FERTILITY INTENTIONS AND PERCEIVED HEALTH STATUS AMONG POLISH MIGRANTS AND NON-MIGRANTS: A COMPARATIVE STUDY

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Abstract. *Background: Fertility intentions provide a reliable measure of future fertility behaviour. By looking into fertility intentions, we can figure out if people are thinking about becoming parents and how many kids they might be considering. Additionally, the role of perceived health has not entered the debate about fertility. Aims: This study aims, probably for the first time, to compare the fertility intentions of migrants and non-migrants of the same nationality at origin based on their self-rated health and well-being. Methods: The study utilized data from the Families of Poles in the Netherlands (FPN) survey and the Generations and Gender Survey (GGS). This study used Blinder-Oaxaca decomposition models and generalized ordered logit models (gologit). Results: The findings reveal that both migrants and non-migrants who have good self-rated health and well-being are more likely to express a desire to have children in the short term. Additionally, the average fertility intentions score is higher for Polish migrants residing in the Netherlands compared to Polish non-migrants residing in Poland across the models. The study emphasizes the role good perceived health plays in shaping fertility intentions. Conclusion: It is encouraged that future research to consider perceived health in the demographic debate about migrant and non-migrant fertility.*
Keywords*: Fertility intentions, Perceived health, Migrants, Non-migrants, Poland, the Netherlands.*
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Introduction. The fertility of both migrants and non-migrants has long been a significant subject of study in the field of demography (Carlsson, 2022; Impicciatore et al., 2020; Mussino & Cantalini, 2022; Stonawski et al., 2016; Tønnessen, 2020). In the European context, this topic has gained renewed attention primarily due to the continuing prevalence of low fertility rates in most European nations since the 1990s (as noted by Kohler et al., 2002), which have persisted after the Great Recession (as discussed by Dantis and Rizzi, 2020 and; Matysiak et al., 2021). Fertility determinants such as income, educational attainment and employment have been closely examined as they influence the amount of time and money available to individuals (Berrington et al., 2015; d'Albis et al., 2017; Gatta et al., 2022; Jalovaara et al., 2019; Lappegård & Rønsen, 2005). Similarly, one's perceived health can be considered a factor that either aids or impedes fertility intentions. If someone feels

their health is not good, it can make them less prepared to become a parent. They might worry about not being able to provide for a family or enjoy doing things together as a family. Feeling physically unfit can also make them doubt their ability to handle the demands of raising a child, like having enough energy to care for them and help them grow up well. However, despite its importance, perceived health has been insufficiently studied as a determinant of fertility.

Materials and methods. This investigation studied the relationship between perceived health and fertility intentions of Polish migrants and non-migrants of both genders. Data from *Families of Poles in the Netherlands* (FPN, Wave-1) was used for Polish migrants in the Netherlands (Karpinska, et al., 2016a) and from the *Generations and Gender Survey* (GGS, Wave-2) for Polish non-migrants (Gauthier et al., 2018). Both surveys were conducted in 2014-15. The FPN survey sample is representative of adult Polish-born persons living in the Netherlands. In the Netherlands, newcomers must register in the municipality where they want to live if their stay is to be longer than four months. The population registers were used to select a sample of adults (via simple random sampling, offering national coverage) who were born in Poland, had at least one Polish parent and first registered in the Netherlands between January 2004 and August 2014. The 2015 questionnaire of the *Generations and Gender Survey* was the blueprint for the FPN survey (Karpinska and Dykstra, 2019). This study used Blinder-Oaxaca decomposition models and generalized ordered logit models (gologit).

Results. This study focuses solely on the relationship between perceived health and fertility intentions. Thus, I only report the results as regards the effect of each of the two measures of perceived health on fertility intentions, separately for each subgroup analysed. *Table 1* shows the contribution of selected predictors on intentions to have a/another children difference between Polish migrants living in the Netherlands and non-migrants living in Poland. *Table 2* illustrates the discrete effects of migration status on the fertility intentions of both migrants and non-migrants. *Table 3* and *Table* 4 show the discrete effects of reported SRH and wellbeing on the probability of giving a specific answer to the question about fertility intentions by men and women.

