and product class. As newer research results were piled up in the field, the variables entering into the equation were classified as the product class, decision stage, sub-decisions, parental characteristics, child's age and family characteristics (Mangleburg, 1990).

In most of the studies, the child's age was found to be the predominant factor of impact on family decision-making. Ward and Wackman (1972) found that parental yielding to influence attempts increased with the child's age. Other studies similarly concluded that older children have significantly higher influence on family purchase decisions compared to the younger ones. The impact of age on children's influence is twofold, first, children's age is positively related with the parent's yielding behavior (Atkin, 1978; Jenkis, 1979; Darley and Jeen-Su, 1986; Isler *et al.*, 1987; Levy and Lee, 2004) and second, as the age increases, children make attempts to influence the purchase of more product categories (Mehrotra and Torges, 1976; McNeal, 1969). This effect is largely due to the development of cognitive capabilities and accumulation of information about the products and markets in older children.

Another important source of variation in children's influence is the product class (Mangleburg, 1990). Research shows that the more relevant the product to the children, the more the influence. Similarly, perceived importance of the product for the children reflects itself in increased influence. Children's influence on items such as cereals, candies, toys, children's electronics, apparel and family

vacations are reported to be significantly higher than those which are relatively non-relevant (Ward and Wackman, 1972; Mehrotra and Torges, 1976; Jenkis, 1979; Swinyard and Sim, 1987; Foxman *et al.*, 1989; Kim and Lee, 1997). This effect is also due to lower risk levels associated with these products. However, recent studies report evidence on children's influence over purchases of more risky products such as houses (Levy and Lee, 2004). Wilson and Wood (2004), Beatty and Talpade (1994) and Ekstrom *et al.* (1986) suggested that the influence increases positively with the amount of knowledge that the child has regarding a particular product.

The influence of children on family purchases was also reported to vary with regard to different decision stages and sub-decisions. Earlier research included three to nine decision stages, whereas the use of three is a common practice: Initiation, search and evaluation and the final decision (Shoham and Dalakas, 2003; Beatty and Talpade, 1994; Syzbillo and Sosaine, 1977). In general, children were found to be more influential in the earlier stages. Research also investigated the children's influence on various sub-decisions within these stages, mainly focusing on when to buy, where to buy, which to buy (including the brand, model, color etc.) and how much to spend decisions. Findings suggest that children claim a greater role in making decisions about which to buy and the influence is minimal on how much to spend decisions (Darley and Jeen-Su, 1986; Jenkis, 1979). It should be noted that the influence on sub-decisions as well as later decision stages increase with the age.

In terms of demographics, some other studies found that the child's gender is to be considered an important variable, reporting that girls have more influence on family purchases, whereas the boys are more self-oriented (Lee and Collins, 2000; Moschis and Mitchell, 1986; McNeal, 1969). Another demographic variable that investigated in the literature is social class (Page and Ridgway, 2001). As it is expected there is a significant difference of children's influence between lower and higher social classes, that is, children from in higher social classes have more impact on family purchase decisions. Similarly, Beatty and Talpede (1994) concluded that the children's influence increases in dual-income families, especially for non-relevant items to the child. This effect is partly due to delegation of the parents, as they are time poor (Foxman *et al.*, 1989) and partly due to higher socioeconomic status (Moschis and Mitchell, 1986).

