

Alina
NORGĖLAITĖ

**UNCERTAINTY AND PROCREATIVE BEHAVIOUR
IN LITHUANIA**

Summary of Doctoral Dissertation
Social Sciences, Sociology (S 005)

This doctoral dissertation has been prepared during the period of 2020-2024 at the Institute of Sociology at the Lithuanian Centre for Social Sciences, under the doctoral program right conferred to Vytautas Magnus University, Lithuanian Centre for Social Sciences and Kaunas University of Technology on 22nd of February 2019 by the Order No. V-160 (amendment – 2021 January 18, Order No 75) of the Minister of Education, Sport and Science of the Republic of Lithuania.

Scientific supervisor:

Chief researcher Prof. Dr. Aušra Maslauskaitė (Lithuanian Centre for Social Sciences, social sciences, sociology S 005).

Dissertation will be defended at the Committee of Sociology of Vytautas Magnus University, Lithuanian Centre for Social Sciences, Kaunas University of Technology.

Chairman:

Assoc. Prof. Dr. Jurga Bučaitė-Vilkė (Vytautas Magnus University, social sciences, sociology S 005)

Members:

- Chief researcher Dr. Diana Janušauskienė (Lithuanian Centre for Social Sciences, social sciences, sociology S 005)
- Researcher Dr. Daumantas Stumbrys (Lithuanian Centre for Social Sciences, social sciences, sociology S 005)
- Prof. Dr. Domantas Jasilionis (Max Planck Institute for Demographic Research (Germany), social sciences, sociology S 005)
- Assoc. Prof. Dr. Vida Česnuitytė (Mykolas Romeris University, social sciences, sociology S 005)

The doctoral thesis will be defended in the public meeting of the Committee of Sociology on 10 January 2025, 10:00 a.m., at the Institute of Sociology at the Lithuanian Centre for Social Sciences.

Adress: A. Goštauto str. 9, LT-01108 Vilnius, Lithuania.

Alina
NORGĖLAITĖ

**NEUŽTIKRINTUMAS IR PROKREACINĖ ELGSENA
LIETUVOJE**

Mokslo daktaro disertacijos santrauka
Socialiniai mokslai, Sociologija (S 005)

Mokslo daktaro disertacija rengta 2019–2024 metais Lietuvos socialinių mokslų centre, Sociologijos institute pagal doktorantūros teisę, suteiktą Vytauto Didžiojo universitetui su Lietuvos socialinių mokslų centru ir Kauno technologijos universitetu (2019 m. vasario 22 d. įsakymu Nr. V–160, įsakymo pakeitimas – 2021 m. sausio 18 d., Nr. 75).

Mokslinė vadovė:

Vyriaus. m. d. prof. dr. Aušra Maslauskaitė (Lietuvos socialinių mokslų centras, sociologijos institutas, sociologija, S 005).

Mokslo daktaro disertacija ginama Vytauto Didžiojo universiteto, Lietuvos socialinių mokslų centro ir Kauno technologijos universiteto sociologijos mokslo krypties taryboje.

Pirmininkė:

Doc. dr. Jurga Bučaitė-Vilkė (Vytauto Didžiojo universitetas, socialiniai mokslai, sociologija, S 005)

Nariai:

- Vyriaus. m. d. dr. Diana Janušauskienė (Lietuvos socialinių mokslų centras, socialiniai mokslai, sociologija, S 005)
- M. d. dr. Daumantas Stumbrys (Lietuvos socialinių mokslų centras, socialiniai mokslai, sociologija, S 005)
- Prof. dr. Domantas Jasilionis (Makso Planko demografinių tyrimų institutas (Vokietija), socialiniai mokslai, sociologija, S 005)
- Doc. dr. Vida Česnuitytė (Mykolo Romerio universitetas, socialiniai mokslai, sociologija, S 005)

Mokslo daktaro disertacija bus ginama viešame sociologijos mokslo krypties tarybos posėdyje 2025 m. sausio 10 d. 10 val. Lietuvos socialinių mokslų centre, Sociologijos institute (III aukštas, konferencijų salė).

Adresas: A. Goštauto g. 9, LT-01108 Vilnius, Lietuva.

INTRODUCTION

Relevance of the study. The decline in fertility that began in the second half of the 20th century is a complex and multifaceted issue, the consequences of which manifest themselves and are felt in many different areas of social life. As fertility declines in a particular country or region, demographic ageing of the population begins, which, in turn, leads to changes in the economy, due to the shifting structure of the workforce, and in the social sphere due to the changing demand for social benefits and services. This also affects politics and culture, raising questions about the nation's survival, and so on. Fertility is one of the components of population size.

The decline in population, when generational replacement was no longer ensured, began in many countries around the world in the middle of the last century (Wilkins, 2019). In the second half of the 20th century, fertility declined at different rates in different countries, with both the pace of the decline and the level of reduction varying (Kohler et al., 2006). It also did not occur at the same time in all countries. For example, in Southern European countries such a decline in fertility was recorded ten to fifteen years later than in Scandinavia (Esping-Andersen and Billari, 2015). Around the year 2000, the fertility rate partly stabilized and even started to increase in Western European and Northern European countries (Wilkins, 2019). More attention began to be paid to studies of family policies in the Nordic countries, as they were seen as promoting an increase in the birth rates. However, the overall total fertility rate in the Nordic countries started to decline again (Rossetti, 2019): following the 2008-2009 economic crisis, a decrease in the birth rate has been observed in all Nordic countries since 2010 (Comolli et al., 2020).

