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ANALYSIS OF THE FINANCIAL CULTURE RELATED INTERGENERATION EFFECTS. INVESTIAGION OF YOUNG CONSUMERS' FINANCIAL BEHAVIOR

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Abstract

The purpose of this paper is to provide insight into the consumer and financial socialization of young adults, with applying a result approach – outcome of parental intergenerational influence on children's financial behaviour – as well as a process approach – the nature of the influence. The empirical part of the research is based on a database of 1070 persons, actually 535 student-parent pairs. An online questionnaire on financial behaviour, attitudes and materialism has been completed by students of the Corvinus University of Budapest and their parents. Based on Z-test and regression analysis results show that family effects exist on young adults' financial behavior and family communication patterns have got a significant role in shaping financial socizalization processes. Implications for marketers (eg. commercial banks with financial education programmes) and for educators are encapsulated in the paper. While the analyses and results of the present paper are built on a larger sample size than similar studies with paired samples, and they equally include fathers, the sampling is restricted to students of one university. Studies so far have examined the related phenomena from one perspective only (e.g. from that of the child, or the parent). The scientific conclusions of the research, therefore, are expected to provide, inter alia, a more accurate, more reliable and more valid point of reference for upcoming scientific studies in the field.

Keyword: *financial socialization, consumer socialization, family, intergenerational effects, young consumers, consumer finance*

JEL Classification: D14, G40, G41, M50

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I. Introduction

The central question of my research is about the role parents play in the development of young adults' financial behaviour. In my research I shall investigate the mechanism and outcomes of intergenerational transmission. The research subject is based on consumer socialization theories. The question to be addressed is about how consumer behaviour patterns are transmitted/passed down in a family from generation to generation. As communication – specifically social interactions – is an essential dimension of the transmission process, the topic of the research has been narrowed down in line with this aspect. Communication from parents to children is the traditional way of socialization. The research question will be studied from two main aspects: intergenerational influence and consumer behaviour theories. Then, results obtained from these areas shall provide a framework to analyze the influential role of the family.

I.1 Theory of consumers' financial behaviour

Research into and the definition of consumer finances primarily emerge in three areas: (1) consumer behaviour, (2) financial education, (3) financial counselling. The first one is closely related to psychological research, financial behaviour is often approached from financial problems. In Hungary, all the three strands has just started to revive. Aiming to develop financial literacy inevitably led to research on consumer finances (for example, Botos et al., 2012; Béres & Huzdik, 2012), and the importance of education has received increasing emphasis not only in words but also in actions, such as programmes of Money Compass Foundation of the Central Bank of Hungary, or Basics I and Basics II educational programmes of Fáy András Foundation of OTP. The third area, financial counselling, has established the strongest presence in the United States of America, and there are many cases in the Western European countries, but Hungary is still in its infancy in this area as well. According to Xiao (2010: 70) any human behaviour can be defined as financial behaviour that is related to personal finances management in any way. Financial behaviour generally includes cash management, and behaviour related to credits and savings (Xiao, 2010).

There are various strands of financial education literature, and they can be relevant in studying financial behaviour as well. Depending on the main goal of education, researchers attempt to apply various approaches to evaluate the efficiency of educational programmes. One of the strands is about the financial behaviour of participating students/pupils, whether education was able to lead to some change in

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students' behaviour. Such studies often fail to define financial behaviour, or only one or two dimensions are explored (Fox & Barthalomae, 2010). For example, in a research Bernheim et al. (2001) tried to measure the proportion of savings when they examined the long-term impact of financial education programmes. They emphasized one dimension of the many, the saving dimension of financial behaviour. In a study Bayer et al. (1996) tried to explore the implications of financial education at workplaces, and emphasized saving likewise. Eductional programmes at workplaces often emphasize the saving dimension (Bernheim & Garrett, 2003; Todd, 2002). Behaviour can also be examined by describing how credit cards are used (Ethridge, 1982; Mottola, 2013; Shefrin & Nicols, 2014). Peng et al. (2007) applied the same approach and added timely payment of bills to the characteristics describing financial behaviour. Bowen & Jones (2006) also investigated various aspects of credit card use, including whether respondents planned any change in their credit card use. Chen & Volpe (1998) studied savings and credits, as well as investments. In a study Shockey & Seiling (2004) also deal with financial education, and apart from focusing on saving, various concepts about financial consciousness are also applied.