As earlier stated, the majority of data on children's influence are US based, with a few exceptional studies in other cultural settings such as Singapore (Swinyard and Sim, 1987), Israel (Shoham and Dalakas, 2003), Malta (Caruona and Vassalo, 2003) and Scotland (Thompson, 2003). Although some of these studies revealed significant differences in children's influence compared to studies done in other cultural settings, some other reported no such difference, making the literature unclear on this point. Therefore, additional research in various cultural contexts as well as longitudinal studies is needed to provide generalizations and observation of trends. In one of the recent studies, Shoham and Dalakas (2003) investigated the issue in Israel, a country with evidence of remarkable differences in cultural dimensions of Hofstede, compared to the US (1993). The researchers based their argument on differences in the dimensions of individualism, uncertainty avoidance and power distance, ignoring femininity/masculinity dimension as it showed no significant difference between the US and Israel and their research concluded that the influence of children over family purchases are significantly different in another cultural setting. The researchers also recommended further research in other countries, which have more distinct cultural characteristics. Turkey is obviously a suitable choice having a childadolescent (age between 8-20) population of 20 millions, which represents an approximate 30% of the entire population, as well as it reveals remarkable diversity in terms of cultural dimensions of Hofstede, which constitutes the theoretical background for this study.

Hofstede's well-known study (1984) classified nations in terms of four cultural dimensions. Individualism/collectivism dimension focuses on relationship between the individual and the group. In highly individualistic cultures it is believed individual is the most important unit and these cultures encourage people taking care of themselves, making decisions based on individual needs and the I

mentality. Conversely, highly collectivistic cultures appraise group as most important unit and they encourage loyalty to group, decision-making based on what is best for the group and dependence on organization and institutions. Uncertainty avoidance is the second dimension, which focuses on how cultures adapt to changes and cope with uncertainty. Emphasis is on extent to which a culture feels threatened or is anxious about ambiguity. High uncertainty avoidance cultures are more resistant to change, often characterized by more elaborate rituals, whereas low uncertainty avoidance cultures tend to accept competition and conflict, tolerate dissent and deviance. Third dimension is power distance and it focuses on the nature of human relationship in terms of hierarchy. In high power distance cultures obedience to authority is expected. The final dimension of masculinity/femininity focuses on how extent to which a society stress achievement or nurture. Masculinity is seen to be the trait that emphasizes ambition, acquisition of wealth and differentiated gender roles. On the other hand, Hofstede (1984) defined femininity as a trait that stresses caring and nurturing behaviors, environmental awareness and more fluid gender roles.

It is obvious that all these dimensions have a significant impact on use of power and influence and the extent of it, whether it is in consumer context or not. Children's influence on family purchase is therefore directly dependent on the cultural environment of the family and the individual. Turkey is classified in high power distance nations with an index score of 66, significantly higher than the US (which scored 40), or other countries where children's influence research was conducted previously. Turkey is highly characterized by collectivism and uncertainty avoidance and tends toward femininity (Hofstede, 1984). When compared with other nations, Turkey is found to have a remarkably different culture than those of Central and West Europe and the US, but she is rather placed in the same league with Latin American as well as some Middle Eastern cultures. Therefore, children in Turkey are expected to be more obedient to parental directives and advice due to low individualism and high power distance. Similarly, high uncertainty avoidance is likely to cause doubts in children's proposals during family decision-making process. As Turkey shows no extreme scores in terms of masculinity/femininity, the influence of children are not expected to vary with regard to child's gender.

Consequently, the main aim of this research is the identification of the children's influence on family purchases in Turkey, with regard to several variables such as sub-decisions, demographics and product classes. In this context, findings are expected to explain to what extent the influence is similar to those exerted in other cultural settings.

Collected data is analyzed to investigate children's influence on the family decision making process for five different product classes. These are selected according to the classification of family-major (home appliances), family-minor (milk), child-major (cellular phone), child-minor (shoes) and a service (dining outside). Major and minor discrimination is based on the risk levels associated with the consumption. Since decision-making is not a one step action, it is investigated as a process including sub-decisions such as need recognition, where to buy, which to buy, when to buy and how much to spend. By this way, the effect of children on each step is identified. Finally, demographic variables such as age and gender of the child, income level of the family, parental status and number of children that parents have to meet the consumption needs are included to the research.