In Lithuania, fertility has not ensured generational replacement since the end of the 20th century: in 1975, the total fertility rate was 2.18, but by 1995 it had fallen to 1.55 (State Data Agency [SDA], 2024). From 2001 to 2005, the total fertility rate fell below 1.3 (fluctuating between 1.23 and 1.29) (SDA, 2024). Since 2005, this rate has begun to increase (Stankūnienė et al., 2013). Over the past two decades, it was highest in Lithuania in 2015-

2016 reaching 1.63, but in 2017 it started to decline again and was 1.27 in 2022 (SDA, 2024). According to the population projections published by Eurostat in 2023, the total fertility rate will not reach the level necessary for generational replacement in any European country in the long term (up to 2100), fluctuating between 1.5 and 1.8 (Lithuania will reach 1.7) (Eurostat, 2023).

So far, fertility most often has been studied in relation to a wide variety of aspects of individual and societal life and changes within them: for example, the increasing education of women and their integration into the labour market (Goldscheider et al., 2015), gender role development (Esping-Andersen and Billari, 2015), the incompatibility of social norms and expectations associated with it (Hudde, 2016), gender equality (McDonald, 2000), institutional environment (Kohler et al., 2006), economic factors (Wilkins, 2019), family policy (Billingsley and Ferrarini, 2014), changes in the demographic structure of society (Anderson and Kohler, 2015), the modernization of society, and changes in culture, values and technologies (Van de Kaa, 2010; Wilkins, 2019).

In Lithuania, the dynamics of fertility have also been studied very broadly and comprehensively. Fertility has been analysed in relation to socio-demographic factors (e.g. Jasilionis et al., 2015; Stankūnienė and Baublytė, 2016). Its fluctuations have been explained based on theoretical perspectives on demographic (more often second) transition (e. g., Stankūnienė et al., 2013), considering economic trends (e.g., Stankūnienė et al, 2013), aspects of parental well-being (e.g., Gataūlinas, 2013), family policy (e.g., Šerikova et al., 2008; Stankūnienė et al., 2013, 2005), changing gender roles and life plans (Galdauskaitė, 2023).

Research conducted so far, revealing the impact of various economic, political, cultural factors on fertility, cannot explain why fertility rates are declining in Europe. Negative changes are observed even in those countries where the situation started to improve at the beginning of the 21st century. Some researchers (e.g. Vignoli et al., 2020a) are beginning to argue that, despite objective reasons, fertility should be linked to people's subjective assessment of the situation and the uncertainty they experience: anxiety about the present and the future when making decisions that have long-term consequences, including those related to childbearing. Anxiety

experienced by individuals about the correctness of their decisions is characteristic of societies of late modernity, which Bauman (2000) refers to as 'fluid modernity' and Beck (2009) calls it 'a risk society'. With the onset of globalization processes and the rapid development of information technologies, established behaviour patterns begin to fade compared to earlier societies. There is an increase in the diversity of family forms, and the significance of the child is changing, among other things. Individuals have to take more responsibility for their own lives and the choices related to them. When making decisions, it is no longer possible to rely on the past (Giddens, 1999; Beck, 2009). This creates tension for people and shapes the subjectively experienced uncertainty – whether long-term decisions made under current conditions, including childbearing decisions, are correct when it is impossible to accurately predict the future.

The uncertainty experienced due to the current situation or anxiety about the future can negatively affect people's procreative behaviour: encouraging them to have children later, to have fewer or not to have children at all. Childbearing in conditions of uncertainty is akin to risk, as it is impossible to predict what consequences - positive or negative - the decision will have and how it will affect the individual's or family's life. In the dissertation, risk is understood as the decision taken together by one or both partners to have children under unfavourable circumstances, when it is unclear how this will affect their future. However, the main focus of the present work is not on risk but on uncertainty, as the aim is to understand how uncertainty is related to the decisions to have children.

In the dissertation, uncertainty is linked to the decline of a certain social definiteness associated with the standard sequence of important life events (obtaining an education, starting a family, finding a first job, moving out of parents' home, etc.) (Mills and Blossfeld, 2005), which leads to anxiety about the individual's or family's current and (or) future life circumstances and situations. Uncertainty can be a certain state of an individual or a situation shaped by external factors. It can be evident or hidden and may not manifest itself until confronted with certain circumstances (Spini et al., 2013).

Uncertainty is a multidimensional phenomenon. At the micro level, uncertainty is linked to individual characteristics: education, position in the labour market, personality traits, etc. The mezzo level encompasses

social networks and trust in them. The macro level involves family policy implemented by the state and the measures applied, the welfare state, global risks, and similar factors.

Research problem of the dissertation is that little is known about how uncertainty, caused by and subjectively perceived or projected by factors at the micro, mezzo, and macro levels, affects procreative behaviour. Decisions to have or not to have children are made considering the uncertainty shaped by a wide variety of aspects: childhood experiences, partnership stability, individual characteristics, structural factors, global economic, social, and political conditions. The impact of individually experienced uncertainty is inseparable from personal experience, the living conditions at the time of the decision-making, as well as from the formed expectations and subjective evaluation of the present and the future. The evaluation of experienced uncertainty can vary along the life trajectory due to different life experiences, unequal social networks, and dependence on a specific social group.

