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Differentiation of reproductive behaviour of the population of the Kraków Metropolitan Area in the light of survey research

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Abstract. Metropolitan areas are the poles of economic growth of regions and countries. These areas are characterized by specific development cycles, which are related to the direction of population migrations. Accordingly, there is a phase of urbanisation, suburbanisation, disurbanisation and re-urbanisation. Studies show that most Polish metropolitan areas are undergoing the process of suburbanisation, which means the movement of population from the central city to its suburban area. This process entails a number of demographic, social and economic consequences. One of the main demographic consequences of suburbanisation is the change in the structure of the central city and its suburban area. The reason for this is the fact that migrations from the centre are usually undertaken by young people. Thus, the number of inhabitants of the central city declines and the population is ageing. Migrants from the city bring new patterns of social and demographic behaviour, which may be shown in, among others, the tendencies of indigenous people to change the traditional family model.
This paper attempts to determine the reproductive behaviour patterns of the population of the Krakow Metropolitan Area (KMA) in the light of the survey. The surveys were conducted in selected KMA municipalities in 2013. The analysis of qualitative data, divided into two categories of respondents: immigrant and indigenous inhabitants, will give an answer to the question, what are the reproductive attitudes of the population and how they may affect the further development of these areas?

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1. Introduction

Socio-demographic changes in metropolitan areas are linked to the second demographic transition. The second demographic transition results in a decrease of birth rate and fertility levels, changes in the family model and household structures (increasing their diversity and reducing their size which is associated with profound transformations in the sphere of values, norms, attitudes and behaviour of post-industrial societies of developed countries involving the weakening of the role of traditional patterns of marriage, the growing rate of divorce, the social acceptance of childlessness or customization in choosing professional careers and lifestyles (Champion, 1992; Van de Kaa, 1987, 2003; Lesthaeghe 2010; Lesthaeghe, Neels, 2002; Surkyn, Lesthaeghe, 2004; Ogden, Hall, 2004; Buzar et al., 2005). In the first stage, the transformation of the family model relates to the big cities, especially their centers (Steinführer, Haase, 2007), followed by a diffusive transfer of SDT behaviour to the suburban areas (Kährik A., Tammaru T., 2008; Soja, 2012; Kurek, Lange, 2013).

Substantial variations in fertility levels can be observed between urban and rural areas, showing smaller values in the former. The researchers have found that rural areas fall behind urban areas when it comes to reproductive changes leading to a decline in total fertility rate (e.g. Michielin, 2004; Kulu, 2005, 2006; Kulu et al., 2007; Steinführer and Haase, 2007, Boyle et al., 2008 , Steinführer et al. 2010; Dyson, 2011). Also in Finland, the level of urbanisation and the impact of the urban lifestyle were the main determinants of spatial differentiation in reproductive behaviour characterized by high divorce rates, cohabitation, and high numbers of extramarital children (Valkonen et al., 2008). In contrast, Lutz, Testa and Penn (2006) have showed that it is the population density rather than the urban-rural differences that is negatively correlated with the level of total fertility rate. However, Hank (2001) sees the cause of regional differentiation of reproductive behaviour, regardless of the city-village dichotomy, in the structure of employment (higher total fertility rates among workers and people employed in agriculture) as well as the structure of education, cultural factors (attitudes towards family and marriage, participation in religious practices) and local housing conditions. The author also points to the high dependence of the reproductive behaviour on age-selective migration. People migrating to rural areas are characterized by a more traditional approach to family than migrants moving to cities (Snyder et al. 2004). Moreover, using the example of Germany, he points out that the strongest differences in total fertility rates between urban and rural areas exist in age groups 25-29 and 30-34. On the other hand, Basten et al (2011) state that the regional urban-rural differences in fertility have been shrinking in recent years.

There are few studies by geographers describing different levels of total fertility rates in cores and peripheral areas (Boyle 2003, Vobecka, Piguet, 2012). Most researchers believe that residential mobility is an important factor influencing the level of total fertility rate in suburban areas (Felson, Solaún, 1975; Mulder, 2006). The decision to change the place of residence often implies plans to enlarge or start a family; on the other hand, a more comfortable or a larger apartment in a friendly environment can promote the increase of total fertility rate. Kulu and Boyle (2008) and Kulu et al. (2009) have demonstrated higher total fertility rates and higher

birth age of mothers living in suburban areas than of those living in urban centres.