In general, I found that the average fertility intentions score is higher for migrants compared to non-migrants. I also found that both migrants and non-migrants with worse SRH and wellbeing were more likely to give a negative answer to the question "Do you intend to have a/another child during the next three years?" In other words, both migrants and non-migrants with good SRH and wellbeing were more likely to give a positive answer to the question about their short-term fertility intentions. However, a few exceptions to this pattern were found (e.g. male migrants).

Table 1 presents the results of the Blinder-Oaxaca decomposition analysis for the ordinal dependent variable. Statistically significant differences in fertility intentions between migrants and non-migrants were observed across models. The total observed difference in fertility intentions between migrants and non-migrants is 0.6272 for *Model 1*, 0.5323 for *Model 2*, 0.5801 for *Model 3* and 0.5289 for *Model 4*, representing 100% of the observed difference for each model. In other words, on a scale from 1 to 4, the

average fertility intentions score is 0.5323 units higher for migrants compared to non-migrants in *Model 2*, and 0.5289 units higher in *Model 4.*

Table 1. **Oaxaca decomposition for ordinal dependent variable: contribution of selected predictors on intentions to have a/another children difference between Polish migrants living in the Netherlands and non-migrants living in Poland, 2014-2015**

Result		Omega (Migrant)=1		Omega (Non-migrant)=0		
		Char	Coef	Char	Coef	Raw
Model 1 (n=5426)	Coef.	0.0079	0.6193***	0.5003***	0.1270	0.6272***
	% Contribution	1.26	98.74	79.76	20.24	100
	[95% Confidence Interval]	-0.0034	0.5154	0.2998	-0.1560	0.5220
		0.0192	0.7233	0.7008	0.4100	0.7326
Model 2 (n=5426)	Coef.	0.2593***	0.2730***	1.071***	-0.5394***	0.5323***
	% Contribution	48.71	51.29	201.32	-101.32	100
	[95% Confidence Interval]	0.2146	0.2130	0.8940	-0.7416	0.4666
		0.304	0.3331	1.2496	-0.3372	0.5982
Model 3 (n=5426)	Coef.	-0.0284**	0.6085***	0.5715***	0.0086	0.5801***
	% Contribution	-4.90	104.90	98.52	1.48	100
	[95% Confidence Interval]	-0.0530	0.5382	0.4857	-0.0362	0.5163
		-0.0039	0.679	0.6575	0.0533	0.644
Model 4 (n=5426)	Coef.	0.2446***	0.2843***	1.0378***	-0.5088***	0.5289***
	% Contribution	46.25	53.75	196.20	-96.2	100
	[95% Confidence Interval]	0.1914	0.2023	0.8040	-0.7718	0.4480
		0.2979	0.3664	1.2716	-0.2459	0.6100

Sources: Author's elaboration after appending Families of Poles in the Netherlands (FPN) data (Karpinska, et al., 2016b) and Generations and Gender Survey (GGS) data (Gauthier et al., 2018). Model 1 is the crude results of the impact of SRH on fertility intentions; Model 2 is the adjusted results of the impact of SRH on fertility intentions by controlling for age, sex, activity, education and parent status of the respondents. Similarly, Model 3 is the crude results of the impact of Well-being on fertility intentions; Model 4 is the adjusted results of the impact of Well-being on fertility intentions by controlling for age, sex, activity, education and parent status of the respondents.

The *Model 2* and *Model 4* are adjusted. Therefore, I am only interpreting these two models here. The different valuation of characteristics (Coef) for migrants in *Model 2* contributes 0.2730 units, accounting for 51.3% of the total difference in omega1. Similarly, the different valuation of characteristics for migrants in *Model 4* contributes 53.7% of the total difference in omega1. Both results are statistically significant.