Novelty of the research. The relationship between uncertainty and decisions to have children has been primarily examined in both Lithuania and globally based on studies of the impact of economic uncertainty (e.g. Ranjan, 1999; Sobotka et al, 2011; Hofmann and Hohmeyer, 2013; Kreyenfeld, 2016; Kreyenfeld et al., 2023; Vignoli et al., 2020a), often distinguishing the uncertainty shaped by employment (e.g. Schmitt, 2012; Hanappi et al., 2017; Alderotti et al., 2021; Gatta et al., 2022). The links between uncertainty and other aspects are studied less frequently. For example, Vignoli et al. (2020b) investigated how employment uncertainty is related to subjective well-being assessment, while Aassve et al. (2021) examined how it is associated with social trust. Winter and Teitelbaum (2013) linked the decline in the number of children born to the response characteristic of Beck's risk society to risks when faced with macro-level changes that have caused political, economic, and social uncertainty. Following the outbreak of COVID-19, studies emerged examining how uncertainty caused by the pandemic affects decisions to have children (e.g., Luppi et al., 2020; Aassve et al., 2020; Wang et al., 2022; Guetto et al., 2022; Sobotka et al., 2023). In Lithuania, most comprehensive examination of this topic was conducted by Maslauskaitė

(2021). However, other works by Lithuanian researchers only hint at the links between uncertainty and having children. For example, Vaitekūnas and Raudeliūnienė (2006) only mention women's uncertainty about the future, Galdauskaitė (2022) notes uncertainty caused by the transformation of gender roles, Stankūnienė et al. (2012) discuss uncertainty about the future in times of economic recession, Dryžaitė (2019) highlights uncertainty and insecurity arising from the situation in the labour market. However, no comprehensive research examining the relationship between individual and subjective perceptions of uncertainty and the decision to have children was found.

The dissertation combines insights from demographic and the latest sociological research on societal trends in childbearing and the impact of uncertainty on decisions to have children. The empirical research in the dissertation extends scientific knowledge of individual decisions to have children: the dissertation examines the procreative behaviour of the people born in Lithuania between 1970 and 1989, which has not yet been thoroughly analysed in the context of uncertainty. Although in this period, according to Zilinskiene and Ilic (2022), a distinction can be made between two generations - the last Soviet generation and the transition generation - this is not done in the dissertation, as the differences between these groups were very slight and could not always be justified by belonging to different generations.

The dissertation provides further insights into potential procreative behaviour of people under various conditions of uncertainty. It focuses not only on the aspects of uncertainty that are encountered, but also on how they are subjectively evaluated, and which factors influence the formation of this evaluation. It considers how subjective evaluation adjusts the experienced uncertainty when making decisions about having children or after having children.

The thesis aims to reveal individual subjective reactions to uncertainty caused by different aspects and to examine the situations that people face when having children. Uncertainty is formed and changes over time, while decisions relating to the birth of a child are made depending on the interaction of various factors. Thus, uncertainty is examined comprehensively in the

dissertation without limiting the analysis to factors related to uncertainty and childbearing just at one level - micro, mezzo, or macro.

Object of the dissertation research: the impact of subjective perceptions of uncertainty on decisions regarding (not) having children.

Aim of the research: to reveal the factors shaping subjective perceptions of uncertainty and to determine their impact on decisions to have or not to have children.

Research tasks:

1. Based on the analysis of scientific literature, to provide an overview of the aspects that shape uncertainty associated with individual procreative behaviour.
2. After analysing the changes in uncertainty within individuals' life trajectories, to develop a theoretical research model and methodological approach.
3. After conducting empirical research, to reveal how uncertainty is perceived, the peculiarities of its evaluation, and to identify its relationship with decisions to have children.
4. To identify the most typical scenarios of childbearing in the context of uncertainty and to reveal the aspects of the relationship between behaviour and uncertainty characteristic of these scenarios.

Defended statements:

1. The uncertainty-related factors that shape the perception of uncertainty and its impact on procreative decision-making can change depending on a person's evolving experiences linked to subjective and objective well-being.
2. There is a reciprocal relationship between the evaluation of subjective uncertainty assessments and individual and family life trajectories: subjective perceptions of uncertainty are not only shaped by these trajectories but also modify them.

3. Under conditions of uncertainty, the conflict between procreative goals and other life goals (such as professional aspirations, the pursuit of material well-being, etc.) may intensify.
4. Having a child can be a way to overcome the uncertainty caused by partnership instability, personal issues, labour market challenges, and other risks.

Research methods. The dissertation employs qualitative research methodology. A thematic analysis of biographical and semi-structured interviews was conducted. The original dissertation research was conducted in 2021 and 2022 and included thirty semi-structured interviews. Thirty-six biographical interviews from the research project 'Families, Inequality and Demographic Processes' implemented in 2018-2019 and funded by the European Social Fund (project No. DOTSUT - -09.3.3-LMT-K-712-01-0020) under a grant agreement with the Research Council of Lithuania (research supervisor - Prof. Dr. A. Maslauskaitė) were also used in the dissertation. The biographical interviews allowed factors of uncertainty to be identified and to reveal how uncertainty can be formed and changed at different stages of life. Semi-structured interviews allowed linking uncertainty factors with decisions to have children, as well as with childcare and upbringing. MAXQDA 2020 and MAXQDA 2022 software were used to code the qualitative data.

Structure of the dissertation. The dissertation consists of four chapters divided into subsections. Chapter 1 is devoted to theoretical assumptions. It provides an overview of how risk can be perceived, how it relates to uncertainty in society of late modernity and provides an overview of new global risks. It also examines how having a child is affected by gender roles, social networks, education, economic factors, how the role of a child changes in society, and what constitutes the cost of raising a child. The perception of uncertainty is revealed. The analysis reveals how uncertainty may be related to having a child: what influence social networks, employment situations, and the role of the welfare state may have in the context of uncertainty. At the end of the chapter, a theoretical model of uncertainty and childbearing is presented.

Chapter 2 presents the research methodology: it describes the data collection methods and instruments and discusses the data analysis. The results of the empirical research are reviewed in the Chapter 3 of the dissertation: it analyses informants' perception of uncertainty, the factors shaping and modifying uncertainty and presents informants' typical procreative behaviour. The research results are summarised in Chapter 4. At the end of the dissertation, conclusions, a list of references, and annexes are provided.