MATERIALS AND METHODS

In order to reflect family decision-making process accurately and to identify factors that have an impact on this process, survey method was carried out with a questionnaire that aimed to investigate family decision-making process for five different product classes and five sub-decision levels. Questionnaire was adapted from a range of earlier studies in the field (Kim and Lee, 1997; Ward and Wackman, 1972; Jenkis, 1979). The research was conducted in 2006. The data was collected from

849 families, both from either of parents and children to allow a comparison of perception in influence. Therefore the family is the sampling unit of this study. This sample was drawn from schools in three different levels of the national education system to allow examine age differences, (a) primary schools, (b) secondary schools and (c) high-schools. In this context, children aged between 7 and 18 were included in the sample, as children are acknowledged to become capable of concrete problem solving, to perform multiple classification tasks, comprehend the principle of conservation by the age of 7 (Piaget, 1972). The schools were selected on such basis to allow investigation for diverse socioeconomic classes.

Survey method is used for this research as it allows researchers to reach a large sample. Because earlier research reveals differences in the perception of the children compared to their parents, two different questionnaires, one for children and the other for their parents, are used in the research.

Questionnaires include two main sections: In the first part, demographic data, which is proposed to have a significant impact on children's influence, is collected. Demographic data includes age, gender, number of brothers/sisters and income level evaluation for the child's questionnaire. In addition to these questions, education level and occupation of the parents and parental status are asked in parents' questionnaire.

In the second part, questions measuring the perceived influence of children on family purchasing decision-making are located. There are a total of 25 statements measuring this influence for five main product classes indicated above for five sub-decisions: need recognition, where to buy, when to buy, which to buy and how much spend. Five point Likert scale is used to determine the level of perceived influence of children. Statements that measure the perceived influence of children on family decision-making are common in the questionnaires except the formulation of the Likert scale. In children's questionnaire, the scale is formulated as [the sub-decision] regarding the purchase of [product class] is taken by 1 = Always me, 2 = Mostly me, 3 = Equally with my parents, 4 = Mostly my parents, 5 = Always my parents. However, in the parents' questionnaire it is adapted as 1 = Always us, 2 = Mostly us, 3 = Equally with our child, 4 = Mostly our child, 5 = Always our child.

Data is analyzed using the SPSS software package. t-test and Chi-square test in addition to the descriptive statistics are used for the analysis.

Literature reveals that children begin to affect family purchasing decisions as early as they are 5 years old. Although a number of studies are available in the literature, which investigates the influence of younger children, they either take parents as sampling units or use other data collection methods such as observation, rather than surveys (Ward and Wackman, 1972). This is due to the fact that the cognitive abilities of children younger than 7 are not developed to evaluate the situation and answer the questions presented in a questionnaire. Therefore, children who are between 7 and 18 years old and their parents are included in the sample of this study. To reach a representative sample, research is conducted in six schools located in the different regions of Izmir, the third biggest metropolitan area of Turkey. The selected schools are different from each other according to the classification of national education system in the country. Students of the selected schools and their parents participate to the study as pairs. To compare the effect of the age on the influence of children on family purchasing decisions, students participating to the research are divided into three groups. The first group includes primary school students who are 7-11 years old and their parents. In the second group, junior high school students who are 12-14 years old and in the third group high school students who are 15-18 years old and their parents participate to the research. Only paired questionnaires -those both the child and either of his/her parents have responded- are included to the study. Responds from one parent are considered enough, as the literature reveals that the responses of husbands and wives are very similar when compared on an aggregate basis (Granbois and Willett, 1970; Darley and Jeen-Su, 1986).

RESULTS

Before the main analysis, the items measuring the child's influence in the parent's questionnaire were recorded to allow for development of a single Likert scale. This scale is used through the analysis, where, 1 indicates a 100% child's influence and 5 indicates a 100% influence by the parents on family buying decisions. The reliability analysis for the items included in the questionnaires generated Cronbach Coefficient Alpha scores of 0.83 for the children's questionnaire and 0.90 for the parent's questionnaire, which are higher than the adequate levels of internal consistency, as the minimum is stated to be 0.70 (Cronbach, 1951).

