

WHAT IS THE COST OF RAISING A CHILD?

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Abstract

What are the expenses in raising a child? Or more children? Those are the questions that started this research, which entails the analysis of the budget distribution issue in relation to family expenses from the parent's point of view – buyers of products for the whole family. The chosen research issue for this study is represented by the analysis of the structure of the expenses budget of families with 1 to 3 children aged between 0 and 14 years as well as determining the average expenses dedicated to children in the family budget. For this, we constructed through the quota method, a sample of 60 families supporting children aged 0 to 14. During the period of 3 consecutive months (November 2019 – January 2020) these families put all their expenses in a daily journal meant to record them based on different categories and sub-categories.

The data analysis comparatively presents the main types of expenses destined strictly for children.

Keywords

Household Budgeting, Household Resource Allocation, Childhood Studies.

JEL Classification

D10, D14, D19, G50, L67

Introduction

Family as a concept, has a considerable influence over the consumer behavior of its members. For children, family is the first group in which they discover the utility and value of money (Hillen and Lavarda, 2019). It is the normative group of reference which influences the general principles system with a large appliance spectrum (Chala et al., 2016). Also, through family, the child has his initial and initiatory encounter with the product (Stearns, 2010); it is the first environment in which the child tests the product and discovers its utilities and consumption principles and requirements (Lopez and Rodriguez, 2018). For example: edibles

that are comprised in a healthy diet, the adequate apparel chosen according to the occasion, where and how to do shopping etc.

The adoption process of the purchasing decision in regards to family, can differ in many aspects from the method in which this process runs its course for an individual (Marshal, 2010). Most often, the products are acquired by individuals in order to be utilized by the entire family (Vincent and Maxwell, 2016). But this involves a complex process, implying multiple roles and actors, starting from identifying the need for the product that is to be bought, continuing to the selection of the type and brand of the product, all the way to choosing the shop itself and the method and moment the product will be used and lastly the individual that makes the purchase. Not everybody evaluate the product following the same characteristics. Parents influence the socialization process of the children, both directly and indirectly (Cook, 2008). They seek to pass on to their children their own values and principles (Kalwij and Salverda, 2007) about consumption („You will learn the value of money!”). Also, parents decide the measure in which children can get in touch with other information sources such as television, sales people or friends (Kennedy, 2002). The socio-cultural tradition in regards to involving children in the purchasing decision process influences the moment and method of coaching from the parents to their children (Chaudhary, 2018), for the role of consumer and buyer (Brandrup and Mance, 2011).

On the other hand, the influence of children over the purchasing-adult is encompassed in the socialization-process of the consumer (Alanen, 1999; Buckingham, 2011). Thus they gain the abilities, knowledge and attitudes of future buyer even in their first years of life (Buckingham and Tingstad, 2017). To this process, friends or professors can later contribute (Kenway and Bullen, 2001), although the first two socialization sources, according to their importance, are family and mass-media (Jacobson, 2004). For example, the children tell one another about certain products consumed by the family or seen in TV advertising (Mulin, 2014), and this tendency increases with age (Pilcher, 2013; Hawkins, 2016).

The consumption model and the consumption itself of the family synchronously and diachronically varies from one family to another (Lareau, 2003) according to social-economic and cultural determinations of the time in question (Dominick et al., 2018) and to be able to measure it at a population scale, the Quality of Life Research Institute uses the equivalent per-adult consumption. The consumption values start from the needs of an active adult, for which the value 1 is allotted; 0,9 – expenses for the second adult (the wife); 0,7 – expenses for the first child and 0,5 for the second child. Thus, the standard family composed of 2 adults and 2 children sums up 3.1 points.

Methodology

The present longitudinal analysis represents a quantitative research with a descriptive purpose over expenses dedicated to children as a component in the family expenses budget. For this, a sample of 60 families composed of both parents (active workers) and 1 to 3 children aged 0 to 14.

Research goal:

- Studying the variation of expenses made for the benefit of the children in different types of families, in relation to the number and age of the children.
- Studying the variation of expenses made for the benefit of the children during the holidays (such as Christmas) during which, children receive many gifts.

The research problem: The analysis of the structure of the family expense budget of families with 1 – 3 children aged 0 - 14 as well as the determination of the average expenses dedicated to children in the family expense budget.