Implementation elements such as planning and budgeting are included in the model, and additionally an important element, setting a goal. This is the only new element that has not been emerged explicitly in the investigations discussed so far. Shockey & Seiling (2004) tried to incorporate several elements into their model that indicate conscious financial behaviour. Perry & Morris (2005) also investigates conscious financial behaviour, they apply the Responsible Financial Behaviour Scale to describe the financial behaviour of respondents, and to analyze other correlations (for example, to explore relationship between external control and responsible financial behaviour). Their approach encompassed control of expenses, planning, saving and caring, too. Danes et al. (1999) attempted to develop a Financial Behaviour Scale particularly for young adults which covers the following dimensions: goal setting, planning, saving, control and communication. Family communication—a crucial element, not mentioned before—appears.

For young adults communication about finances and shopping is an essential shaping factor (Moschis, 1985; Chaplin & Roedder, 2010). There is some overlap between the statements of this scale and that of Perry and Morris (2005), both intend to measure responsible and conscious financial behaviour, which is also the goal of most programmes in Hungary (Money Compass Foundation of the Central Bank of Hungary, Fáy András Foundation of OTP). Nagy& Tóth (2012) also believe that it is particularly important to strengthen financial consciousness to affect the national economy; in other words, it is important to ensure that consumers behave consciously, have a knowledge of financial services, their advantages, disadvantages and risks (Dobák & Sági, 2005; Chachesz & Honics, 2007; Botos, 2012). Another scale, named Effective Financial Behaviour Scale was developed by Borden et al. (2008) based upon a very similar pool of statements Perry & Moris (2005) applied, but credit card use and attitudes to credits were emphasized in the research, therefore statements were modified accordingly.

Numerous conventional research were conducted on credit card use in the area of personal finances (Xiao et al., 1995; Xiao et al., 2006; Hayhoe et al., 2000; Roberts and Jones, 2005; Pinto et al., 2000, Pinto et al., 2005; Robb, 2011), and they were carried out mainly in western countries. Credit card use is negligible in Hungary, credit card transactions amount only to 0.66% of total financial transactions (Turján et al., 2011; Takács, 2011), therefore it is still irrelevant to integrate credit card use into the financial behaviour model.

Responsible or conscious financial behaviour typically involves goal setting, planning, saving, control of expenses, care about the future and communication. According to Dowling et al. (2009) people who are able to manage their finances effectively are facing fewer financial problems and are more satisfied with their material position.

The concept of future orientation and time preference are closely linked to consciousness, efficiency and responsibility (Webley and Nyhus, 2006; Lynch et al., 2010; Ruthledge & Deshpande, 2015). Both factors are strongly related to financial and economic behaviour of individuals (Julander, 1975; Lea et al., 1995; Webley & Nyhus, 2001). Future orientation means that individuals have long-term plans, consider future consequences of their behaviour and have higher propensity to save (Webley & Nyhus, 2006; Katona, 1975; Ruthledge – Deshpande, 2015). Whether individuals are able to postpone to meet their needs is strongly linked to their future orientation, furthermore their ability to save can also be predicted (Angeletos et al., 2001; Wood, 1998; Webley & Nyhus, 2006; Mofitt et al., 2011), and it is also predictable that they will be able to control their unexpected needs (Leung & Kier, 2010). Table 1 summarizes the financial behaviour dimensions researchers included in their definitions.