Demographic characteristics of the sample are analyzed in two parts; for children and for parents. Age, gender, education and income level are analyzed for both two samples. In addition, occupation, parental status and number of children living with the parents are analyzed for the parent sample. Mean age of the children is 13.64 and of the parents is 42.32. Mean of the number of children living with parents is 2.08. 53.3% children's sample includes high-school students, whereas the remaining is from lower grades. This representation is appropriate when basically two sub age groups are present, being children and adolescents. Ninety percent of the families are nuclear and whereas the remaining are single parent families. Other demographic characteristics of the samples are shown in Table 1.

Table 2 shows the means of each statement measuring the children's influence on family purchasing decision making process in terms of five main product classes and of five sub-decisions. Mean values are given for both the children and parents. These items are measured on a 5-point-Likert Scale, where, 1 = Always the child decides and 5 = Always the parents decide. Columns C, D and E depict the p-values for the t-tests between mid-point 3 and children-parent pairs.

The findings of this study reveal that the children's influence on family decision making is limited to products of direct use to children, i.e., child's shoe and children's cellular phone. Even for the children's responses, who are expected to overestimate their influence, the means of statements for only these two product classes point to values which are significantly smaller than 3. It should also be stated that children perceive their parents to be more influential for how much to spend decisions for all product classes and literally assume no role at this stage.

Table 1: Demographic characteristics of the sample

	Children		Parents	
Characteristics	n	(%)	n	(%)
Gender				
Female	498	59.07	523	61.80
Male	345	30.93	323	38.20
Income level				
Low	18	2.15	18	2.00
Middle-low	51	6.09	74	9.00
Middle	387	46.18	460	54.80
Middle-high	307	36.63	254	30.20
High	75	8.95	34	4.00
Education level (Children's age rang	ge)			
Primary school (7-11)	235	27.80		
Junior-high school (12-14)	159	18.80		
High school (15-18)	450	53.30		
Education level (Parents)				
Primary school			103	12.26
Junior-high school			93	11.07
High school			269	32.02
Vocational school			32	3.81
University			258	30.72
Master's			23	2.73
Ph.D			62	7.39

Table 2: Mean values of each item for children and parents

	Children	Parents	Significance 1	Significance 2	Significance 3
Decisions	Α	В	C	D	E
Need recognition					
Shoe	2.37	3.40	0.000**	0.000**	0.000**
Cellular phone	2.23	3.13	0.000**	0.011*	0.000**
Milk	3.55	3.87	0.000**	0.000**	0.000**
Home appliances	40.00	3.77	0.000**	0.000**	0.000**
Dining outside	3.28	3.12	0.000**	0.000**	0.004**
Where to buy					
Shoe	2.57	3.07	0.000**	0.041*	0.000**
Cellular phone	2.83	3.12	0.000**	0.001 **	0.000**
Milk	3.67	3.77	0.000**	0.000**	0.063
Home appliances	4.13	3.69	0.000**	0.000**	0.000**
Dining outside	3.26	3.24	0.000**	0.000**	0.642
When to buy					
Shoe	2.60	3.21	0.000**	0.000**	0.000**
Cellular phone	3.04	3.31	0.164	0.000**	0.000**
Milk	3.71	3.69	0.000**	0.000**	0.809
Home appliances	40.09	3.70	0.000**	0.000**	0.000**
Dining outside	3.38	3.26	0.000**	0.000**	0.037*
Which to buy					
Shoe	20.05	2.92	0.000**	0.034*	0.000**
Cellular phone	2.35	30.00	0.000**	0.754	0.000**
Milk	3.47	3.56	0.000**	0.000**	0.117
Home appliances	3.91	3.68	0.000**	0.000**	0.000**
Dining outside	3.12	3.12	0.000**	0.000**	0.960
How much to spend					
Shoe	3.38	3.31	0.000**	0.000**	0.326
Cellular phone	3.41	3.15	0.000**	0.000**	0.001 **
Milk	3.88	3.60	0.000**	0.000**	0.000**
Home appliances	4.15	3.71	0.000**	0.000**	0.000**
Dining outside	3.87	3.49	0.000**	0.000**	0.000**