RESEARCH RESULTS

The empirical study revealed that the uncertainty that negatively influenced informants' decisions to have children was related to their subjective dissatisfaction with their current situation, anxiety and uncertainty about the future. Subjectivity intertwined with the informants' ideal vision of family and their desires. Uncertainty encompassed a wide range of areas and aspects: social, family and personal life, as well as the situation in the labour market, which, as some informants' experiences showed, could be influenced by macroeconomic aspects or personal ones, such as education, profession, or simply the lack of access to childcare services. Uncertainty could be shaped by one dominant aspect or the interaction of several factors. Different things may cause uncertainty for men and women. For example, women may pay more attention to interpersonal relationships, personal well-being, safety of their physical environment, self-expression in their relationships, while men may focus more on financial and material conditions, and the goals they have set. The analysis of the interviews showed that the perception of positive and negative aspects which contributes to uncertainty often became more apparent once the informants already had at least one child. Uncertainty, where childbearing is seen as a risk, can encourage the avoidance of having children.

Informants tended to believe that, compared to their parents' generation, raising children was or is easier for them. They explained this by the increased availability of goods, easier household chores, the dissemination of information, and more favourable conditions for raising children. However, it was more often stated that parents experienced greater certainty, as the state provided housing and employment, and partners knew what to expect from each other. For the study participants, uncertainty was related to the loss of a predictable sequence of life events, the constant need to adapt to the changing situation in the labour market, the abundance of information, and the threats posed by the development of information technologies.

Uncertainty regarding having children can start to form in childhood; at that stage, some informants started to develop an idea of the desired family structure, or conversely, a lack of self-confidence in assuming certain social roles or in the ability to establish and maintain relationships with members of

the opposite sex. Early experiences were inseparable from global factors. For example, the informants' parents' inability to adapt to the politico-economic transformations during their childhood, which in turn hindered them from fully performing the roles of mother or father (even due to alcoholism), caused uncertainty for some informants about their own ability to be a mother or father in adulthood. This uncertainty in the informants' stories was often linked to a lack of emotional support, where they were cared for in a more formal manner, without a focus on their needs. Depending on the individual situation, the economic crisis at a mature age could have led to financial uncertainty, which was recognised by the informants as one of the most important conditions for not having children.

Global factors were viewed differently by the informants: the studied global factors (economic crises, migration, the COVID-19 pandemic, the war in Ukraine, climate change) shaped uncertainty related to decisions about having children in different ways. Based on the informants' narratives, factors that caused greater uncertainty were those whose consequences they encountered in their daily lives (for example, IT development) or which they perceived as threatening to them or their families. The uncertainty that most influenced their procreative behaviour was shaped by financial and economic crises, the COVID-19 pandemic, and the war in Ukraine. Whereas migration had a lesser impact and climate change had the least. Uncertainty would also arise when there was a reaction to relevant information disseminated in the media. An important aspect of the formation of uncertainty was the novelty of the factor, where one cannot rely on either their own previous experiences or those of older individuals. The period being remembered was also crucial. For example, in the earlier stages of the COVID-19 pandemic, when there was still insufficient information about what was going on and it was not possible to predict the future, people felt more uncertainty and were less inclined to imagine that they could plan the birth of a child during this period.

Reactions to financial, material, social, and other aspects of uncertainty can be influenced by structural factors such as education, employment, and living space. These factors were interrelated in the informants' narratives. For example, inadequate education (lower or impractically applicable higher education) could result in informants being unable to find a job.

The available jobs did not provide sufficient income, which led to a poor financial situation for the informants' family and similar outcomes. The poor situation and the obstacles to improving it sometimes arose from the fear that changes (e.g. a change of job) might have negative consequences for the well-being of their children. It could also form due to the specifics of the area of residence: for example, some informants noted that in a rural area, unlike in cities, it was possible to attain financial security just with one working adult. The study revealed that certain social groups faced more challenges in establishing themselves in the labour market. These are low-educated mothers of many children living in rural areas. Indeed, in this case, the uncertainty created by education and employment was not an obstacle to having children; rather they faced more challenges in combining childcare and paid work. When planning to have children, a significant number of informants placed more emphasis on the stability of the partner's – specifically the men's – employment and income rather than that of the woman. The husband's income and employment stability compensated for the uncertainty the woman experienced in these areas.

The ownership of a home had the least connection with uncertainty compared to other structural factors. However, not having one, especially when the informants lived with their parents with whom they did not get along well, had a negative impact on the stability of their partnership. The same was true of the assistance provided to a family with children: if the parents offering help sought to control their children's lives, the support would encourage conflicts between the partners, and over time, they would begin to avoid the closely connected social network. However, when the relationships were good, parental help to the family could assist in balancing childcare and paid work.

Other factors can also adjust (weaken or strengthen) the uncertainty that develops. For example, the informants' reflections on voluntary childlessness revealed that in their understanding, a child was a necessary component of the family, without which it would not be complete. Thus, the understanding that a family must necessarily have children along with the desire to have them, can be an important factor in the adjustment of uncertainty. The majority of the participants in the study perceived having children as a natural consequence of marriage and marriage as a very

important condition for raising children. Sometimes this link arose from specific attitudes or beliefs, such as the belief that marriage provides women with more security, they encounter fewer bureaucratic problems, and do not experience societal pressure. In many cases, having a child out of wedlock heightened a sense of uncertainty that the informants tried to avoid, so marriage often followed after the partner became pregnant. The uncertainty experienced by the informants during the unplanned conception was related to their fear about the future, since, particularly at an earlier age, the prospective parents had not yet established a material basis for their lives and did not always have a stable financial source. They also felt anxious because the informants realized that their lives were changing, but it was not clear how and to what extent until the birth of the child.