Suburban demographic processes in Poland in terms of population growth in suburban areas were more pronounced in the 1990s. (Jakóbczyk-Gryszkiewicz 1998, 2011, Śleszyński 2006). Since 1997 we observe a decrease in the rate of urban development due to an increased influx of people into zones surrounding cities, leading to the extension of the daily urban system, because people living in suburban areas are functionally connected with the urban centre by commuting to work, schools, shops and services or places of entertainment and recreation. The quantitative changes in the suburban area are followed by transformations of a qualitative nature (spread of the urban lifestyle, wealth increase).

In socialist cities until the end of the 1980s, there were few manifestations of the second demographic transition, since total fertility rates remained at a relatively high level, with little differentiation of households (Gentile et al., 2012). In 1990s, the changes associated with the second demographic transition began, leading to gentrification and reurbanisation of inner cities bringing new diversity of private living arrangements such as one-person households and cohabiting couples (Haase et al, 2010). In Poland, changes in terms of the second demographic transition, such as the decline of total fertility rates below the generation replacement level or delaying child birth, appeared together with the socio-economic transformation of the 1990s (Kotowska et al., 2008). Deferring the decision about procreation was caused, on the one hand, by the opening of borders and increased permeation of behaviour patterns from Western Europe and, on the other hand, by increasing unemployment, difficult situation on the labour market and the real estate market, and the educational boom. These changes affected at first large and medium-sized cities, and later, with the development of suburbanisation, they began to spread in suburban areas. According to Kurek, Lange (2013), the lowest level of total fertility rates was found in large cities, and suburban areas showed higher total fertility rates. In largest cities and their surrounding areas, it was found that the total fertility rate increased with the distance from the central core. On the other hand, in the first decade of the twenty-first century, the greatest increase in total fertility rate was recorded in large cities, followed by districts of zone I and II. However, the analysis of data aggregated at district level indicates that the reproductive behaviour of female residents of villages located closer to large cities is generally more similar to the behaviour of female residents of these cities. Thus, the progressive process of suburbanisation in terms of demographics associated with the influx of people into areas surrounding large cities contributes to the convergence of reproductive behaviours in the centres and peripheries of metropolitan areas by diffusion of attitudes associated with the second demographic transition.

2. Aim, material and research methods

This paper attempts to determine the reproductive behaviour patterns of the population of the Krakow Metropolitan Area (KMA) in the light of the survey. In particular, the paper examines the impact of age, education, household income and marital status on fertility level and reproduction intentions with division into the suburban and commuting zone. The surveys were conducted in selected KMA municipalities in 2013. The analysis of qualitative data, divided into two categories of respondents: immigrant and indigenous inhabitants, will give an answer to the question, what are the reproductive attitudes of the population and how they may affect the further development of these areas? The study was funded by the National Science Center, awarded by decision number DEC-2012/05/B/HS4/04200 for the project "Transformation of selected social-demographic structures in the Krakow Metropolitan Area".

Krakow Metropolitan Area (KMA) is a functional region, which includes the city with county rights – Krakow and the surrounding group of 50 municipalities in eight counties (including one urban municipality, 14 urban-rural municipalities and 35 rural municipalities). Taking into account the classification of urban and rural units and including Krakow, the KMA has 65 spatial units, which were included in this analysis (Fig. 1). Functionally, the Krakow Metropolitan Area is divided into the core city (Kraków), the suburban zone (mostly adjacent municipalities) and the commuting zone (further units from which at least 15% commute to the central city). The Krakow Metropolitan Area was es-

tablished by resolution No. XV/174/03 of the Malopolska Provincial Assembly of 22 December 2003. In 2014, the KMA region had a population of 1,506 thousand people, of which 762 thousand reside in Krakow, which constitutes 51% of the entire metropolitan region. It should be noted that the share of the population of Krakow in the total KMA population decreases (in 1988 it amounted to 54.2%). The demographic potential of the metropolitan area of Krakow occupies the 3rd place in Poland, after the Upper Silesian and Warsaw metropolitan areas. The level of fertility in Krakow is lower than the average for Polish urban areas, while the values for powiat krakowski (district adjacent to the central city) are higher but still below the TFR level for rural areas, although the disparities are declining (Fig. 2).