Significance 1: t-test p-value for difference between the mean value and midpoint 3 (For children's data), Significance 2: t-test p-value for difference between the mean value and midpoint 3 (For parent's data), Significance 3: t-test p-value for perceptual differences between the children and the parents, **Significant at $\alpha=0.01$, *Significant at $\alpha=0.05$

Children also state that their parents are more influential on decisions regarding products directed at family use, such as milk, home appliances and even dining outside. For these product groups they again assume no role in any sub-decision, where, the mean values derived from children's questionnaire reveal values significantly higher than 3.

It is interesting that the parent's responses literally provide no room for children's influence. Except for which shoe to buy decision, parents claim that they are more influential on family purchase decisions for all product classes and sub-decisions. In addition to the fact that they state themselves as the basic decision making unit for all product classes including products used by the child, this perceived influence increases with regard to product class, i.e., the parents hold themselves more influential on product classes aimed at family use. Parallel with children's responses to how much to spend decision, parents perceive themselves as having a strong influence on monetary affairs. Interestingly, it is evident from the findings that children perceive their parents to have more power on monetary decisions than the parents assume themselves to have.

Other than direct measures of influence of children on family decision-making, how this influence varies with regard to product classes and sub-decisions is also discussed in the literature earlier. Below are presented the findings regarding variation of children's influence across product classes and sub-decisions.

Parallel to the literature, children's influence on family purchasing decision-making is analyzed and compared for different product classes, which are determined according to the user of the product

Table 3: The t-test results showing no significant differences regarding the children's influence on each product class for five sub-decisions

Sub-decisions	Product class pairs	Significance 4	Significance 5
Need recognition	Phone-dining	0.000**	0.459
Where to buy	Phone-dining	0.000**	0.280
	Milk home appliances	0.000**	0.106
When to buy	Shoe-dining	0.000**	0.178
	Milk-home appliances	0.000**	0.887
Which to buy	Phone-dining	0.000**	0.073
How much to spend	Shoe-phone	0.176	0.177
	Milk-dining	0.834	0.000**

Significance 4: t-test p-value for mean difference between the product class pair (For children's data), Significance 5: t-test p-value for mean difference between the product class pair (For parents' data), **Significant at $\alpha = 0.01$

and risk associated with consumption, i.e., child major/minor, family major/minor products and a service for family use. To identify for which product classes the children's influence on family purchasing decision is statistically different, paired t-tests were used for product classes for each decision stage. With reference to Table 2, 25 product class pairs for this analysis were formed such that Pair 1: 1a-1b, Pair 2: 1a-1c, ..., Pair 25: 5d-5e, where, numbers 1-5 signify the sub-decision stage and letters a-e signify the product class.

Results of t-tests applied to children's and parent's samples reveal significant results at $\alpha=0.05$, except for eight pairs, usually for the parents data. These eight pairs, which are not significantly different for either children's data (significance 4) or parent's data (significance 5), are shown in Table 3.

Children perceive their influence on each product class at all sub-decisions to be significantly different from each other except for shoe-phone and milk-dining product class pairs in how much to spend decision stage. On the other hand, parents do not perceive such a difference for seven pairs as shown in Table 3. Overall, it can be suggested that children perceive a difference regarding their influence for the consumption of several items, whereas such a perception is lower by the parents. This is largely due to the fact that parents assume a greater role in family decision-making, where, they minimize the role of children and hence, ignore the difference in levels of participation by their children to consumption of several product classes.