The birth of a child may be related to the creation of certain conditions of certainty before their birth, and the child himself/herself can also become a source of certainty, when the child is used to solve certain problems after being born. In the case of the informants, it is an attempt to avoid unpleasant situations at work (as the birth of a child provides an opportunity to temporarily withdraw from the labour market for a while), to strengthen partnership, etc. It has been observed that especially women were sometimes determined to have another child even when the family relationships were not very good. Female informants more frequently emphasized the importance of the quality of relationships and trust in the family when deciding to have a child. Meanwhile male informants tended to focus more on financial and material conditions.

Interviews with informants revealed a discrepancy between stated attitudes and actual behaviour. When talking about childcare, the informants agreed that both parents should take care of the children but in reality, the greater burden of childcare usually fell on the woman. In cases where one partner supported the family model, believing that the man should be the breadwinner and the woman responsible for the children while the other expected an egalitarian sharing of the childcare responsibilities, fewer children might be born than one of the partners would have wanted. The greater responsibility of mothers compared to fathers for childcare had an impact on the weaker integration of women into the labour market. It also reflected a conscious decision by the informants' families to lose a smaller

portion of the family income compared to what would be lost if higher-paid men had taken parental leave.

State support can to some extent mitigate uncertainty. For example, regular payments were associated with a reduction in financial insecurity. Meantime, an expanded system of childcare services is related not only to solving financial issues but also to balancing childcare with work, fulfilling the expectation of raising children at home for a longer period, and the possibility of caring for several children. During the interviews the need for institutional care for children under two years of age emerged, helping to reduce financial uncertainty and establish a foothold in the labour market.

When it comes to work, flexible employment, self-employment, and having supportive employers and colleagues, sometimes, according to the informants, mitigated the impact of experienced uncertainty and facilitated the balance between work and childcare. Moreover, the assistance of other people influenced uncertainty, as it was related not only to childcare but also to creating the environment necessary for childbearing (emotional support, housing, solving financial and material problems). The participants in the study usually associated the strengthening of uncertainty with situations where support was unavailable.

The informants' stories revealed that uncertainty could be influenced by certain knowledge, as well as experience of pregnancy and childbirth. Although the need for preliminary information about conception and foetal development was most pronounced when informants were unable to conceive for some time or after the woman had already become pregnant, it was recognised that there was a large amount of information, and uncertainty increased when trying to select reliable sources and useful and necessary information. The informants also were not always able to distance themselves from frightening publicly available information (e.g. on the internet). Experience is important for the birth of second and subsequent children. For example, informants could refuse to have another child, or to have another child later, because of difficult experiences with the previous one: uncertainty arose regarding their ability to raise another child when the youngest child had a more difficult character. Circumstances highlighting uncertainty that lead to the decision to not to have another child include pregnancy and childbirth experiences associated with potential fatal

consequences for the mother or the newborn. Uncertainty may have been assessed differently in relation to the newness of the partnership and the number of children already present, but its intensification in the participants' narratives was not related to the age or gender of the existing children.

The analysis of the characteristics of the participants did not reveal any correlation between the informants' personality traits and the increase or decrease in uncertainty that could be linked to childbearing. Informants with three or more children tended to classify themselves as either optimistic or realistically-minded individuals who experienced periods of both optimism and pessimism depending on the situation. However, optimism was also characteristic of those who had only one child. The tendency to take risks was characteristic of many of the informants, but the risks were most often related to reducing financial uncertainty, work, and leisure activities. Similarly, in the case of lack of self-confidence: it can be felt in various areas but may not manifest itself while fulfilling the role of a father or mother. The study participants' religious beliefs were directly related to pregnancy when they adhered to the principle of natural family planning. In this case, conception could also occur even in the presence of uncertainty caused by various factors. However, belief reduces uncertainty when conception occurs, especially when it is unplanned, or a child is born under unfavourable circumstances.

Based on the data of semi-structured interviews, five types of childbearing most characteristic of informants were identified: unexpected childbearing, limiting the number of children, childbearing in a new partnership, purposeful childbearing of another child, and family standardization. The study participants had fewer children in cases where they encountered conditions that made childbearing impossible or too risky. Informants could have more children than they intended due to unplanned circumstances, such as accidental conception, entering into a new partnership, or when one of the partners wanted to have another child. The desire to have children, along with a pre-existing family image – particularly one based on childhood experiences – helped alleviate experienced anxiety, and children were also born into the families of the study participants even under conditions of uncertainty.

CONCLUSIONS

To reveal the factors shaping the subjective perception of uncertainty and to determine their impact on the decisions to have or not to have children, the aspects of uncertainty highlighted in sociological theories of late modernity were examined, demographic results of studies related to uncertainty were analysed, and an empirical study was conducted. A research model was formulated based on the analysis of the scientific literature. The different level factors that shape and adjust uncertainty, which can influence procreative decisions, were reviewed. At the micro level, education, employment, the financial and material situation of the family, etc., can shape the uncertainty that encourages avoidance of the risk of childbearing. At the macro level, it can be caused by economic crises, political situations, globalisation processes, the development of information technologies, the specifics of the labour market, etc.

The empirical study analysed how these factors are reflected in the informants' biographies and how their subjective assessment of uncertainty influenced their childbearing decisions. The qualitative research methodology chosen for the study allowed connecting the participants' procreation stories with the trajectory of their life events, structural factors, subjective assessments of the situation, and attitudes about having children. The empirical study revealed that uncertainty is associated with dissatisfaction with the current personal and/or family situation and anxiety about the future. The informants' stories demonstrated that uncertainty was perceived in different ways. A strong sense of uncertainty at a particular moment in time, or projected uncertainty in the future, can be associated with risks to the well-being of the family or the future child, and thus lead to a tendency to postpone having children until uncertainty is reduced.