Research Objectives:

O1. Determining the average of different types of expenses in the family expense budget of families with children aged 0 – 14, monthly (during November 2019 – January 2020), by types of families differentiated by the number and age of the children:

O1.1 – Determining the average expenses dedicated to children in the family budget studied over the 3 months of monitoring, for families with children aged 0-14;

O1.2 – Determining the average expenses of the family, influenced by children in the family expense budget, over the 3 months of monitoring

O1.3 – Determining the average expenses of the family, not influenced by children in the family expense budget, over the 3 months of monitoring

O1.4 – Determining the average expenses dedicated just for the parents in the family expense budget over the 3 months of monitoring

O2. Comparison of the average sums and average means related to expenses dedicated to children in the family expense budget for families of children aged 0 – 14, according to how many they have:

O2.1– Comparison of average expenses dedicated to children in the family expenses budget, according to how many children there are

O2.2 – Comparison of average expenses dedicated to children in the family expenses budget, according to the children's age

Research Hypothesis

H1. The average expenses dedicated to children aged 0 to 14 in the family expenses budget varies according to the number of children supported (Dominick at al, 2018; Hillen and Lavarda, 2019).

H2. All the expenses strictly dedicated to children and those influenced by children, have a greater average in the total family expenses budget (Dominick at al, 2018; Hillen and Lavarda, 2019).

H3. The expenses strictly dedicated to children in the family expenses budget varies according to the age of the children 0 – 14 years old (Dominick at al, 2018; Hillen and Lavarda, 2019).

Research Method:

The present study was carried out in the form of a panel survey with daily record in the expenses journal and with weekly reporting through online interviews with the persons responsible for the administration of the expenditure budget in each family. We opted for the longitudinal panel type survey also due to the fact that it was desired to observe the social phenomenon of consumption as it occurs naturally in the family, without being influenced by the presence of the human operator. We considered that recording the expenses of the families during the period November - January it can be better presented how the children influence the family expenses budget, rather than in other months.

Research Operationalization:

The sample of 60 families was selected on the basis of a snowball type method that started from an initial number of 15 families from the same city (Iași, Romania). The validation of their participation in the studio was done on the basis of a selection questionnaire, meant to filter exactly the family profiles sought after. Basically, when completing the selection questionnaire, the respondent was asked to agree to participate in the research and was told the responsibilities that they have during the course. If the acceptance for inclusion in the research sample was received, the contact details were requested in order to communicate the method of completion of the Daily Shopping Journal and the planning of the online interviews of each week.

Each family has completed an electronic log of the expenses incurred daily according to the pre-defined categories and subcategories of expenses, as follows:

Table no. 1 Daily log of the expenses incurred by each family by categories and subcategories of expenses

Date: ____	Expenses only for the consumption of children	Expenses for family consumption, influenced by children	Expenses for family consumption, not influenced by children	Expenses only for the consumption of parents
Food				
Apparel/Footwear				
Maintenance of the house				
Endowment of the house				
Transport				
Hygiene/Cosmetics				
Education				
Health				
Spare time				

Source: data from our own research.

Given that one of the major shortcomings of the panel-based survey is the fairly high dropout rate of the families included in the study, we planned weekly online interviews / meetings with each representative to maintain a close connection with the monitored families and to eliminate any errors of registration.

Table no. 2 The schedule of weekly interviews with each family included in the study

Scheduled Date	Time Range	Family (code)	Interview Date	Delay cause

Source: data from our own research.

The interviews were conducted in the form of electronic meetings whose duration did not exceed 10 minutes. They had the purpose of maintaining a closer connection with the respondents (representatives of the families included in the survey) for the following purposes: to reduce as much as possible the dropout rate (one of the big problems that arise in the development of such surveys); to decrease the frequency of registration omissions; to reduce the number of errors generated by the incorrect classification of a purchase into a category or subcategory of the indicated ones; to collect daily logs of expenses grouped by weeks, from each family included in the survey.

In the three-month monitoring period, the atypical consumer situation related to the offer of Christmas presents appeared (December 25). In this regard, during the interview conducted between November 1 and 3, 2019 (the first week of the study), we asked all families if they

are Christians to make sure that there are no differences between the external factors that influence the consumption of the families included in the research.

Data Processing

For data processing we used a series of descriptive and inferential statistical procedures. The descriptive statistical indicator used in the study is the mean, calculated separately by types of expenses, by calendar months and by types of families. Testing the differences between the average expenses for the studied groups was performed using the ANOVA procedure. ANOVA is a statistical method that allows the comparison of several populations and consists of testing the differences between the averages of the studied populations. The test statistic used is the Fisher Test, calculated as the ratio between the intergroup and the intra-group variance. Within the sample of studied families, respecting the national distribution of families according to the number of children, we recorded the related expenses of 105 children: 31 in the range 0-3 years; 35 in the range of 3-7 years and 39 in the range of 7-14 years.

For the sample of 60 families we applied the family structure in Romania according to the number of children (according to Eurostat), and the results are as follows: 52% - families with 1 child, 37% - families with 2 children and 11% - families with 3 children or more. Criteria based on which families included in the panel were selected: number of children supported, age of children, occupational status of parents, residence in Iasi, marital status (to be established on the basis of marriage), daily access to the Internet, the person responsible for being the one that manages the family's spending budget.