Similarly, children's influence on family purchasing decision-making is also analyzed with respect to sub-decisions; i.e., need recognition, where to buy, which to buy, when to buy and how much to spend decisions. In this way, the influence of children on each sub-decision step is identified.

To identify in which sub-decision stages the children's influence is statistically different than the others paired t-tests analysis is used. Pairs are formed using a similar procedure, while for this stage the formulization is such that: Pair 1: 1a-2a, Pair 2: 1a-3a, ..., Pair 25: 4e-5e, where numbers 1-5 signify the sub-decision stage and letters a-e signify the product class.

Results of t-tests applied to children's and parent's samples reveal significant results at α =0.05, except for eight pairs for children's data and 14 for parents data. These pairs, which do not reveal significant differences for either children's data (significance 6) or parent's data (significance 7), are shown in Table 4.

When children's data is taken into account, it can be suggested that children generally perceive their influence to vary with the sub-decision stage. However, this does not hold for parents, as they perceive 14 pairs out of a total of 25 to not to vary in terms of child's influence. It should also be noted that t-test results do not provide significant differences especially for pairs including home appliances. This is due to the fact that decisions regarding home appliances are dominantly assumed by the parents and the children confirm the power of their parents for these products.

As frequently highlighted in the literature, demographics have a great impact on the level of children's influence on family decision-making. Within these, the child's age is the most commonly

Table 4: The t-test results showing no significant differences regarding children's influence on each sub-decision for five

Product classes	Subdecision pairs	Significance 6	Significance 7
Child's shoes	Need recognition-how much to spend	0.000**	0.218
	where to buy-when to buy	0.464	0.000**
Child's cellular phone	Need recognition-where to buy	0.000**	0.962
-	where to buy-how much to spend	0.000**	0.496
Milk for family use	Need recognition-which to buy	0.073	0.000**
	where to buy-when to buy	0.366	0.146
	which to buy-how much to spend	0.000**	0.277
Home appliances for family use	Need recognition-when to buy	0.061	0.102
	where to buy-when to buy	0.192	0.461
	where to buy-which to buy	0.000**	0.450
	where to buy-how much to spend	0.478	0.494
	when to buy-which to buy	0.000**	0.113
	when to buy-how much to spend	0.054	0.740
	which to buy how much to spend	0.000**	0.198
Outside dining	Need Recognition-where to buy	0.333	0.004**
	Need Recognition-which to buy	0.000**	0.604
	where to buy-when to buy	0.001**	0.416

Significance 6: t-test p-value for mean difference between the sub-decision pair (For children's data), Significance 7: t-test p-value for mean difference between the sub-decision pair (For parents' data), **Significant at $\alpha=0.01$

Table 5: The Chi-square results regarding the influence of demographics on children's influence

	Child's age (p)	Child's gender (p)	Income (p)
Decisions	A	В	C
Need recognition			
Shoe	0.000**	0.007**	0.000**
Cellular phone	0.000**	0.872	0.120
Milk	0.003**	0.002**	0.269
Home appliances	0.001**	0.004**	0.561
Dining	0.000**	0.082	0.099
Where to buy			
Shoe	0.000**	0.302	0.001 **
Cellular phone	0.000**	0.100	0.000**
Milk	0.000**	0.033	0.030
Home appliances	0.002**	0.007**	0.941
Dining	0.000**	0.035	0.024
When to buy			
Shoe	0.000**	0.005**	0.295
Cellular phone	0.000**	0.009**	0.007**
Milk	0.002**	0.048	0.649
Home appliances	0.000**	0.169	0.444
Dining	0.000**	0.025	0.273
Which to buy			
Shoe	0.000**	0.375	0.041
Cellular phone	0.000**	0.130	0.003 **
Milk	0.001**	0.023	0.112
Home appliances	0.000**	0.190	0.087
Dining	0.001**	0.005**	0.101
How much to spend			
Shoe	0.000**	0.003**	0.004**
Cellular phone	0.000**	0.016	0.013
Milk	0.000**	0.000**	0.117
Home appliances	0.007**	0.001 **	0.624
Dining	0.000**	0.002**	0.128