The peculiarities of the subjective uncertainty assessment are revealed in the five most typical childbearing scenarios. These include the unexpected childbearing, limiting the number of children, childbearing in a new partnership, purposeful childbearing of another child, and family standardisation. They reveal how procreative goals can be achieved in the presence of uncertainty.

State support also plays quite an important role in the context of uncertainty. The empirical findings of the dissertation show that state social and family policies can be significant in making childbearing decisions in the context of experiencing or projecting uncertainty (e.g. the regularity of benefits for those in financial difficulties can reduce uncertainty). It would be appropriate to investigate the relationship between the role of the state and uncertainty in more detail and depth in the future. Considering that some of the participants in the study no longer had plans for procreation or were no longer able to have children because of their age, no public policy recommendations on this topic were formulated. That is to say, it would be inappropriate to make specific recommendations for the future based on the informants' past experiences, due to the significant contextual differences between the past and the future.

The aspects that emerged during the analysis of the scientific literature and the empirical research have led to the formulation of conclusions presented while taking into account the formulated defended statements:

1. The uncertainty-related factors that shape the perception of uncertainty and its impact on procreative decision-making can change depending on a person's evolving experiences linked to subjective and objective well-being. The analysis of biographical and semi-structured interviews revealed that uncertainty that leads to avoiding the risk of having children can begin to be shaped by early (childhood) experiences. If a child faced lack of emotional support, and witnessed his/her parents' inability to cope with emerging financial difficulties, etc., uncertainty could develop even before adulthood began. In this case, it is linked to the fear of taking on a new social role in adulthood, the risk of repeating the parental behaviour experienced in childhood, and the inability to be a suitable, non-traumatising father or mother to one's child. However, uncertainty can also develop or be adjusted later in life. For example, when raising at least one child, there is experience of how it can affect the well-being of the family, and how much financial-material support a child may require. When faced with objective risks (e.g. arising from economic crises), childbearing decisions may be based on previous experience of similar situations, taking into account the impact of similar threats on subjective well-being in the past.

That is to say, if there is experience indicating that having or raising children in an uncertain situation did not have adverse effects, it becomes easier to have children in risky circumstances. Conversely, negative experience may encourage delaying of childbearing to avoid potential risks.

2. There is a reciprocal relationship between the evaluation of subjective uncertainty assessments and individual and family life trajectories: subjective perceptions of uncertainty are not only shaped by these trajectories but also modify them. The conducted semi-structured interviews revealed the importance of subjective perceptions of uncertainty in making decisions about having children. Subjective perceptions of uncertainty can lead to different behaviours among people in similar situations. Conversely, people may make similar proactive decisions in different situations. For example, those who are less anxious about the unknowns of how a child will change their lives, who positively assess their material and financial situation, and who do not feel uncertainty may find it easier to make the decision to have children. And also those who, despite feeling uncertainty, maintain the belief that a challenging and unfavourable situation for raising a child is temporary and should change in the future. Those who associate having children with family completeness and its natural development will be more inclined to take on the risks associated with having children in uncertain conditions. In this case, it is also important to note that childbearing is inseparable from the individual family vision, regardless of the form of partnership chosen (marriage or cohabitation). The desire to have children, when associated not only with an ideal family composition but also with life purpose or fulfilment, can effectively reduce the experienced uncertainty. However, when the situation does not meet individual expectations related to family life, there may be a conscious desire to have fewer children and in cases of doubt about partnership prospects, a decision may be made to terminate an unexpected pregnancy. Uncertainty affecting the trajectory of family life can arise from both material factors (e.g., unsuitable conditions for raising children) and non-material aspects that contribute to uncertainty, such as dissatisfaction with the current partnership, when a partner's disturbing behaviour raises alarm (e.g., because of tendencies towards violence, alcoholism) or the health

threats that may arise during subsequent pregnancy or childbirth, even if the partners strongly desire to have another child.

3. Under conditions of uncertainty, the conflict between procreative goals and other life goals (such as professional aspirations, the pursuit of material well-being, etc.) may intensify. The conflict between childbearing intentions and other life goals could arise when there is a desire to have time for oneself, a need for self-fulfilment not related to raising children, and a wish to avoid difficult situations experienced with a previous child. The situation becomes more complicated in cases of uncertainty when there was a risk regarding the satisfaction of personal or family needs as certain unfavourable circumstances were encountered. For example, when there was a sense of insecurity in the labour market or when one's education became a barrier to finding a job that meets personal and/or family needs. Additionally, when low incomes prompted individuals to primarily consider the challenges of sustaining their existing family and creating its well-being. The incompatibility of different goals was evident in the informants' stories especially when childcare services were inaccessible: when they were provided far from home, at inconvenient times. In such cases, if participants did not receive help from others in caring for children, they faced risks related to successfully establishing themselves in the labour market or balancing childcare with paid work interests. The study showed that the conflict between procreative and other goals is more commonly identified in situations where decisions were made not about the first child but about subsequent children.

4. Having a child can be a way to overcome the uncertainty caused by partnership instability, personal issues, labour market challenges, and other risks. In the face of uncertainty, the risk of having children is taken in the belief that having them will help to cope with the uncertainty or the situation that is causing the uncertainty. For women living in poverty, a man with a job guarantees reduced financial uncertainty. The reduction of the financial burden also means that a woman can devote more attention to her children and their care, including children born in previous partnerships. Working in an unsatisfying job, but fearing that losing it

would worsen the financial situation, having a child can seemingly *release* the individual from the difficult decision-making and the responsibility for it. Regular benefits received during parental leave not only provide a certain level of income necessary for living but also offer the opportunity to leave a stressful job, and give time to decide on future actions for securing a position in the labour market. Those with harmful habits can hope that the birth of a child will completely change their life and to give them more motivation to break the habits. Those who are uncertain about the stability of their relationship but want to preserve it, can take the risk hoping that having a child will strengthen the bond between the partners and improve their relationship. Worrying about the future of an existing child, to prevent him or her from being lonely in the future, another child may be born, despite unfavourable conditions for raising children. All these behavioural scenarios are inseparable from a certain narrative of the future being created and the expectations that are hoped to be achieved.

