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FERTILITY DESIRES OF ADOLESCENTS AND YOUNG ADULTS LIVING IN LARGE FAMILIES

The Role of the Family of Origin and the Cultural Stereotypes**

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In our study, we aimed at examining the childbearing desires of adolescents and young adults living in Hungarian large families. Two different methods were used during the dyadic data analysis. On the one hand, correlation between the fertility desires of siblings, on the other hand, the absolute difference in the planned number of children was measured. The data indicate that in two out of the three dyads of siblings, created by the order of birth, significant correlation can be measured. Pseudo-dyads were created in order to test if the above mentioned parallel data can be explained by the similar socio-demographic characteristics of the sample families. The correlation disappeared in case of the randomly paired adolescents and young adults. All in all, family background is likely to have a more important impact on fertility desires of youngsters than similar social environment.

Keywords: large family, dyad, fertility, family of origin

Fertilitätswünsche von Heranwachsenden und jungen Erwachsenen, die in großen Familien leben: Die Rolle von Ursprungsfamilie und kulturellen Stereotypien: In unserer Studie wollten wir die Kinderwünsche von Heranwachsenden und jungen Erwachsenen erforschen, die in ungarischen großen Familien leben. Bei der dyadischen Datenanalyse haben wir zwei verschiedene Methoden angewandt. Zum einen haben wir die Korrelation zwischen den Kinderwünschen von Geschwistern und zum anderen die Unterschiede bezüglich der absoluten Zahl der geplanten Kinder ermittelt. Die Daten zeigen, dass bei zwei von drei Geschwisterdyaden, die nach der Reihenfolge der Geburt gebildet wurden, eine signifikante Korrelation besteht. Es wurden Pseudodyaden gebildet, um zu prüfen, ob sich die genannten Parallelen durch ähnliche soziodemographische Merkmale der Familien in der Stichprobe erklären lassen. Die Korrelation war bei einander zufällig zugeordneten Heranwachsenden und jungen Erwachsenen nicht mehr vorhanden. Insgesamt ist es wahrscheinlich, dass die Familienverhältnisse einen stärkeren Einfluss auf die Kinderwünsche junger Menschen haben als ein ähnliches soziales Umfeld.

Schlüsselbegriffe: große Familie, Dyade, Fertilität, Ursprungsfamilie

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1. Introduction

When making our most important private decisions, besides personal motivations and individual peculiarities, the social environment we live in also plays an essential role. Morel raises the question 'whether people act differently than it is expected from them by the norms of contemporary society and social environment with reason' (MOREL 1989, 60; our trans.).[1] The plans and desires about family life are influenced by many factors, which are in complicated interaction with each other.

The present study aims at examining the childbearing desires of a special population, adolescents and young adults living in large families. Before reviewing the scholarly literature relevant to the topic, it should be noted that social sciences differentiate between *fertility intentions* and *fertility desires*. While the first term refers to childbearing within a relatively short time period (usually three years), the latter one indicates how many offspring the questioned person wants in his or her lifetime. Referring to completed fertilities, which are of high importance regarding demography, fertility intention allows the setting of more accurate prognoses; although the number of children eventually born almost always lags behind the desired number. Although measuring fertility intentions is usually preferred by demographers, the importance of fertility desires should not been ignored.

Desires are always present in theories in a way that explains actual fertility behaviour. The *Theory of reasoned action,* one of the most often cited theories was elaborated by Icek AJZEN and Martin FISHBEIN (1980). A further developed version of this model, *Theory of planned behaviour*, was devised by the same author. (AJZEN 1991; FISHBEIN & AJZEN 2010). The fundamental concept of this theory is fertility intentions. These are affected by three main determinants: attitudes, subjective or perceived norms and perceived behavioural control. Although hypothetical variables, such as fertility desires and ideals, are not explicit components of the model, these are relevant background factors which influence intentions indirectly via attitudes, norms and perceived behavioural control.

Some authors assume that the primary determinants of fertility are personal desires and preferences in the number of children. In his theoretical framework, Miller developed a motivational sequence that drives reproductive behaviour. According to Miller's model, fertility behaviour is influenced by motivational factors. The name of this concept is Traits – Desires – Intentions – Behaviour (MILLER 2011). This three-step motivational sequence drives childbearing behaviour. During the first step of the process, these unconscious factors result in desires and ideals. Desires lead to fertility intentions and these intentions will be realised in childbearing. Positive and negative motivations should be distinguished, as the first facilitates childbearing, and the latter increases the likelihood of contraceptive behaviour.