Table 1- Dimensions included in financial behaviour definitions

Author(s)	Dimensions of consumer finances
Williams et al. (1976)	Frequency of financial problems;care
Deacon and Firebaugh (1988)	Planning; implementation
McKenna & Nickols (1988)	Long-term planning
Danes & Morris (1989)	Planning
Mathur (1989)	Goal setting; long-term and short-term planning; implementation
Fitzsimmons et al. (1993)	Problems; planning and implementation; purchases
Dickinson (1996)	Knowledge; long-term and short-term planning; implementation
Bayer et al. (1996)	Saving
Chen & Volpe (1998)	Saving; credit management; investments
Danes et al. (1999)	Goal setting; planning; saving; control; communication
Bernheim et al. (2001)	Saving; accumulation of wealth
Shockey & Seiling (2004)	Saving; goal setting; planning; implementation
Perry & Morris (2005)	Control; planning; saving; care
Webley & Nyhus (2006)	Long-term planning; saving
Bowen & Jones (2006)	Credit cards usage; planning
Garman & Forgue (2006)	Long-term and short-term planning; credit and income management; purchase of products and services; investments
Peng et al. (2007)	Credit cards usage; paying bills on time
Xiao (2010)	Managing cash; managing credits and savings
Botos et al. (2012)	Income; cash flow; managing credits and savings
Béres & Huzdik (2012)	Income; cash flow; managing credits and savings
Shefrin & Nicols (2014)	Credit cards usage

Source: own elaboration

Various definitions and approaches are found in the literature, thus various scales are available to measure and to understand financial behaviour. These scales often overlap, exist concurrently, and there is hardly any continuation in research strands, thus measurements are done mainly separately, and are not build on previous works (Dew and Xiao, 2011). Two strands seem to emerge, as described by Fitzsimmons et al. (1993). One strand investigates financial behaviour on general level (for example, Danes et al., 1999). The other strand explores one or more aspects of financial behaviour, such as credit related behaviour (for example, Hayhoe et al., 2000; Robb, 2011).

I.2 Theory of family communication patterns

The theory of family communication patterns has been developed by McLeod & Chaffee (Chaffee et al. 1966; McLeod et al., 1967) who applied this theory first in research into relationship between political socialization and the effect and context of media consumption. In the field of consumer behaviour, the theory of family communication patterns was applied first by Chaffee, McLeod & Atkin (1971), who supplemented consumer socialization processes with family 'communication climate' (Bordás, 2008: 9).

McLeod & Chaffee (1972) identified that families and pairs come to agreement in two different ways. Way one is when family members listen to other members, how they evaluate something, and then adopt this evaluation. Practically, they conform to other members, and in this process the emphasis is on the relationship between family members. The two authors name it socio-orientation. The other way is concept-orientation, the essence of which is that family members come to common perception of things in their environment. In this case, the emphasis is on the manner family members define the thing in question. Thus, the basis of the communication style is the creation of a common social reality within the family (Graham, 2011). In a study McLeod & Chaffee (1972) focused on children's information processing regarding media content. Their results shed light on this issue, the way children process information depends on the way they come to an agreement. Children of socio-oriented parents tend to rely on others to understand media messages, while children of concept-oriented parents tend to process media messages on their own, and define the meaning accordingly. The two authors have developed a scale to measure family communication patterns, the Family Communication Patterns Scale; which was further developed in communication science by Fitzpatrick (1990), and in consumer behaviour by Moschis & Moore (1979).

'Socio-orientation emphasizes harmony, and tries to avoid disputes, whereas concept-orientation places intellectual values in the centre, encourage flexibility and questioning others' views, even if there are differences in status, ability or knowledge.' (Bordás, 2008: 9). The theory of McLeod & Chaffee (1972) provides a simple dichotomy between the two orientations (socio- and concept-orientation), low and high values, thus defining four family communication styles (see Table 2).