REFERENCES

1. Aassve, A., Cavalli, N., Mencarini, L., Plach, S., & Bacci, M. L. (2020). The COVID-19 pandemic and human fertility: birth trends in response to the pandemic will vary according to socioeconomic conditions. *Science*, 369(6502), 370–371. <https://doi.org/10.1126/science.abc9520>
2. Aassve, A., Le Moglie, M., & Mencarini, L. (2021). Trust and fertility in uncertain times. *Population Studies*, 75(1), 19–36. <https://doi.org/10.1080/00324728.2020.1742927>
3. Alderotti, G., Vignoli, D., Baccini, M., & Matysiak, A. (2021). Employment instability and fertility in Europe: A meta-analysis. *Demography*, 58(3), 871–900. <https://doi.org/10.1215/00703370-9164737>
4. Anderson, T., & Kohler, H. P. (2015). Low Fertility, Socioeconomic Development, and Gender Equity. *Population and Development Review*, 41(3), 381–407. <https://doi.org/10.1111/j.1728-4457.2015.00065.x>
5. Bauman, Z. (2000). *Liquid Modernity*. Cambridge: Polity Press.
6. Beck, U. (2009). *World at Risk*. Cambridge: Polity Press.
7. Billingsley, S., & Ferrarini, T. (2014). Family Policy and Fertility Intentions in 21 European Countries. *Journal of Marriage and Family*, 76, 428–445. <https://doi.org/10.1111/jomf.12097>
8. Comolli, Ch. L., Neyer, G., Andersson, G., Dommermuth, L., Fallesen, P., Jalovaara, M., ..., & Lappegård, T. (2020). Beyond the economic gaze: Childbearing during and after recessions in the Nordic countries. *European Journal of Population*, 37, 473–520. <https://doi.org/10.1007/s10680-020-09570-0>
9. Dryžaitė, I. (2019). Dirbančios šeimos ir prekarizuotas gyvenimas. *Kultūra ir visuomenė: socialinių tyrimų žurnalas*, 1, 99–126. <https://doi.org/10.7220/2335-8777.10.1.5>
10. Esping-Andersen, G., & Billari, F. C. (2015). Re-theorizing Family Demographics. *Population and Development Review*, 41(1), 1–31. <https://doi.org/10.1111/j.1728-4457.2015.00024.x>
11. Eurostat. (2023). *Assumptions for fertility rates by age and type of projection (proj_19naasfr)*. https://ec.europa.eu/eurostat/databrowser/view/proj_19naasfr/default/table?lang=en [Accessed 5 Dec. 2023].

12. Galdauskaitė, D. (2022). Gimstamumo ir lyčių revoliucijos sąsajos: Lietuva lyginamojoje perspektyvoje. *Socialinė teorija, empirija, politika ir praktika*, (24), 69-83. <https://doi.org/10.15388/STEPP.2022.38>
13. Galdauskaitė, D. (2023). *Vaikų susilaukimas besikeičiančių lyčių vaidmenų ir asmeninio gyvenimo planavimo kontekste*. [Doctoral dissertation]. Vilniaus universitetas.
14. Gatta, A., Mattioli, F., Mencarini, L., & Vignoli, D. (2022). Employment uncertainty and fertility intentions: Stability or resilience? *Population Studies*, 76(3), 387-406. <https://doi.org/10.1080/00324728.2021.1939406>
15. Gataūlinas, A. (2013). *Gyventojų studijos. Nr.5*. Vilnius: Demografinių tyrimų institutas, Lietuvos socialinių tyrimų institutas.
16. Giddens, A. (1999). „Risk and Responsibility“. *The Modern Law Review*, 62(1), 1–10.
17. Goldscheider, F., Bernhardt, E., & Lappegard, T. (2015). The Gender Revolution: A Framework for Understanding Changing Family and Demographic Behavior. *Population and Development Review*, 41(2), 207–239. <https://doi.org/10.1111/j.1728-4457.2015.00045.x>
18. Guetto, R., Bazzani, G., & Vignoli, D. (2022). Narratives of the future and fertility decision-making in uncertain times. An application to the COVID-19 pandemic. *Vienna Yearbook of Population Research*, (22), 1-38. <https://doi.org/10.1553/populationyearbook2022.res1.6>
19. Hanappi, D., Ryser, V. A., Bernardi, L., & Le Goff, J. M. (2017). Changes in Employment Uncertainty and the Fertility Intention-Realization Link: An Analysis Based on the Swiss Household Panel. *European Journal of Population*, 33, 381–407. <https://doi.org/10.1007/s10680-016-9408-y>
20. Hofmann, B., & Hohmeyer, K. (2013). Perceived economic uncertainty and fertility: Evidence from a labor market reform. *Journal of Marriage and Family*, 75(2), 503-521. <https://doi.org/10.1111/jomf.12011>
21. Hudde, A. (2016). *Fertility Is Low When There Is No Societal Agreement on a Specific Gender Role Model*. University of Bamberg Demographic Discussion Papers No. 18. <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-47677-7>
22. Jasilionis, D., Stankūnienė, V., Maslauskaitė, A., & Stumbrys, D. (2015). *Lietuvos demografinių procesų diferenciacija*. Vilnius: Lietuvos socialinių tyrimų centras.