[1] Original text: 'egyáltalán tesz-e az ember mást, cselekszik-e másként, mint ahogy kora társadalmában, szociális környezetében a normák előírásai szerint az embernek tenni illik'.

Fertility behaviour is influenced by macro and micro level factors. While the macro level refers to social entities and forces, at the micro level the individual's free agency, personal decisions and his interactions with other individuals appear. To illustrate the relationship between the two levels, Coleman created a model, often referred to as Coleman's boat, since the graphically illustrated process resembles a schematic boat (Coleman 1986; 1990; Raub et al. 2011; Matsueda 2013). A macro-micro model of fertility and its determinants, which was inspired by Coleman's model, was elaborated by Liefbroer and his co-workers (2015). The decision making process with the consequence of a certain number of children is not only influenced by the macro level conditions, but also by the attitudes of family members, friends and peers. These factors can either negatively or positively motivate individuals or couples.

Observing the processes at the social level, a traceable connection between views regarding the ideal number of children and actual fertility can be noticed. The norm of ideal family size plays an important role in the intention of wanting a child – especially when having one or more (Spéder & Kapitány 2007). In Hungary, since the first half of the 70's, there has been information on the transformation of norms regarding the number of children. Between 1974 and 2009, the average of ideal number of children decreased with almost one child, i.e. it declined in the same measure as actual fertility (S. Molnár 2011). This can partly be explained by the fact that intentional childlessness, which was barely measurable in the 70's, gained ground. In 2009, the number of those who preferred not to have children more than doubled compared to those who wished to have at least four. (3.3% and 1.5%) (S. Molnár 2009) The appearance of the two-child model can be dated before the political transition. In the first sequence of data, the respondents' absolute majority preferred three children, 25% more than those who preferred two children. This ratio substantially changed until 1987, when six out of ten respondents thought two children to be ideal (S. Molnár 2011). For three and a half decades, the ratio of those preferring large families declined dramatically. While formerly seven out of ten people had wished to have three children, this ratio decreased to 16% until 2009 (S. Molnár 2011). This is reflected in the answers given to the question whether those questioned consider it good if there are three children in a family. Within two decades, after the transition, the ratio of those who thought it to be good or very good declined to 20%.

By comparing the considered ideal number of children with actual fertility, we see how much the norms regarding family size in a given society differ from the actual act. If the indicator, derived from the average ratio of the two, converges to one, it means that childbearing is realised in harmony with the accepted norms and ideals (Girard & Roussel 1982). In Hungary, the ideal number of children decreased less than the actual fertility, so it can be stated that the gap between the value system and the actual act increased in the last decades.

Among the older age groups, the ideal number of children is slightly higher than among the younger ones; however, as S. Molnár (2011) indicates, the transition in public thinking has a stronger influence than ageing. Based on quasi-cohort analyses

we see that respondents did not embrace their parents' thinking, but they have adjusted their preferences to the transition of norms by modifying them downwards.

It should be mentioned that the desired number of children is not always stable; due to the effects of changes in circumstances, those involved often modify the desired number. In a panel study, Liefbroer (2009) has examined how constant the desired number of children is. During the 18 years, the participants were asked six times and it was found that the plans changed by the ageing of the respondents, the average desired number of children decreased from 2.42 (women) and 2.3 (men) to two. Ray and co-workers (2016) found that the personal ideal number of children was stable for about 70% of women, and the remaining 30% were equally likely to decrease or increase the desired number of children in the examined period.

The majority of changes can be explained by a change of partner, studies or carrier. If a woman delays giving birth to her 30s it becomes more likely that she will plan less children. It is generally true that discrepancy among individuals also grows with age; in this respect young age groups are the most homogeneous. According to Liefbroer (2009), less than half of those questioned have reached the desired number of children. The rate of those who had more children was below 15%, while 44% of women and 37% of men had fewer offspring. Those who cohabit without marriage wish to have fewer children than those who are married and the plans of married couples are the most stable, they seldom change their plans.