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Table 2- Types of family communication

		Concept-orientation	
		High	Low
Socio-orientation	High	**CONSENSUAL** Parental power, children are encouraged to express their views	**PROTECTIVE** Emphasis is on obedience to parents, children's problem-solving skills are less developed
	Low	**PLURALISTIC** Children are encouraged to express their views openly, parental bond is weak	**LAISSEZ-FAIRE** Parent-child communication is poor

Source: Neulinger, 2011 based on Ritchie & Fitzpatrick, 1990

Consensual families are high both in concept-orientation and socio-orientation, thus there is, concurrently, pressure to obey to parents and encourage children to express their views openly, hence family members tend to share the same opinion on basic things, and usually agreement prevails in the family. Protective communication climate prevails in families that are high in socio-orientation and low in concept-orientation, therefore emphasis is on obedience to parents and on social harmony. Children of these families have less developed problem-solving skills, as parents do not regard it important to encourage children to process information and interpret independently. In pluralistic families the level of dimensions are the opposite, namely, families are high in concept-orientation and low in socio-orientation. Children's opinions are usually accepted, and children are encouraged to develop skills and abilities, such as problem-solving skills, and as a result their skill are more developed. Laissez-faire families are low in both communication orientations, communication is poor between parents and children, parents fail to lay stress both on control and self-reliance (Kim et al., 2009; Caruana & Vassallo, 2003; Bordás, 2008; Graham, 2011; Neulinger, 2011; Neulinger & Zsótér, 2012).

The family communication patterns model of Fitzpatrick & Ritchie (1990; 1994) is based upon the assumption that relationships, including family relationships, cannot be established without communicative co-orientation (Fitzpatrick & Ritchie, 1994; Ritchie & Fitzpatrick, 1990). Researchers intended to further the train of thought of McLeod & Chaffee (1972), however their theory is different; they place stronger emphasis on family behaviour and patterns than McLeod & Chaffee (1972) who emphasized children's information processing. Nevertheless, they acknowledge that family communication patterns are defined by parents primarily, and stress that children's role must not be forgotten as children can affect both the style and the outcome of the communication process. Their theory does not distinguish between right or wrong, healthy or unhealthy family mechanisms, it is intended to describe the communication journey families can undertake (Graham, 2011).

II. Applied methodology

The empirical research is guided by three research questions:

Q1. Does an intergenerational effect exist within the family between young adults and their parents as regards financial behavior?

H1. There does exist an intergenerational effect within the family as regards young adults' financial behavior.

Q2. To what extend does parents' financial behavior affect young adults' financial behavior?

H2. The more conscious parents' financial behavior is, the more their children's financial behavior is conscious.

Q3. How can young adults' financial socialization process can be characterized in connection with family communication patterns?

Prior assumption 1: Parents in families characterized with high conceptual and high social orientation (i.e. where parents exercise a resolute control and consciously encourage autonomy at the same time [consensual communication]) are expected to have a higher impact on their young adult children's financial socialization than in the remaining subsamples.

Prior assumption 2: In families where parents do not seek to control their young adult children nor to encourage their autonomy, the results are expected to be lowest compared to the remaining subsamples.

The study of the intergenerational effects on young adults' financial socialization was based on the above-mentioned research questions and related hypotheses using literature-based measuring instruments. A quantitative research methodology based on international scales and the author's prior research results is used to answer the study's research questions and to test the related hypotheses. The variables included in the study originate from, on one hand, the Financial Planning Scale (Danes et al., 1999), and on the

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other, from the Financial Behavior Scale (FBS) (Perry-Morris, 2005). The pool of items was generated with expert assistance, and four sub-dimensions were identified: savings, objectives, monitoring, and norm compliance. Family communications were measured using the Family Communication Patterns Scale (FCPS) (Moore – Moschis, 1981; Caruana – Vassallo, 2003). The factor structure obtained with the above scales was verified using IBM SPSS Amos 22 software.

In the framework of the research both univariate and multivariate statistical methods are used. Data was analyzed using IBM SPSS 22 software. The study of the existence of intergenerational effect within the family (Q1), and the test of hypotheses H1 was performed by a random and actual pairing of students and parents leading to a Z-test (Kanji, 1993). The research question related to the extent of parental effect (Q2), and related hypotheses H2 are assessed using regression analysis. Regression analysis was equally used on further subsamples to assessing Q3. In case of Q3, based on the methodology proposed by Moore & Moschis (1981), four categories of communication were created by dividing the sample along the medians for conceptual and social orientations into two parts each.