Fig. 1. Administrativie division of the Krakow Metropolitan Area

Source: Own study based on the Małopolskie Province Spatial Development Plan, 2003

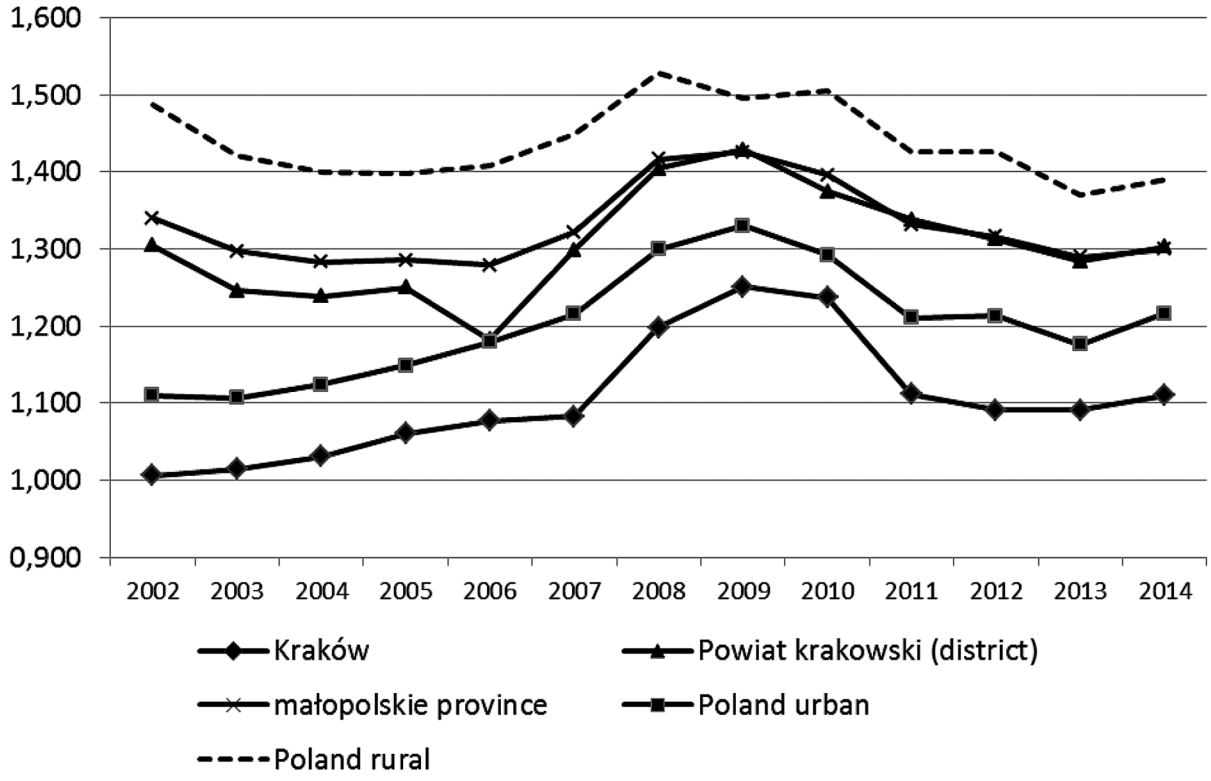

Fig. 2. Changes in total fertility years in Poland, the Małopolska province and some territorial units of the Krakow Metropolitan Area

Source: Own study based on Central Statistical Office data

The data used in the study were obtained in surveys conducted in selected communities of the Kraków Metropolitan Area. A total of 643 questionnaires were collected. The sample was dominated by women (60%), persons of mobile age 18-44 (57%), married persons (75%) and persons with general secondary education (32%). The study was based on analyses of the number of responses to questions concerning the reproductive behaviour of the population living in the area of the KMA (Krakow Metropolitan Area).

In the years 1988-2012, the population of the KMA increased by 8.1%, while the highest average annual growth was recorded in the last studied period 2002-2012 (0.41% per year) at 0.34% between 1995 and 2002 and 0.26% in the years 1988-1995. Population dynamics between Krakow and the surrounding areas was very diverse. In Krakow, in the years 1988-2012, the population increased from 746,000 to 759,000 (according to Central Statistical Office data), while the population of the remaining KOM area - from 630,600 to 729,000 (by 15,6%) and its suburban zone – from 218,100 to 273,100 (by 25,2%). In spatial terms, in 1988-1995, 10 study units out of 65, including Krakow, noted a decline of population and it occurred mainly in units in the northern part of the KMA. The biggest positive dynamics of population was noted by municipalities located in the southern part of the KMA (with an increase of more than 10%). In the second analysed period (1995-2002), population growth was recorded in 49 municipalities, with the largest increase in the rural municipality of Zielonki (22.2%), where housing was already in intensive development (convenient location and proximity to the centre of Krakow). The largest decrease occurred in agricultural municipalities located in the northern part of the study area (over 6%). The increase of population in cities and municipalities in the immediate vicinity of Krakow was a result of suburbanisation processes (Zborowski et al. 2011, Więcław-Michniewska 2011).