If migrants had the same characteristics (Char) as non-migrants, their fertility intentions score would be 201.3% higher in *Model 2* and 196.2% higher in *Model 4*,

contributing to the total difference in omega0, both of which are statistically significant.

Table 2 shows a generalized ordered logistic model for revealing the impact of migration status on fertility intentions of migrants and non-migrants. Among migrants, the probability of definitely not intending to have a child in the next three years is 31.0%, whereas this probability is 54.4% for non-migrants. Conversely, migrants have a 9.4% probability of definitely intending to have a child, whereas non-migrants have only a 3.8% probability. This pattern has an exception for probably not category of the fertility intention. However, it is not the case for probably yes category of the fertility intention. Among migrants, the probability of probably intending to have a child is 23.1%, whereas this probability is 11.6% for non-migrants. All these results are statistically significant.

Table 2. **Generalized ordered logistic model for fertility intentions: migrants and non-migrants. Discrete effects are reported**

Intention to have children	Margin	P>z	[95% Conf. Interval]	
Definitely not (Migrants)	0.310	0.000	0.280	0.341
Definitely not (Non-migrants)	0.544	0.000	0.530	0.558
Probably not (Migrants)	0.364	0.000	0.350	0.379
Probably not (Non-migrants)	0.302	0.000	0.290	0.315
Probably yes (Migrants)	0.231	0.000	0.209	0.253
Probably yes (Non-migrants)	0.116	0.000	0.108	0.124
Definitely yes (Migrants)	0.094	0.000	0.081	0.107
Definitely yes (Non-migrants)	0.038	0.000	0.034	0.042

Sources: Author's elaboration after appending Families of Poles in the Netherlands (FPN) data (Karpinska, et al., 2016b) and Generations and Gender Survey (GGS) data (Gauthier et al., 2018), (n=5426).

Discussion and conclusion. Researchers in the field of demography have investigated various factors that influence fertility, but the role of perceived health has been little discussed. To address this gap, this study used Poland as an example and examined the connection between different perceived health and intentions regarding fertility. It is probably the first study of its kind to investigate the relationship between perceived health and fertility intentions among migrants and non-migrants of the same nationality at origin together based on two different data sets.

I found that the relationship between perceived health and intentions to have children among migrant Poles was positively stronger than among non-migrants. This relationship persists in all four models, where *Model 1* is the crude results of the impact of SRH on fertility intentions, *Model 2* is the adjusted results of the impact of SRH on fertility intentions by controlling for age, sex, activity, education and parent status of the respondents. Similarly, *Model 3* is the crude results of the impact of wellbeing on fertility intentions, *Model 4* is the adjusted results of the impact of wellbeing on fertility intentions by controlling for age, sex, activity, education and parent status of the respondents (*Table 1*). The relationship further strengthened by

showing the discrete effects of how migration status affects the fertility intentions of both migrants and non-migrants after controlling for SRH, age, sex, activity, education and parent status of the respondents presented in *Table 2*. It clearly shows a direction that the probability of intending to have a child in the next three years is higher for migrants than that of non-migrants. This finding can be corroborated in existing literature (Alderotti and Trappolini, 2022). Previous studies, including the one conducted by Wallace et al. (2019), have indicated that immigrants in wealthy countries generally enjoy better health compared to native populations in countries of origin. This could be due to several factors, as suggested by various researchers: selective migration (Lee, 1966; McDonald and Kennedy, 2004), cultural influences (Lee et al., 2013), and healthier behaviours among immigrants (Razum et al., 2000). Furthermore, it has been found that poor health is associated with less favourable fertility intentions among migrants, as highlighted in the recent study by Alderotti & Trappolini (2022). When it comes to Polish non-migrants, this study also found a positive relationship between perceived health and intentions to have children.

Further investigation is necessary to gain a more comprehensive understanding of the intricacies of the relationship between perceived health and short-term fertility intentions in other settings. One particularly promising avenue of research would be to examine using panel data how short-term fertility intentions translate into actual fertility behaviour.

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