The measurement of financial behaviour was based on the two scales applied by Perry & Morris (2005) and Danes et al. (1999). The two scales attempt to measure conscious and responsible financial behaviour respectively (see Table 3).

Table 3- Items of the Financial Behaviour Scale

Financial Behaviour Scale	Responsible Financial Behaviour Scale
I track my expenses I compare prices when I shop I set aside money for future needs/wants I use budget I repay the money I owe on time I make goals for managing my money I achieve my money management goals I discuss money matters with my family	I control my spending I pay my bills on time I make plans for my financial future I provide for myself and my family I save money

Source: Danes et al., 1999, Perry & Morris, 2005

The two scales overlap on a few statements. The scales applied in consumer finances and a phenomenon, the separated, island-nature of investigations. Thus, it is not easy to find a reliable and validated scale in this area, however I tried to minimize this problem by conducting expert interviews. The development of conscious financial behaviour is an important strand in financial education (Central Bank of Hungary, 2012), and this is the reason why I have chosen these two scales. Based upon the two scales (Perry & Morris, 2005; Danes et al., 1999) and the expert interviews, the following statements on financial behaviour were involved in the research:

Table 4- Scale items to measure financial behaviour

Scale items	Factors
I regularly save money.	Saving behaviour
I set aside money for future needs/wants.	
I make goals for managing my money.	Goal setting
I achieve my money management goals.	
I regularly check my expenses. That is, I compare how much I had planned to spend and how much I spent in the end.	Control
I use budget. (That is, I administer my incomes and expenses.)	
I pay what I have to pay on time (rent for a room, student hostel, phone bill, other bills, etc.)	Norm compliance
I repay the money I owe on time.	
I discuss money matters with my family.	

Source: own elaboration

The intergenerational effect within the family is often studied by putting only one family member into focus, and determining from their point of view whether there exists a parental effect or not. An important goal of the present research was to not only determine the financial socialization aspects of young adults but also to consider their parent's answers, thereby offering a complex interpretation of the problem using a paired sample, where intergenerational effects are assessed considering both respondent groups.

The instrument used for data collection was a survey. An online survey was used for collecting data from both students and parents. While respondents were offered the choice to answer the questionnaire on paper, only a few respondents resorted to this option. Data collection was performed along freshmen students of Corvinus University of Budapest. Respondents received extra points when both them and their parents filled out the questionnaire. Participation in the study was thus optional. In order for us to be able to identify the student/parent pairs at the end of the data collection period, students' university identification codes were used. These personal data were deleted after successful pairing. The latter method allowed us to perform both a random and actual pairing of the two samples (students and parents). At the end of the data collection period, a database of 602 student/parent pairs was obtained. After data cleaning, the database was ultimately composed of 535 pairs. For the sake of comparison, the study that constituted the starting point for the present work (Moore et al., 2002) included 102 daughter/mother pairs to analyze intergenerational effects within the family. In the student sample, the majority of excluded respondents were male. For this reason, their proportion in the final sample is 37.6%. In the parent sample, the majority of respondents are female: mothers constitute approximately two thirds of the sample. The average income values obtained for both the student and parent samples leaves to suggest that respondents generally have an above average financial situation in a Hungarian context. Table 5 shows baseline statistics for the student and parent samples.

Table 5- Baseline statistics of the student and parent samples

	Student sample (N=535)	**Parent sample (N=535)**
Gender		
Male	37.6%	27.3%
Female	62.4%	72.3%
Main residence		
Budapest (capital city)	32.0%	29.2%
Other town	49.5%	54.6%
Minor municipality	8.2%	8.0%
Other village	8.2%	8.2%
Monthly average income	54,517 HUF (175 EUR)	313,524 HUF (1000 EUR)

Source: own elaboration

III. Results and conclusion

Research questions Q1 and Q2 focus on the study of the existence and intensity of intergenerational effects within the family. Q1 is suitable for formulating H1 as the existence of intergenerational effect is assumed, based on the literature (Webley – Nyhus, 2006; Fluori, 1999; Solheim, 2011; Chaplin – Roedder John, 2010). The test of hypotheses is performed in a multi-step process, as follows:

1. A paired random sample is created, where respondent students are attributed random respondent parent pairs. At the same time, a sample with actual pairs is constituted based on the identification codes provided by the respondents.