Findings

Analysis of differences in expenses dedicated to children, between families with one, two or three children

The average values of expenses made only for children in November 2019 are the highest for families with two children compared to families with one or three children. In order to verify if the differences regarding the level of the expenses dedicated to the children are significant between the three types of families, we applied the ANOVA procedure, separately, monthly, with the help of the SPSS program. We tested the equality of average expenses (null hypothesis) dedicated to children for three populations (families with 1, 2 and 3 children) in each month of the observation period (November 2019, December 2019 and January 2020). The calculated value of Test F is lower than the threshold value for each of the three months, which leads us to accept the null hypothesis of equal average spending for the three types of families. Therefore hypothesis 1, according to which the average of the expenses dedicated to children between 0 and 14 years in the family expenses budget varies according to the number of children supported is not confirmed.

Analysis of differences in expenses on children over time

The analysis of the expenses recorded daily by each family included in the survey reveals that, regardless of the age and the number of children in the family, the total amount spent on average by each family with children increases in December compared to November, so that in January they can register a sudden decrease.

Table no. 3 Variation of the average amount spent only for children according to the family composition in the months of monitoring

Family Type	November Expenses	December Expenses	January Expenses
Families with 1 child	1816	1958	1383
Families with 2 children	1856	2048	1465
Families with 3 children	1562	2093	1471

Source: data from our own research.

We can deduce from this graph that in December, regardless of the number of dependent children, the average value of the expenses incurred for their benefit is higher than in the other months of monitoring. This fact is determined by the fact that the month of December, nicknamed the "gift month", is characterized by a significant change in the consumption behavior of parents resulting in an increase of the volume of purchases made for children.

In order to compare the average expenses for the children per month, the ANOVA procedure was applied for each type of family (with 1, 2 and 3 children respectively). The calculated value of Test F is higher than the threshold value, respectively Sig. F is lower than the assumed risk ($\alpha = 0.05$), which leads us to reject the null hypothesis of equal average expenses for the three months for all types of families.

For the category "expenses for family consumption, influenced by children", the average expenses for January are significantly lower than for December, but do not differ significantly from those incurred in November. We observe a similar behavior in November and December regarding family consumption, influenced by children. In the case of the variable "expenses only for the consumption of parents", the average values are significantly lower in January than in November and December. It is found that in the case of the average of expenses only for the consumption of parents in the family expenses budget, there are significant differences only between January and November (but January does not differ significantly from December and November does not differ significantly from December).

Analysis of the average of other categories of expenses in the total family consumption expenses budget

Analyzing the average of the four major categories of expenses considered in the study, we found that the family spending budget is balanced, each of them having an approximately constant percentage over time. Differences between families according to the number of children refer mainly to the category of family expenses, influenced by children.

If the average mean for the three months of monitoring in the case of consumption influenced by children registers in the case of families with a child the value of 29.79%, this slightly decreases in the case of families with two children, but it is 5.56% lower in the case families with three children. We can consider that this variation is due primarily to the fact that the first child generates the largest changes in family consumption (only entering the "full nest" stage).

Analysis of the structure of the expenses dedicated to the children according to the age of the child / children supported

In children over 6 years old, we considered the purchase of toys as "spare time" items, while in the younger, toys were included in the "education" category because games are the main learning activity until the school period. It can be seen that education is the main destination of the expenses registered for the benefit of the children, seconded by the subcategory of food and followed by apparel-footwear. We note that the subcategory "food" in the age range of 0

- 2.99 has the lowest weight compared to the other age ranges, but the differences between them are not large.

Small differences also occur in the case of the "spare time" subcategory between the three age ranges: 3.44% average in the family expense budget (for the 0 - 2.99 years range), 4.19% for the age range of 3 - 6.99 years and 0.04% more for children between 7 and 13.99 years. The "transport" and "house endowment" subcategories have very low averages in total spending regardless of the age ranges of the children since most of them are included in the similar subcategories of family consumption, influenced. It is understood that most of the expenses of transporting or equipping the house are not strictly dedicated to children, but benefit the whole family from them.

Research Limitations

The influence of the child on the consumption expenditures of families with children under the age of 14 years cannot be measured very precisely since its level varies from one family to another, being a subjective element (correlated with the value system promoted within the family). The harmonization of the family program with the scheduling for the weekly interview of expenses reporting has caused that during the research there are situations of postponing the weekly interviews (on average, between 1 and 5 cases / week), even with a week for various reasons: illness to a child or even the respondent, school holidays - especially around Christmas.

Conclusions

We could find that in the structure of expenses made for the benefit of children, the most important averages are education, food and expenses for apparel-footwear, regardless of the number of children in the care of the family and their age. Even though in establishing the 4 types of expenses we considered a category called "family consumption, not influenced by children", most parents stated that, with the appearance of the first child, they pay more attention to the foods they buy for several reasons:

- Breastfeeding women should avoid certain foods because their consumption can cause health problems for their children.