3. Results

3.1. Analysis of the reproductive behaviour of the KMA inhabitants

Reproductive behaviour of the population is the result of various demographic, economic, and personal factors, of which the most important seem to be: age, education, income level and individual preferences of men and women with regard to their children. The survey shows that the vast majority of the KMA population had children (77%) at the time of the study. Immigrants had a higher number of children than permanent residents of the metropolitan area (Tab. 1). Indigenous people in the commuting zone had more children than in the suburban area. However, among in-migrants, the proportion of respondents with children was similar in both zones and amounted to over 83%. This was primarily due to the development of suburbanisation and the influx of mostly young married couples with children especially to municipalities located in the suburban area of Krakow (Więcław-Michniewska, 2011; Zborowski et al., 2011). However, a detailed analysis of the responses of inhabitants of the suburban zone and inhabitants of the area of commuting did not show significant differences in terms of having or not having children. The percentage of people with offspring in both areas was similar and amounted to 75% and 78.4%.

Table 1. Having children by respondents of selected socio-economic characteristic and by zone of the KMA in %

Variables		Do you have children?								
		Total			Commuting zone			Suburban zone		
		Yes	No	Total	Yes	No	Total	Yes	No	Total
Sex	female	80.9	19.1	100.0	83.6	16.4	100.0	77.3	22.7	100.0
	male	71.0	29.0	100.0	70.7	29.3	100.0	71.6	28.4	100.0
Age	≤25	16.9	83.1	100.0	21.1	78.9	100.0	12.8	87.2	100.0
	26-44	74.2	25.8	100.0	75.3	24.7	100.0	72.6	27.4	100.0
	45-64	95.8	4.2	100.0	94.3	5.7	100.0	97.8	2.2	100.0
	≥65	98.5	1.5	100.0	97.6	2.4	100.0	100.0	0.0	100.0
Marital status	married	91.4	8.6	100.0	90.6	9.4	100.0	92.7	7.3	100.0
	single	7.2	92.8	100.0	7.3	92.7	100.0	7.1	92.9	100.0
	divorced, separated and widowed	95.2	4.8	100.0	95.7	4.3	100.0	94.7	5.3	100.0
Education	higher	73.4	26.6	100.0	72.4	27.6	100.0	74.6	25.4	100.0
	secondary	71.8	28.2	100.0	73.5	26.5	100.0	69.2	30.8	100.0
	basic vocational	88.5	11.5	100.0	93.6	6.4	100.0	79.6	20.4	100.0
	primary	87.5	12.5	100.0	88.5	11.5	100.0	85.7	14.3	100.0
Monthly income per household in PLN	≤2000	85.3	14.7	100.0	90.9	9.1	100.0	77.9	22.1	100.0
	2001-4000	76.5	23.5	100.0	78.5	21.5	100.0	73.5	26.5	100.0
	4001-6000	69.3	30.7	100.0	60.3	39.7	100.0	78.1	21.9	100.0
	6001-9000	56.8	43.2	100.0	68.8	31.3	100.0	47.6	52.4	100.0
	≥9000	64.3	35.7	100.0	57.1	42.9	100.0	71.4	28.6	100.0
Zone	commuting zone	78.4	21.6	100.0	-	-	-	-	-	-
	suburban zone	75.0	25.0	100.0	-	-	-	-	-	-
Type of inhabitants	autochthons	72.5	27.5	100.0	75.5	24.5	100.0	67.6	32.4	100.0
	immigrants	83.4	16.6	100.0	83.3	16.7	100.0	83.5	16.5	100.0

Source: Own survey

The survey shows that the vast majority of women had children regardless of their place of living. The men had more babies in the suburban zone, which can be an effect of suburbanisation inflow of young families with children from Krakow and other cities.