2. In a second step, variables suitable to analysis are created from the tested constructs. The factor structure obtained from t he confirmatory factor analysis are used as

a base for creating the variables, which are made up by the sum of items belonging to a concept or dimension. These variables are further transformed into categorical variables, i.e. for each studied construct, three groups are constituted (low, medium, high).

3. In a third step, for each variable involved we examine in both samples (actual and random pairing) how many subjects fall into the same category. The three values obtained for the random pairing show the number of parent/student category matches (expressed as a percentage), i.e. how many of them fall into a same category, regardless of whether they belong to the same family or not. The three values obtained for the random pairing show the number of parent/student category matches (expressed as a percentage), i.e. how many of them fall into a same category. In this latter case, actual parent/children pairs are concerned.

4. In a fourth step, the significance of differences between the two groups is examined using a Z-test (Kanji, 1993), that is, we study whether the number of participants categorized into one of the three categories differs significantly between the random and actual samples. According to the null hypothesis of the Z-test, the values in the two samples do not significantly differ. The null hypothesis is rejected at a .05 significance level in case $-1.96 < Z < 1.96$. The null hypothesis is rejected at a .1 significance level in case $-2.576 < Z < 2.576$. Based on the obtained Z values, we can conclude whether an intergenerational effect exists in the studied variables. If the null hypotehsis is rejected based on the result of the Z-test (i.e. the assumption that the two samples are similar turns out to be false), one can then conclude that there is an actual intergenerational effect within the family for the studied variable.

The following symbols and formulas were applied in the calculations (Kanji, 1993; Moore et al., 2002):

- p_{h1-3} = the proportion of students (young adults) (h: hallgató [Hungarian for student]) falling into the given category of the given variable;
- p_{sz1-3} = the proportion of parents (sz: szülő [Hungarian for parent]) falling into the given category of the given variable
- M_{1-3} = number of paires effectively categorized into the given category
- n = sample size
- E = shows the total number of subjects in the random pairing sample who fall into the same category as their pairs
- A = shows the total number of subjects in the actual pairing sample who fall into the same category as their pairs

$E = n * [(p_{h1}*p_{sz1})+(p_{h2}*p_{sz2})+(p_{h3}*p_{sz3})]$

$A = 2* (M_1+M_2+M_3)$

$$Z = (A/n – E/n)/\{[E/n * (1 – E/n)]/n\}^{1/2} \quad (1)$$

The results of the above study performed for eleven variables (four dimensions of financial behavior, five dimensions of financial attitudes, two dimensions of materialism) support the existence of an intergenerational effect. In nine (out of a total of eleven) cases, the obtained Z-result was higher than the threshold value of 2.576. In these cases, the null hypothesis of the Z-test can be rejected: the number of pairs significantly differ between the random and actual samples. The values of the Z-test are presented in Table 6.

Table 6 - Intergenerational effects within the family for studied variables

Variable	**Z values**	**Significance (P≤.01)**	**Does an IG effect exist?**	**Hypothesis accepted or rejected**
Financial behavior				
Behavior_saving	0.259	not significant	NO	H1 partially accepted
Behavior_target	3.518	significant	YES	
Behavior_control	3.688	significant	YES	
Behavior_normcompliance	6.391	significant	YES	

Source: own elaboration

Question Q2 focuses on the intensity of parental effect, and studies the various dimensions of young adults' financial socialization in terms of parental effect. Hypotheses H2 theorizes a positive relationship between parents and young adults in the studied dimensions. To test H2, a two variable regression analysis was performed. The independent variable was an attribute relative to the, while the independent variable was the same attribute relative to the student (young adult). We therefore study whether the parent has an effect on their young adult children, and if yes, what is the extent of the. Table 7 shows the results of the regression analysis for financial behavior.