^{**}Significant at $\alpha = 0.01$

cited factor to affect the extent of influence (Ward and Wackman, 1972; Isler *et al.*, 1987; Levy and Lee, 2004). Other factors such as child's gender (Lee and Collins, 2000; Moschis and Mitchell, 1986; McNeal, 1969) and family income level (Page and Ridgway, 2001) are also proposed to be the factors affecting the magnitude of the child's influence.

Chi-square tests were run to investigate the effect of demographics, i.e., child's age, child's gender and family income, number of children in the family, parental status and parent's education on children's influence. As for child's age, three age groups proposed in the methodology were included in the test as categorical variables. Income level was measured as being placed in five socioeconomic status groups (Table 5).

Parental status, number of children in the family and parent's education are not included in the table, as they show no significant difference. As anticipated, child's age was found to dominate the extent of child's influence. The results suggest that the influence of the child increases with age, for all product classes analyzed in the research.

On the other hand, the results of present study do not reveal a strong relationship between the child's influence and other demographic variables, i.e., child's gender and income level of the family. The effect of child's gender is only evident for how much the spend decisions, i.e., the girls are slightly more influential on decisions regarding monetary issues. This is suggested to be related to the fact that the girls are more involved in family affairs, hence increasing their influence. The income level of the family has partial effect on child's influence, especially for the product classes aimed at children's use (shoe and cellular phone).

DISCUSSION

The general findings of this study suggest that the children's influence on family decision-making in Turkey is limited to products of direct use to children, i.e., child's shoe and children's cellular phone. For these two product groups the children state that they are more influential on need recognition, where to buy, when to buy and which to buy sub-decisions. Yet the children do not assume any role on monetary issues, stating that their parents are influential on how much to spend decisions to a great extent. On the other hand, the parents perceive children to have very little influence on family-decision making, as they state themselves as the most influential units of family decision-making. It is already stated in the literature that children overestimate their role in family decision making (Caruana and Vassalo, 2003; Palan and Wilkes, 1997; Foxman and Tansuhaj, 1988), however the findings of this study tend to explain this issue from a different angle. It is rather parents underestimating the role of their children on family buying decisions.

Underestimation by parents is suggested to arise from the cultural context of the environment from which the sample is drawn. As derived from Hofstede's studies (1984), Turkey is classified as a high power distance nation, compared to countries such as the US or other countries where, children's influence research was previously conducted. She is also highly characterized by collectivism and uncertainty avoidance. In such a cultural setting, children are expected to be more obedient to their parents and highly praise their advice and directives. Similarly, high uncertainty avoidance is causes the parents to be doubtful in their children's suggestions during family decision-making process. Therefore, underestimation of the child's role by the parents can be explained with the cultural context.

The literature suggests that the extent of children's influence varies among product classes (Jenkis, 1979; Swinyard and Sim, 1987; Foxman *et al.*, 1989; Kim and Lee, 1997). In this study a total of five product classes were used, two aimed at children's use and three aimed at family use. The products were selected to represent high involvement-low involvement, as well as high risk-low risk situations. The findings of the research reveal that children's influence is statistically higher for product classes targeted at child's use (i.e., shoe and mobile phone). Additionally, the extent of influence greatly varies among product classes. In other words, the child's influence is not the same for all product classes, from the viewpoint of both the children and the parents and children exercise more influence for the products that they will use personally. This finding is also parallel to the literature.