Having a child is closely associated with age. The survey has shown that younger people, up to 25 years of age, more rarely declared to have children than people in older age groups. Thus, the relationship could be observed indicating that the percentage of people with offspring grew with age. In the group of up to 25 years of age, only 16.9% of respondents had children. A much higher percentage of children was reported in the group of older people who have graduated from universities, in the age group of 26-44 years (74.2%). However, the percentage among respondents aged 45-64 years was over 95%. The highest percentage of children was observed among persons of retirement age (over 98% of respondents in this group had children) (Tab. 1).

The research shows that more people in the immobile productive age (45-64 years) and retirement age (≥65 years) have children in the suburban area. However, in the commuting zone more people in the younger age groups had children than in the suburban area (for example, at the age less than 25 years, 21.1% compared to 12.8% respectively), which is due to starting a family early on in the rural areas located further from Krakow and to the more traditional lifestyle.

The low percentage of respondents having children in the younger age groups reflects the trends in this regard in other regions of the country (CBOS, 2010). This should be linked to the demographic transformation of Polish society and Poland entering the phase of the so-called second demographic transition, visible in the decline in total fertility rates and deferring the moment of starting a family as well as deliberate childlessness and an increase in the share of extramarital children (Van de Kaa, 1987; Kurek, 2008). This is particularly evident among women who decide on the first child at the age of about 30 years.

Another factor influencing the fact of having or not having children by respondents was the marital status of the respondents (Tab.1). The survey shows that the vast majority of married respondents had children (91.4%). The large percentage of children among divorced, separated and widowed people (95.2%) is noteworthy. Another noteworthy fact is the relatively high percentage of single persons with children, over 7%. In this case, we can also refer to the concept of the second demographic transition, which was characterized by, among other things, the increase in the rates of extramarital children (Van de Kaa, 1987). Comparing the percentage of respondents who have children by area of residence and their marital status significant differences were not noticed. In both zones most married, divorced and widowed people have children. Also, a similar proportion of singles had offspring in both zones (approximately 7%).

Having children depends also on the level of education of respondents (Tab. 1). Our research shows that respondents with a higher level of education had lower total fertility rates. The lowest ones were observed in groups with secondary and higher education (respectively 71.8% and 73.4%). However, among people with vocational education and primary education, the percentage of respondents with offspring was respectively 88.5% and 87.5%. In the suburban area more people with higher education (74.6%) had offspring than in the commuting zone (72.4%). In contrast, in the zone of commuting more people with the lowest and average level of education had children than in the suburban area. For example, in the commuting zone 93.6% of people with vocational education had children, in the suburban area only 79.6%.

People with higher education, due to the long and time-consuming education, their desire for professional development or due to the broadly defined self-fulfilment, decide to have children later and have a lower number of children than people with lower education because of conscious family planning (Tyszka, 2002).

The study shows that another factor differentiating the fact of having children is the household income (Tab. 1). The KMA inhabitants who had the lowest income of less than 2000 PLN per month were characterized by the highest percentage of children (85.3%). In contrast, it was observed that the increase in personal wealth was accompanied by an increase in percentage of population without children. The research shows that in the suburban area more people with average (4001-6000 PLN)

and high (≥9000 PLN) income had children at the time of the study. On the other hand, in the commuting zone more people with the lowest (≤2000 PLN) and low income (PLN 2000-4000) had children.. This is due to the fact that in the area of commuting more people are employed in agriculture, and have lower incomes than the population living in the suburban area of Krakow.

3.2. Procreative plans of the KMA inhabitants

Plans for having children primarily depend on the age of respondents. With age, the percentage of people planning to have children decreases. Most often, people under the age of 49 plan to have children. Therefore, further discussion will concern only those respondents, both men and women, who at the time of the study were less than 49 years old.

The study shows that 36.4% of respondents aged 18-49 years plan to further enlarge their family, while 63.6% do not plan to have more children. Respondents who have declared their desire to have a larger family ultimately would like to have two children - more than half of the respondents in this group opted for such number (52.4%). Over 27% of respondents would like to have three children, but few want to have four or five. These numbers were chosen by respectively 3.4% and 4.5% of respondents (Fig. 3).

