The abstract prepared for the 2024 European Population Conference

## Not so global uncertainty. On three sources of fears and worries and their relationship to childbearing choices.

Monika Mynarska & Oliwia Piekarska

Cardinal Stefan Wyszyński University in Warsaw, Institute of Psychology

Uncertainty has long been recognized as a significant factor influencing reproductive decisionmaking. Fears stemming from economic instability, global pandemics, or climate change are frequently discussed in this context (Brauner-Otto and Geist 2018; Vignoli et al. 2020; Arnocky et al. 2012; Davis et al. 2019; Aassve et al. 2020). Acknowledging the importance of different sources of uncertainty, several countries implementing Generations and Gender Survey (GGS) have integrated a series of questions to assess selected fears and worries about the future. This module, originally introduced in Sweden, covers 13 items on concerns related to such things as economic crisis, high unemployment, climate change, military conflicts, weakened democracy, political extremism or global epidemics (Andersson et al. 2020). Although these questions were designed to provide an overall score of global uncertainty, factor analysis on a Norwegian sample has revealed a multidimensionality of the scale. In particular, we examined a subsample of childless men and women aged 18-44 (men n=879, women n=1080). We conducted the Principal Axis Factoring (PAF) with an orthogonal Varimax rotation. Using the Keiser's criterion, three distinct dimensions were distinguished, indicating fears related to (1) the potential disruption of economic and social order (explaining 17.5% of variance), (2) the political future of the state (explaining 15% of variance), and (3) climate change (explaining 10% of variance). Table 1 depicts factor loadings in the final rotated solution.

Table 1. Factor loadings for all items and three identified factors (Norway, childless men and women, aged 18-44, N=1959)

Thinking about the future, how much does		Factor	
the following worry you?	1	2	3
1. Terrorism	0.56		
2. Climate change			0.77
3. Overpopulation/population pressure			0.51
4. Economic crisis	0.49		0.36
5. Increased number of refugees	0.43		
6. High unemployment	0.56		
7. Organised crime	0.73		
8. Military conflicts	0.55		
9. Global epidemics	0.45		
10. Weakened democracy		0.66	
11. Increased social inequality		0.69	
12. Political extremism		0.71	
13. Prospects of coming generations		0.40	0.39

Notes: The responses were coded from 1-not at all, to 4-very. Only the factor loadings higher than .33 are displayed.

In the next step, we examined how different dimensions of uncertainty are linked to childbearing ideals and intentions. To this end, the factorial scores for all three dimensions were computed for each respondent (regression method) and used as explanatory variables predicting ideal number of children (model 1) and intention to have a child (model 2). In both models, we controlled for sex, age, relationship status and education level. Preliminary results are presented in table 2.

Table 2. Preliminary results of the regression analysis predicting ideal number of children (model 1) and intention to have a child in the next three years (model 2) by the three different types of fears and worries identified in factor analysis.

	Model 1 β	Model 2 β
Fears related to:	ŀ	•
(1) the potential disruption of economic and social order	.04*	.08*
(2) the political future of the state	02	.00
(3) climate change	07*	09**
	$R^2 = .20$	$R^2 = .06$
	F = 63.99**	F = 15.08**

Note: \*p < .05, \*\*p < .01; in both models we controlled for sex, age, relationship status and education level. The analyses are conducted on smaller samples, as individuals with missing information on dependent variables were excluded. Model 1 n=1760, Model 2 n=1638.

These findings indicate that fears related to the climate change are associated with a lower ideal number of children and have a negative effect on childbearing intention. Surprisingly, the effect of fears related to a potential disruption of economic and social order was reversed and no significant effect was found for concerns related to the political future of the state. While these are preliminary findings, they clearly suggest that different types of fears and worries may affect childbearing choices differently.

In the paper, we intend to verify whether the three dimensions of uncertainty can be identified in other GGS countries, where the relevant questions were included (i.a., Estonia and Finland). Further, we will examine how different dimensions of fears and worries are related to childbearing ideals and intentions across the selected countries.

## **References:**

- Aassve, A., Cavalli, N., Mencarini, L., Plach, S., & Livi Bacci, M. (2020). The COVID-19 pandemic and human fertility. *Science*, *369*(6502), 370-371, doi:10.1126/science.abc9520.
- Andersson, G., Dahlberg, J., & Neyer, G. (2020). New sub-module on Uncertainties and resilience in the Swedish GGS2020. *GGP Technical Paper*. Den Haag.
- Arnocky, S., Dupuis, D., & Stroink, M. L. (2012). Environmental concern and fertility intentions among
  Canadian university students. *Population and Environment*, *34*(2), 279-292,
  doi:10.1007/s1111-011-0164-y.
- Brauner-Otto, S. R., & Geist, C. (2018). Uncertainty, Doubts, and Delays: Economic Circumstances and Childbearing Expectations Among Emerging Adults. *Journal of Family and Economic Issues*, 39(1), 88-102, doi:10.1007/s10834-017-9548-1.
- Davis, A. C., Arnocky, S., & Stroink, M. L. (2019). The Problem of Overpopulation: Proenvironmental Concerns and Behavior Predict Reproductive Attitudes. *Ecopsychology*, 11(2), 92-100, doi:10.1089/eco.2018.0068.
- Vignoli, D., Guetto, R., Bazzani, G., Pirani, E., & Minello, A. (2020). A reflection on economic uncertainty and fertility in Europe: The Narrative Framework. *Genus, 76*(1), 28, doi:10.1186/s41118-020-00094-3.