European Journal of Accounting, Finance & Business

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Table 7- The effect of parents' financial behavior on their children's financial behavior – Results of the regression analysis

Hypothetical effect		B	β	t	R^2	F
Beh_saving_sz	Beh_saving_h	.107	.101	2.338*	.010	5.465*
Beh_target_sz	Beh_target_h	.134	.114	2.641*	.013	6.974*
Beh_control_sz	Beh_control_h	1.0167	.183	4.307**	.034	18.553**
Beh_normcomp_sz	Beh_normcomp_h	.355	.302	7.325**	.091	53.659**

Source: own elaboration

*p<.05; **p<.001

One can conclude that among the studied dimensions of financial behavior, no significant relationship can be found at a .1 probability of type I error for the savings and targeting behaviors of parents and their young adult children. The remaining two dimension (control, norm compliance) show a significant relationship, with norm compliance being the strongest (R2=.091; F=53.659, p=.000). Parents thus have a strongest effect on their children's financial behavior where they show a model of adaptation to social norms to their children. Hypothesis H2 is partly supported.

The effect of family communication patterns can be measured by FCP scale. Ritchie & Fitzpatrick (1990) scale is longer and was designed to explore family communication styles in general, whereas Moore & Moschis (1981) scale is specified to consumption-related research, thus it seems to be more suitable to investigate consumer financial behaviour. The two dimensions of the scale (concept-orientation and socio-orientation) and their items ranging from 1 (strongly disagree) to 5 (strongly agree) are as follows (see Table 8):

Table 8- Items of Family Communication Pattern Scale by dimension – adjusted to students

Concept-orientation
My mother (father) asks me to help her buy things for the family.
She (he) asks me my preference when she buys something for me.
She (he) talks to me about where different products can be bought.
She (he) lets me decide which things I should or shouldn't buy.
She (he) asks me for advice about buying things.

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Table 8- *Cont.*

Concept-orientation
My mother (father) and I talk about buying things.
She (he) asks me about things that she buys for herself.
She (he) asks me what I think about things I buy for myself.
Socio-orientation
My mother (father) tells me what things I should or shouldn't buy.
She (he) tells me that I'm not allowed to buy certain things.
She (he) wants to know what I do with my money.
She (he) complains when she (he) doesn't like something that I bought for myself.
She (he) tells me not to buy certain things.

Source: Kim et al., 2009

Based on prior research one statement of concept-orientation failed to fit into the original factor structure (She/he lets me decide which things I should or shouldn't buy). Furthermore, two more statements had to be excluded from the concept-orientation because of the low factor loading. The scale has become more balanced as statements in the two orientations are similar in number. Factor analysis was performed on the student sample, and the value of Cronbach's alpha of the concept-orientation was 0.72, and on socio-orientation 0.745. The factor analysis conducted on the parent sample (KMO=0.812) yielded low factor loading on the same statements as on the student sample, thus excluding the same statements the following structure was produced. The factor analysis performed on the parent sample yielded Cronbach's alpha 0.727 for the concept-orientation, and 0.737 for socio-orientation. Each Cronbach's alpha value is within the threshold value of 0.7 (Nunally, 1978), thus scales can be confirmed reliable.

Based on the FCP scale, one can distinguish between two major communication orientations: conceptual and social. A combination of these two styles (distinguishing, along the median of each orientation, between a low and high category) leads to the four communication styles typical of parents (Moschis, 1979; Moschis, 1986). In the following table we summarize the results of the regression analyses on the four communication style subsamples (values of the R2 determination coefficients), and display the value of the R2 determination coefficient for the entire research sample, which will enable us to answer research question Q2.