The family of childhood is of high importance among the factors that affect the preferences about having children. The study of intergenerational transmission in the research of the connections between the values of the family of origin and the attitudes towards family life has a history of a hundred years (Pearson et al. 1899), the connection between the fertility of parents and their children, and the similarity in the planned number of children have been proved by several researches (Jennings & Leslie 2013; Bras et al. 2013; Rijken & Liefbroer 2009; Bernardi 2016). Empirical studies that focus on the effect of the family of origin on fertility found positive correlation between the number of children of successive generations in the same family as well as the age of mothers and daughters entering into parenthood (Manlove 1997; Barber 2000). Mothers' preferences also have a strong and proximate effect on their children's behaviour (Axinn et al. 1994). This correlation is usually explained by the transmission of values, preferences and socialisation (Axinn & Thornton 1993; Bernardi 2013). The correlation between the number of siblings and that of own offspring has also been proved by researches (Solaz & Beaujouan 2014). The influence of the parental home on shaping the behaviour of children is known for decades (Thorton 1980). Far less research has been carried out that concentrated on the correlation of the fertility of siblings than on that of successive generations. Some studies pointed out that siblings have an effect not only on the timing of childbearing (Lyngstad & Prskawetz 2010), but also on the success of adult family life and the likeliness of divorce (Bobbit-Zeher et al. 2016).

The similitude between the values and behaviour of siblings cannot only be explained by the effect of the family. The common home and the same social status

make the similarity of values very likely per se. The expression of stereotype accuracy first appeared in literature in the middle of the previous century to explain the similarity in the values of those living in identical cultural and normative environments (Cronbach 1955). Since then, several researchers have tried to measure it. Considerable differences can be shown regarding both the term (stereotype accuracy, cultural stereotype, shared cultural values, zeitgeist) and the methodology (Okagaki & Bevis 1999; Glass & Polisar 1987; Rohan & Zanna 1996; Knafo & Schwartz 2003; Boehnke 2001).

The present study aims at examining whether significant correlation can be shown between the fertility desires of siblings living in the same household, in a group which is homogeneous regarding the variables relevant to the attitudes towards having children. Provided that a correlation can be shown between the preferences in the number of children of siblings, the question arises whether this can be explained by the similarity of the families questioned or the correlation is rather in connection with the characteristics of the family of origin.

2. Sample and methods

During our own data collection, we questioned 570 adolescents and young adults between ages 15–29 who live with their parents in large families about their future plans regarding the number of children they wish to have during their life. The number of cases in the three sub-samples of the siblings were 322, 166 and 82. The main focus was on the value system of those living in large families. In order to familiarise ourselves with that value system, the question regarding fertility desires is a more appropriate tool. The question was the following: 'How many children do you want in your entire life?'

The families involved were chosen from the members of the National Association of Large Families with probability sampling. A family raising or having raised at least three children can become a member of the Association.

Three forth of the sample families are intact families, 87% of them are with two parents. Half of the respondents are youngsters between the age of 15 and 19, 36% are between 20 and 24, and 14% between 25 and 29. When questioned, half of the respondents claimed to have a vocational degree, four out of ten people had a matura examination, and 11% had a university degree. 54% of those questioned had two siblings, 27% had three, while every fifth participant had more than three.

When sampling, a maximum of three youngsters being 15 years of age or older were asked per family. (Also in the case of families with more children belonging to this age group.) Couple-centred methods were used to measure the similarity between

[2] The variable-centred methods would have only been suitable for measuring the correlation between the number of children of the three sub-samples (oldest, middle and youngest child). Thus, this would have been competent to describe the samples, not the dyads.

siblings (KENNY et al. 2006).[2] The method we used analyses the similarity of the answers of real siblings. To measure the correlation between siblings, we used Kendall's tau-b coefficient. Pseudo-dyads were created to measure cultural stereotypes. In case of the pseudo-dyads, in accordance with Little and Rubin, we counted the rates five times and used their mean. (LITTLE & RUBIN 1987) During previous observations, measuring absolute difference scores proved to be more effective than ordinary correlations (ROEST et al. 2009), so we used both methods.