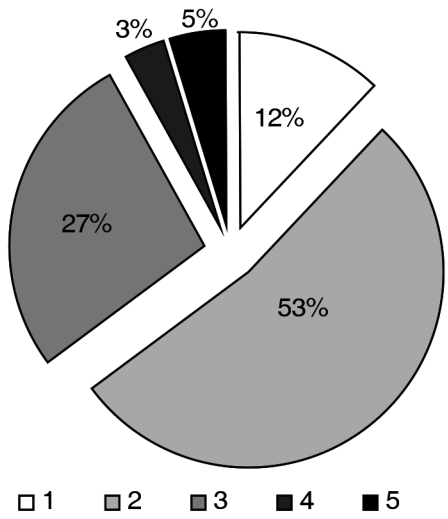

Fig. 3. How many children do respondents want to have in the future?

Source: Own survey

It is interesting to learn the answer to the question why young Poles do not want to have more children? The study shows that over 34% of respondents are satisfied with the current number of children, and this is the main reason to abandon any plans for more children. Other factors influencing the lack of desire to have children were age and financial reasons. Another important reason for abandoning plans to have children was reluctance to reorganize work and lack of time needed to raise them (Fig. 4).

The study also tried to answer the question what factors determined the diversity of procreation attitudes of the KMA area inhabitants. It turns out that age was the most important factor influencing further procreation plans (Tab. 2). The study shows that having children was mostly the plan of very young persons, who were still students - at the age below 25 - and of respondents after graduation at the age of 26-35 years. Those people planned to have children. In this age group, more than 58% of respondents declared this intention. It is worthwhile to refer to the concept of the second demographic transition and the shift of the age at which to have children. The research shows that this moment has shifted to a group of people at a younger working age, which is 26-35.

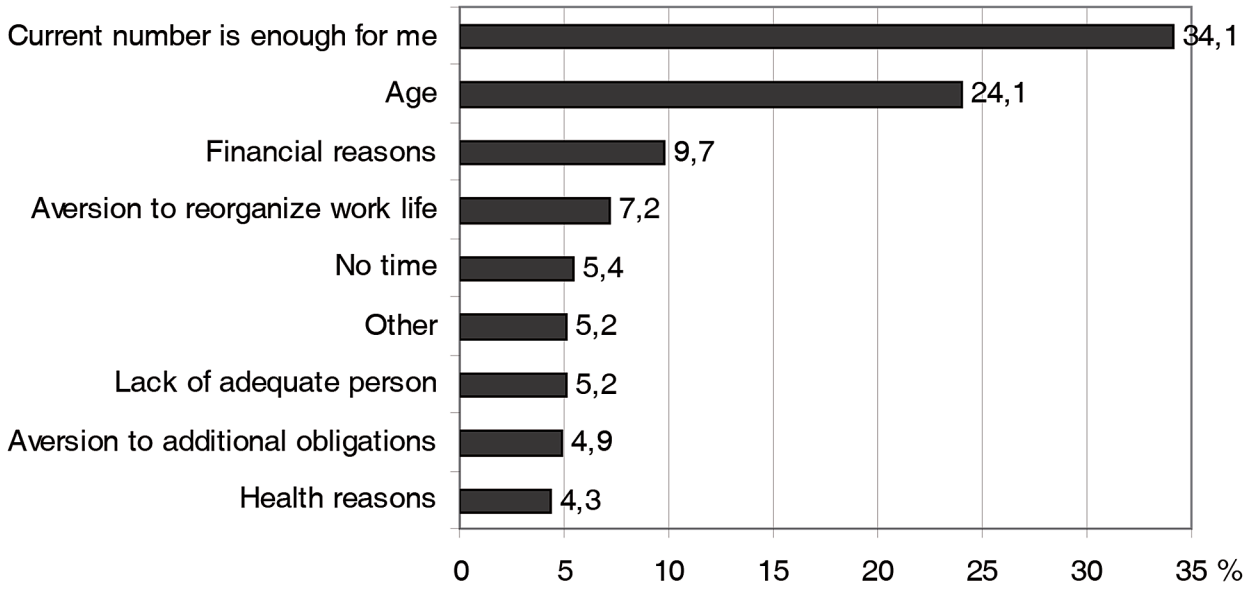

Fig. 4. Distribution of answers to the question: Why respondents don't plan another baby/babies?