European Journal of Accounting, Finance & Business
Volume **VIII**/2018 ISSN 2344-102X
Issue (XVIII) / **October** 2018 ISSN-L 2344-102X

Table 9- Values of the determination coefficients obtained from the regression analysis of the four communication subsamples [1]

Hypothetical effect		**R^2 (m)**	**R^2 (t)**	**R^2 (v)**	**R^2 (lf)**	**R^2 (total)**
Beh_saving_sz	Beh_saving_h	.067**	.000	.019**	.001	.010*
Beh_target_sz	Beh_target_h	.012	.020	.009**	.010	.013*
Beh_control_sz	Beh_control_h	.042*	.065*	.010	.028	.034**
Beh_normcomp_sz	Beh_normcomp_h	.057*	.094*	.108**	.059*	.091**

Source: own elaboration

**p<.001; *p<.05;
(m: consensual; t: pluralistic; v: protective; lf: laissez-faire)

In case of the consensual communication style, one variable pair (saving behavior) shows higher R^2 value than the other samples. One additional variable pair (control) shows higher R^2 value than the R^2 value of the entire sample. Both in case of pluralistic families, one variable pair (control) turns out to show the strongest correlation among the four subsamples. The R^2 value is higher than that of the entire sample in four cases:

- saving in protective subsample,
- control in consensual subsample,
- norm compliance in pluralistic and protective subsamples.

No variable pair was found to be most important in families that can be characterized by a more liberal, or laissez-faire communication style. Based on the above, it can be concluded that both prior assumptions turned out to be true. One can equally establish that it is the consensual communication style that goes along with a highest effect of parents over their young adult children's financial socialization, while a laissez-faire communication style produces the lowest effect.

Based on the results of the study, there were shown to be differing degrees of parental effects on the various aspects of children's financial socialization. In the category of financial behavior, norm compliance was shown to have a distinguished intergenerational effect. The above results comply with the literature (Jorgensen – Savla, 2010). It is important to note that prior research has shown that future borrowing intention and behavior is strongly influenced by the subject's general attitude towards loans (Kidwell et al., 2003; Shim et al., 2010). Financial education then thus needs to take into account the strong influence of the family in forming attitudes and the outcomes thereof. Consumer socialization theories emphasize the process and interaction dimensions

(McNeal, 2007; Roedder John, 1999; Lassare – Roland-Lévy, 1989) which are consistent with the results of the present research. Both consumer socialization and intergenerational effects are thus to be regarded as ever-changing phenomena with peculiar dynamics, and not as the effect of one given and known output variable. This is supported by the finding that the strength of the measured parental effects can be distinguished along dimensions like family communication styles and respondents' financial independence. Varying levels of parental effects were shown along the different family communication patterns. Parents following a consensual communication style can have a larger influence on their young adult children, as they can encourage their children's gradual independence by constantly communicating with them and keeping a certain amount of control as regards their financial status. On the contrary, parents with a liberal or laissez-faire communication style have a negligible impact on their children compared to the other groups. This result is in line with the literature of consumer socialization, stating that family dynamics are an important factor in the study of intergenerational effects (Moschis – Moore, 1979; Kim et al., 2009; Caruana – Vassallo, 2003; Sharma – Sonvaney, 2014). When aiming to address parents with a financial education program through the school or through an financial institution, parents ought to be segmented along their various educational goals and subsequent family communications patterns. It cannot however be established whether one or the other communication style is better. One can indeed imagine a scenario where a parent following a laissez-faire style of communication would otherwise perpetuate negative habits and attitudes and thus way the young adult is left with a choice to take example from outside sources regarding their financial socialization.

Organizations targeting young adults with financial education programs or financial products/services ought not consider this group as a homogeneous crowd, as, for instance, their levels of financial independence determinates the impact their parents have on their finances. Those young adults who receive income from a form of employment, and those that plan on becoming financially independent on the short run will be likely to be interested in different pieces of information than those who have a somewhat guaranteed existence.

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Volume **VIII**/2018 ISSN 2344-102X
Issue (XVIII) / **October** 2018 ISSN-L 2344-102X

Others

[1] Colored values in the table represent those higher than the value of R^2 relative to the entire sample. Values highlighted in bold represent those with the strongest correlation relative to the regression analysis of the given variable pairs.

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