3. Results

In case of the question regarding fertility desires, there were only five among the 570 respondents who do not wish to have any offspring in their current life stage. Although their opinion might change in the future, it should be mentioned that in modern society intentionally chosen childlessness is gaining more ground. In our sample, this ratio remains below 1%, which is significantly lower compared to the national data of Hungarian Youth 2012 (MAKAY 2013). The proportion of those who do not desire any children is of the same proportion as that of those who want more than five children. The popularity of the two-child family model, characteristic of modern societies, can also be detected among those raised in a large family; half of the respondents claimed that they wanted two children. The ratio of those, with a large family background, who plan only one child is 12%. Every third child living in a large family plans to have a large family as well. 27% plan to have three children, but 6% want four children, 2% five and every 100th child wishes to have more than five offspring.

The respondents' gender does not significantly influence the planned number of children; men wish to have slightly more offspring, but the difference is only three hundredth. The average planned number of children was 1.7. (The standard deviation was 0.958 among men and 0.911 among women.) If we examine the adolescents and young adults between 15–29 by age groups, it can be stated that the youngest (between 15–19) plan to have the most children, 2.45 on average (SD = 1.088). In the age group of 20–24, the average is slightly lower, 2.32 (SD = 0.967), while in the age group of 25–29 it further decreases, 2.17 (SD = 0.806).

If we include birth order while analysing adolescents from large families, it can be seen, that fourth born children plan to have the most offspring (3.09 SD = 1.998). However, we should be careful while interpreting this information since the number decreases dramatically from children who were born third or later. Regarding the three oldest children, there is no significant difference in numbers (first 2.32; SD = 0.960; second 2.31; SD = 0.990; third 2.36; SD = 0.807), so it can be stated that birth order does not have a significant influence on the respondents' wished number of children. It is remarkable that adolescents and young adults living in large families desire significantly more offspring than their peers (MAKAY 2013).

3.1. The fertility plans of siblings

The greatest similarity was found between the plans of the first and the second child (*Table 1*). The ratio of those sibling dyads where both members of the dyad wanted the same number of children exceeded 45%. The ratio was similar by siblings (43.9%) where one member of the dyad wishes to have one child more than his or her sibling. The difference was two by 9.3%, while in 1.4% of the cases the two siblings' plans differed significantly (±3 or more). Among siblings this was the only pairing where we found the highest ratio of dyads where both siblings want to have the same number of children.

In case of dyads formed by the first and third born child those pairs were in a majority where one of the siblings wants to have one offspring more than his or her sibling (53.2%). The ratio is also relatively high among first and third born children where the plans are the same (39.1%). Only a few pairs of siblings were found where the difference between the planned number of children was two (4.6%) or more (3.1%).

In case of dyads formed from the second and third born children the highest ratio is by pairs where the difference between the siblings' planned number of offspring is more than one. In 14% this number is two, while in 1.6% it is three or more. Similar to the pairs of the first and third born children the biggest group of dyads among the pairings of second and third born children is where the difference is one (43.8%). Only slightly does the ratio of those second and third born siblings who want to have the same number of children lag behind.

It is detectable that the desired number of children of siblings from the same family is similar and there is a significant measurable correlation. However, the question whether this similarity derives from the family of origin's attributes or from the unified value system that characterises the population of large families, due to which the sample is homogeneous – which fact would explain the measured connection by the dyads – cannot be answered clearly. In order to verify this, random dyads were created from the three subsamples (first, second and third born children).

Similar to the siblings, we calculated the pseudo-dyads' values of absolute differences. In case of the latter, there were slightly less instances where both members of the dyad planned the same number of children. The highest ratio, where there was no difference between the two members, was in the pseudo-dyads formed from first and second born children; however, the ratio of such pairs still slightly exceeded 36%. In case of all three pairings, the highest ratio was there where the difference of the two values was one. Regarding pseudo-dyads formed from first-third and second-third born children, these were in absolute majority. In contrast to the sibling dyads, the ratio of those pairs was significantly higher where the planned number of offspring's difference reached, or even exceeded, two.

Then, during the analysis, we were not only interested in how large the difference between the planned numbers of offspring among siblings is, but also whether there is a verifiable correlation among sibling-dyads. In order to measure this we counted with the Kendall correlation (*Table 2*). Calculating with a 10% p-value, in all three types of

dyads we measured a significant correlation, but with the exception of the second and third born children dyads, the connection was significant even on the generally accepted five-percent level. We measured the highest tau-b value (0.381; $p = 0.000$) by the dyads of the first and second born children. The value of coefficient (0.275; $p = 0.014$) was slightly lower by the first and third born children dyads. The weakest correlation was in the case of second and third born children (0.195; $p = 0.079$).