- The desire to determine the child / children to adopt a healthy eating style, etc.

The highest average values of expenses made only for children in the case of families with two children compared with families with one or three children are recorded in November 2019 and not in December, as we would have expected.

The analysis of the expenses recorded daily reveals that, regardless of the age and the number of children in the family, the total amount spent on average by each family with children increases in December compared to November, so that in January they can register a sudden decrease. Compared to the other categories of families, in the case of families with three children, the average level of spending on children is higher not only in December but also in January. Looking at the entire research approach after its completion we can confidently state that:

- The average of expenses for children aged 0-14 in the family expenses budget varies depending on the number of children supported.;

- The total of the expenses dedicated strictly to the children and those influenced by the children holds a majority average in the total budget of the family's expenses;

- The average of expenses intended strictly for children in the family budget varies according to the age of the children (between 0 and 14 years).

Therefore, without comparing the structure of family expenses before the appearance of children with that of the "full nest" we can say without hesitation that expenses (direct or indirect) made for the benefit of children are a basic component of the family budget.

References

- Alanen, L., 1999. Childhood as a generational condition: Towards a relational theory of childhood. Paper in *Research in Childhood: Sociology. Culture and History. A collection of Papers*. University of South Denmark Odense/Esbjerg. October, pp.11–29.
- Brandrup, J.D. and Mance, P.L., 2011. How Do Pregnancy and Newborns Affect the Household Budget? *Family Matters*, 88, pp.31-41.
- Buckingham, D., 2011. *The material child. Growing up in consumer culture*. Cambridge: Polity Press.
- Buckingham, D. and Tingstad, V., 2017. Children as consumers. In *Routledge Handbook on Consumption*, Routledge Press, pp. 303-313.
- Challa, N., Singh, A., Fosado, M., Harjani, J. and Hota, M., 2016. Family Size, Structure and Composition: Influence on Development of Children as Consumers, *Working Papers Series IESED School of Management*, pp.1-9.
- Chaudhary, M., 2018. Profiling Children as Consumers: An Indian Study. *Pertanika Journal of Social Sciences and Humanities*, 26(4), pp.2523-2539.
- Cook, D., 2008. The missing child in consumption theory. *Journal of Consumer Culture*, 8(2), pp.219–243.
- Dominick, S. R., Widmar, N. O., Acharya, L. and Bir, C., 2018. The Relative Importance of Household Budget Categories: A Best-Worst Analysis. *Advances in Applied Sociology*, 8(05), pp.378-388.
- Economic Policy Institute, 2015. *Family Budget Calculator*. Economic Policy Institute, [online] Available at: <<https://www.epi.org/resources/budget/>> [Accessed 11 Apr. 2020].
- Eurostat, 2020. *Mean consumption expenditure per household and per adult equivalent*, [online] Available at: <https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=hbs_exp_t111&lang=en> [Accessed at 19 February].
- Hawkins, C. ed., 2017. *Rethinking children as consumers: the changing status of childhood and young adulthood*. London: New York: Routledge, Taylor and Francis Group.
- Hillen, C. and Lavarda, C.E.F., 2020. Budget and life cycle in family business in succession process. *Revista Contabilidade and Finanças*, 31(83), pp.212–227.
- Jacobson, L., 2004. *Raising consumers: children and the American mass market in the early twentieth century*. Popular cultures, everyday lives. New York: Columbia University Press.
- Kalwij, A. and Salverda, W., 2007. The Effects of Changes in Household Demographics and Employment on Consumer Demand Patterns. *Applied Economics*, 39, pp.1447-1460
- Kennedy, D., 2002. The child and postmodern subjectivity. *Educational Theory*, 52(2), pp.155–167.
- Kenway, J. and Bullen, E., 2001. *Consuming children. Education – Entertainment – Advertising*. Buckingham: Open University Press.
- Lareau, A., 2003. *Unequal childhoods: Class, race, and family life*. Berkeley/Los Angeles: University of California Press.
- Lopez, A. and Rodriguez, R., 2018. Children and their brands: how young consumers relate to brands. *Journal of Consumer Marketing*, 35(2), pp.130-142.
- Marshall, D., 2010. *Understanding children as consumers*. London: Sage.
- Mullin, A., 2014. Children, paternalism and the development of autonomy. *Ethical Theory and Moral Practice*, 17, pp.413–426.
- Pilcher, J., 2013. ‘Small, but very determined’: A novel theorization of children’s consumption of clothing. *Cultural Sociology*, 7(1), pp.86–100.
- Stearns, P., 2010. Defining happy childhoods assessing a recent change. *The Journal of the History of Childhood and Youth*, 3(2), pp.165–186.