Source: Own survey

Table 2. Plans for having children by respondents of selected socio-economic characteristic and by zone of the KMA in %

Variables		Are you planning a larger family?								
		Total			Commuting zone			Suburban zone		
		Yes	No	Total	Yes	No	Total	Yes	No	Total
Sex	female	35.5	64.5	100.0	31.5	68.5	100.0	40.5	59.5	100.0
	male	37.4	62.6	100.0	38.6	61.4	100.0	35.6	64.4	100.0
Age	≤25	54.5	45.5	100.0	55.3	44.7	100.0	53.8	46.2	100.0
	26-35	58.6	41.4	100.0	58.6	41.4	100.0	58.6	41.4	100.0
	36-49	12.0	88.0	100.0	10.8	89.2	100.0	13.8	86.3	100.0
Marital status	married	31.8	68.2	100.0	31.5	68.5	100.0	32.3	67.7	100.0
	single	52.8	47.2	100.0	51.0	49.0	100.0	54.5	45.5	100.0
	divorced, separated and widowed	0.0	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0
Education	higher	41.7	58.3	100.0	46.2	53.8	100.0	37.0	63.0	100.0
	secondary	36.2	63.8	100.0	33.8	66.2	100.0	40.0	60.0	100.0
	basic vocational	21.5	78.5	100.0	8.0	92.0	100.0	44.8	55.2	100.0
	primary	30.0	70.0	100.0	40.0	60.0	100.0	20.0	80.0	100.0
Monthly income per household in PLN	≤2000	33.8	66.2	100.0	22.6	77.4	100.0	44.1	55.9	100.0
	2001-4000	40.1	59.9	100.0	36.9	63.1	100.0	44.4	55.6	100.0
	4001-6000	38.2	61.8	100.0	41.5	58.5	100.0	34.7	65.3	100.0
	6001-9000	41.4	58.6	100.0	54.5	45.5	100.0	33.3	66.7	100.0
	≥9000	41.7	58.3	100.0	42.9	57.1	100.0	40.0	60.0	100.0
Zone	commuting zone	34.7	65.3	100.0	-	-	-	-	-	-
	suburban zone	38.6	61.4	100.0	-	-	-	-	-	-
Type of inhabitants	autochthons	36.1	63.9	100.0	35.3	64.7	100.0	37.2	62.8	100.0
	immigrants	36.7	63.3	100.0	33.9	66.1	100.0	40.0	60.0	100.0

Source: Own survey

The study shows that women more often than men did not plan to have children, because they are the ones to bear the hardships of giving birth and bringing up children. Although the Polish law allows fathers to benefit from paternity leave, in reality only a small percentage of fathers enjoy this privilege. According to the Social Insurance Institution (ZUS), in 2010, the first year of the new privilege of paternity leave, slightly more than 17 thousand fathers benefited from it, in 2011 the number fell to more than 14 thousand, while in the first half of 2013, only 14 thousand fathers took this opportunity.

Definitely more women (over 40%) plan offspring in the suburban area than in the commuting zone (only about 31%), while men living in the latter have such plans.

Another factor differentiating the procreation plans of the respondents was their marital status. The survey has shown that single and married people were mostly the ones who planned and did not plan to have offspring regardless of place of living. Married couples with one child planned the next one, while families with a higher number of children did not want to have more. On the other hand, a high percentage of people planning children was observed among single people - up to 52.8%. It is worth noting that in this group, there is a high percentage of people who do not plan to have children and choose deliberate childlessness - 47.2%. This reflects the deep social transformations of Polish society.

The study shows that it is mainly childless families that are planning to have babies (over 80%). The next group are families with one child (51.5%) and respondents living alone (50%) (Fig. 5). In contrast, only few respondents living in multi-generational families plan to have children.

The research shows that regardless of the residential area, mainly one-person households, childless families and those having one child plan to have children. In contrast, it is worth noting that in the suburban area as much as 50% of respondents living in six-person households are planning to have another child while only 27.8% of people living in the commuting zone.