We also examined the Kendall's correlation between the desired number of children of randomly paired adolescents and young adults. We did not find a significant correlation by any of the pairs; in none of the cases did the tau-b value reach 0.1. By dyads, formed from the second and third born children, the coefficient took a negative value (–0.059). In case of the first and third born children pseudo-dyads, the p-value exceeded 0.9; i.e., the two values are entirely independent of each other. The strongest correlation, by siblings, was measured between the first and second born children. While in the case of siblings the p-value was 0.000, by pseudo-dyads, formed from first and second born children, it was 0.261. All in all, it can be stated that in the case of pseudo-dyads, created by a random selection of the sample, correlation cannot be verified.

4. Conclusion

Social sciences, for a long time, have been paying careful attention to the analysis of those factors that have an effect on childbearing plans and, eventually, on fertility. It is easy to see that individuals' decisions and preferences are influenced by processes on the macro level and even more so by parental models, values and attitudes of nuclear and more extended family members. A large number of studies within this topic deal only in part (also due to methodological reasons) or not at all with the effects of the family of origin, as a small community, on the individual plans and value systems. Throughout our research we aspired to examine the effects of social factors and that of the close family. In order to be able to do that we used a sample taken from a special population that received less attention than actually deserved, the circle of large families.

While examining the correlation between the planned numbers of children of siblings who live in the same family, we stated that in the majority of the cases correlation is statistically verifiable. However, its strength varies from dyad to dyad. From this it can be concluded that it is not just the family of origin's characteristics that have an influence on the fertility desires but the position within the family due to birth order, as well.

In order to test whether the measured significant correlation can only be explained by the similarity of the examined families, or not, we created random dyads from three subsamples based on birth order. The p value was not only higher than 0.05, but in some cases it almost reached one, which would refer to a random distribution. The fact that the similarity between the members of the dyads disappeared when we paired

respondents randomly shows that the role of the shared cultural values, or, in other words, the role of cultural stereotypes cannot be justified statistically.

We got similar results when analysing the absolute difference of the planned number of children. Although the ratio of siblings who plan to have exactly the same number of children does not reach absolute majority by any of the dyads, it can be clearly seen, that there are only relatively few families where the difference among the plans of siblings is significant.

A key limitation of this research is that the data are only representative regarding the National Association of Large Families, thus inference can only be drawn very prudentially. The member families of NOE differ significantly from other Hungarian large families in term of residence and the education of the parents. Families living in Budapest and other major cities are overrepresented in our sample. The proportion of respondents with a university degree is also above the national average.

When sampling, we asked only a maximum of three youngsters per family, so it cannot be excluded that there might be a difference in the planned number of children of those living in households of different sizes. The number of samples did not allow us to analyse the dyads separately according to the size of the family, but no statistically significant connection between the family members living in the household and the desired number of children was measured.

As a conclusion, we can say that there are significant differences among large families, and they cannot be considered as one homogeneous group. In order to explore the peculiarities that explain the individual differences and the small differences of similarities among siblings, further research is needed.

Table 1
The distribution of the Sibling- and the Pseudo-dyads based on the absolute difference of the desired number of children of the members (%)

Dyads	*Same No.*	*± 1*	*± 2*	*± 3 or more*
		SIBLING DYADS		
First-Second	45.4	43.9	9.3	1.4
First-Third	39.1	53.2	4.6	3.1
Second-Third	40.6	43.8	14.0	1.6
		PSEUDO-DYADS		
First-Second	36.2	43.9	17.1	2.8
First-Third	32.8	50.8	12.0	4.4
Second-Third	25.8	54.6	13.6	6.0

Table 2
The coefficients and significance values of tau-b Kendall correlation between the desired numbers of children of the dyad members

	First born child		*Second born child*		*Third born child*	
	t_b	*sig.*	t_b	*sig.*	t_b	*sig.*
SYBLING DYADS						
First born child		–	0.381	0.000	0.275	0.014
Second born child	0.381	0.000		–	0.195	n.s
Third born child	0.275	0.014	0.195	n.s		–
LARGE FAMILY PSEUDO-DYADS						
First born child		–	0.083	n.s	0.010	n.s
Second born child	0.083	n.s		–	–0.059	n.s
Third born child	0.010	n.s	–0.059	n.s		–

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