Children's influence on family purchasing decision-making is also analyzed with respect to sub-decisions, as a variance between sub-decisions is proposed in the literature. Earlier research report that children claim a greater role in making decisions about which to buy and the influence is minimal on how much to spend decisions (Darley and Jeen-Su, 1986; Jenkis, 1979). The findings of this study also show that the children have little impact on monetary issues. Additionally, the influence of the children varies with the sub-decision stage, however the perceptions of the parents and the children are not entirely parallel to each other regarding this variance. In other words, parents do not observe a remarkable difference in influence with regard to product class and sub-decisions. This arises from the fact that the parents generally ignore the role of their children on family decision-making, although the children are more involved in the process than the parents believe it to be so.

Demographic characteristics are one of the most prominent factors on children's influence, frequently mentioned in the literature. Within these, the child's age (Ward and Wackman, 1972; Isler et al., 1987), family income level and socioeconomic status (Beatty and Talpede, 1994; Page and Ridgway, 2001), child's gender (Lee and Collins, 2000; Moschis and Mitchell, 1986), parental characteristics (Ekstrom et al., 1987) and often proposed to have effect on the extent of the child's influence. In this study, six demographic variables were entered into the model, however only three of these were found to be suitable for statistical tests. These variables tested are the child's age, child's gender and family income level. Education level of the parents, parental status and number of children living with the family were excluded, as they were found to have no effect on children's influence and therefore this exclusion does not constitute a drawback with regard to validity of the study. The findings of the study revealed that child's age is the most powerful factor having an impact the extent of child's influence, which is parallel to the literature. In other words, the influence of the child on family decision-making increases with the age.

On the other hand, the results suggested that there does not exist a strong relationship between the child's influence and child's gender or income level of the family. It is evident from the findings that the effect of child's gender is only evident in how much to spend decisions, i.e., girls are more involved in this stage of family decision-making when compared to boys. The income level of the family has only partial effect, which is only apparent for the product classes aimed at children's use (shoe and cellular phone). The fact that child's gender is has little effect on children's influence is suggested to be due to cultural context as well as sample characteristics. Turkey shows no extreme scores in terms of masculinity/femininity in Hofstede's studies (1984), which imply that the influence of children are not expected to vary with regard to child's gender, which is also reflected in the findings. Additionally 89% of the sample comes from middle and upper socioeconomic status families, which may conceal the gender discrimination that is more common in lower socioeconomic status levels. As for the effect of income level, it is suggested that families having higher levels of income are likely to take the opinions of their children into account when they are purchasing a product for their children, as the price of the product loses its relative importance.

In general, this study validates earlier study in terms of variance of child's influence along product classes and sub-decisions. It also restates the importance of child's age as a critical factor in children's influence studies and the most importantly, this study points to the effects of cultural contexts on the extent of children's influence.

LIMITATIONS AND RECOMMENDATIONS

The main limitation of this research is the use of a convenience sample. The study is conducted only in the city of Izmir because of the appropriateness of reaching the sample. To reach a representative sample and reduce the effect of this limitation, data is collected from schools that reside on the different levels of national educational system and are located in the different regions of Izmir. These regions are selected on the basis of socio-cultural characteristics. Additionally, the sample size of 849 pairs, which is a relatively large sample, is expected to overcome this limitation.

In order to overcome bias that may result from either the children's or the parents' perception, only parent-child pair questionnaires were included into the study. Since reaching the parents is more difficult, this was expected to decrease the response rate. To overcome this limitation, expected response was determined to be 60% and therefore a total of 1400 questionnaires were distributed to the students. The actual response rate turned to be 60.6%, which was parallel to the expectations.

This study contributes to the literature, first by validating the findings of the previous studies. It incorporates an extensive scope that analysis the majority of the factors that are earlier stated in the literature. Additionally, it highlights the effect of cultural differences. Here, further cross-cultural studies in the field are recommended to investigate the effects of cultural differences. In addition, the influence of the children may be studied for other product classes, especially for service encounters. As this study concludes that there are significant perceptual gaps between the children and their parents, the factors influencing these gaps are recommended for investigation in further research.

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