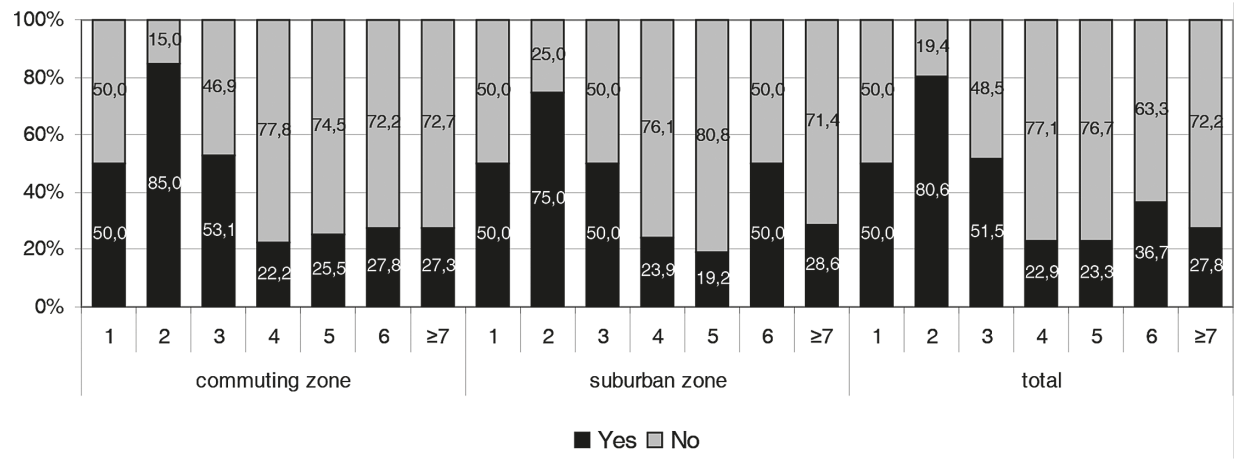

Fig. 5. Plans for having children by household size in %

Source: Own survey

Education and the level of household income are other factors that differentiate the reproductive behaviour of respondents (Tab. 2). People with a university degree planned to have children - more than 41% of respondents expressed such an opinion. In contrast, lower education was accompanied by lower percentage of people with this intention. In the group of persons with secondary education only 36.2% of respondents planned to have children. Among people with basic vocational education, it was 21.5% of respondents. Only one third of respondents with primary education planned to have children in the future. The research shows that in the suburban zone mainly people with secondary (40%) and vocational education (44.8%) were planning children while in the zone of commuting more

people with higher (46.2 %%) and primary (40%) education had such intentions.

The level of income significantly influenced the differentiation of reproductive behaviour of the population. Thus, people with the lowest income, i.e. up to 2000 PLN net income per month, did not plan to have offspring as opposed to groups of respondents with the highest levels of income (over 9000 PLN). It also turns out that quite a large percentage of people with average monthly income (4001-6000 PLN did not plan further enlargement of the family - 61.8% of respondents chose this response. The result may be affected by a small number of people with the highest and the lowest income, therefore the results of analyses should be considered with caution.

In the suburban area more people with the lowest (up to 2000 PLN - 44.1%) and highest income (over PLN 9000 - 40%) intend to have children, while in the commuting zone only 22.6% respondents with low incomes plan children. However, in this zone mainly people with high (6001-9000 PLN) and very high incomes (over 9000 PLN) are planning larger families.

The research shows that the influx of people associated with suburbanisation to a greater extent will affect the demographic change in the suburban area, because as many as 40% of immigrants declared their intention to expand the family in the near future, while in the commuting zone only 33.9% of immigrants had such intentions. In contrast, the procreative plans of indigenous people were very similar in both zones, with a slightly higher percentage of family planning in the suburban area (37.2%).

4. Conclusions

The reproductive behaviour of the KMA population reflects nationwide reproductive attitudes of Poles (CBOS, 2010). Young families take over the Western way of life manifested by a decrease in the number of children. A large group of respondents deliberately chose childlessness. Respondents decided to have a small number of children for various reasons: demographic, economic, or related to the functioning and organization of work and family life. Deferring child birth resulted in the fact that a large group of respondents did not decide to have more children because of their age and the associated risk of having a child with a birth defect. Another important reason for abandoning plans to have many children was reluctance to reorganize work and lack of time needed to raise them.

The study also shows that the level of total fertility rate among the KMA inhabitants was not very varied spatially. The percentage of children in the suburban area and the commuting area was similar. It can be inferred that suburbanisation and the influx of young population of childbearing age influenced the level of total fertility rate in both zones only to some extent.

In conclusion, reproductive attitudes relate to the concept of the second demographic transition (deferring child birth, extramarital children, voluntary childlessness, change of family model). The study also shows the relationship between having children and planning a family and the level of education and income. This was reflected in the correlation between the higher income and education of respondents and their lower total fertility rate but greater willingness to have children. In addition, the study shows that the influx of people associated with suburbanization will have a greater impact on demographic developments in the suburban area than in the area of commuting.

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