23. Kohler, H. P., Billari, F. C., & Ortega, J. A. (2006). Low Fertility in Europe: Causes, Implications and Policy Options. In F. R. Harris (Ed.), *The Baby Bust: Who will do the Work? Who Will Pay the Taxes?* (p. 48–109). Lanham, MD: Rowman & Littlefield Publishers.
24. Kreyenfeld, M. (2016). Economic Uncertainty and Fertility. In eds. K. Hank, & M. Kreyenfeld (Eds.), *Social Demography Forschung an der Schnittstelle von Soziologie und Demografie* (p. 59–80). Wiesbaden: Springer VS.
25. Kreyenfeld, M., Konietzka, D., Lambert, P., & Ramos, V. J. (2023). Second Birth Fertility in Germany: Social Class, Gender, and the Role of Economic Uncertainty. *European Journal of Population*, 39(1), 5. <https://doi.org/10.1007/s10680-023-09656-5>
26. Luppi, F., Arpino, B., & Rosina, A. (2020). The impact of COVID-19 on fertility plans in Italy, Germany, France, Spain, and the United Kingdom. *Demographic Research*, 43(47), 1399–1412. <https://doi.org/10.4054/DemRes.2020.43.47>
27. Maslauskaitė, A. (2021). COVID-19 pandemija ir gimstamumas: ko tikėtis ateityje? *Filosofija. Sociologija*, 32(4), 377–385. <https://doi.org/10.6001/fil-soc.v32i4.4621>
28. McDonald, P. (2000, September 15-16). *The 'toolbox' of public policies to impact on fertility – a global view*. [Seminar paper]. Seminar on Low Fertility, Families and Public Policies. The European Observatory on Family Matters, Sevilla, Spain.
29. Mills, M. C., & Blossfeld, H. P. (2005). Globalization, Uncertainty and the Early Life Course: A Theoretical Framework. In H. P. Blossfeld, E. Klijzing, M. Mills, & K. Kurz (Eds.), *Globalization, uncertainty and youth in society* (p. 1–24). London: Routledge advances in sociology.
30. Ranjan, P. (1999). *Fertility behaviour under income uncertainty*. *European Journal of Population/ Revue Européenne de Démographie*, 15, 25-43. <https://doi.org/10.1023/A:1006106527618>
31. Rossetti, D. (2019). Why Are Birth Rates in Sweden Falling? *Population Europe*. <https://population-europe.eu/research/policy-insights/why-are-birth-rates-sweden-falling>

32. Schmitt, C. (2012). Labour market integration, occupational uncertainties, and fertility choices in Germany and the UK. *Demographic Research*, 26, 253-292. <https://doi.org/10.4054/DemRes.2012.26.12>
33. Sobotka, T. (2011). Fertility in Central and Eastern Europe after 1989: Collapse and Gradual Recovery. *Historical Social Research*, 36(2), 246–296. <https://doi.org/10.12759/hsr.36.2011.2.246-296>
34. Sobotka, T., Zeman, K., Jasilioniene, A., Winkler-Dworak, M., Brzozowska, Z., Alustiza-Galarza, A., ..., & Jdanov, D. (2023). Pandemic Roller-Coaster? Birth Trends in Higher-Income Countries During the COVID-19 Pandemic. *Population and Development Review*. <https://doi.org/10.1111/padr.12544>
35. Spini, D., Hanappi, D., Bernardi, L., Oris, M., & Bickel, J. F. (2013). *Vulnerability Across the Life Course: A Theoretical Framework and Research Directions*. (LIVES Working Papers No. 27). <https://doi.org/10.12682/lives.2296-1658.2013.27>
36. Stankūnienė, V., & Baublytė, M. (2016). Gimstamumas: ilgalaikė kohortinė perspektyva ir diferenciacija. Iš V. Stankūnienė, M., Baublytė, K., Žibas, & D., Stumbrys, *Lietuvos demografinė kaita: ką atskleidžia gyventojų surašymai* (p. 175–241). Kaunas: Versus aureus.
37. Stankūnienė, V., Jasilionienė A., & Jančaitytė R. (2005). *Šeima, vaikai, šeimos politika: modernėjimo prieštaros*. Vilnius: Socialinių tyrimų institutas.
38. Stankūnienė, V., Maslauskaitė, A., & Baublytė, M. (2013). *Ar Lietuvos šeimos bus gausesnės*. Vilnius: Socialinių tyrimų centras.
39. Stankūnienė, V., Sipavičienė, A., & Jasilionis, D. (2012). Demografiniai pokyčiai ekonominių nestabilumų kontekste. *Lietuvos socialinė raida*, 1, 23–53. Vilnius: Lietuvos socialinių tyrimų centras.
40. State Data Agency (2024). *Total fertility rate*. <https://osp.stat.gov.lt/> [Accessed 5 Jan. 2024].
41. Šerikova, A., Šimkienė, V., & Gordejeva, N. (2008). Šeimos politika ir gimstamumas. *Ekonomika ir vadyba: aktualijos ir perspektyvos*, (3), 329-336.
42. Vaitekūnas, S., & Raudeliūnienė, I. (2006). Šeima ir jos transformacija XXI amžiaus pradžioje. *Tiltai. Priedas*, (31), 8-35.
43. Van de Kaa, D. J. (2010). Demographic Transition. In Y. Zeng (Ed.), *Demography: Volume I* (p. 65–103). Oxford: EOLSS Publications.

44. Vignoli, D., Bazzani, G., Guetto, R., Minello, A., & Pirani, E. (2020a). Uncertainty and Narratives of the Future: A Theoretical Framework for Contemporary Fertility. In R. Schoen (Ed.), *Analyzing Contemporary Fertility* (p. 25–47). Berlin: Springer.
45. Vignoli, D., Mencarini, L., & Alderotti, G. (2020b). Is the Effect of Job Uncertainty on Fertility Intentions Channelled by Subjective Well-Being? *Advances in Life Course research*, 46. <https://doi.org/10.1016/j.alcr.2020.100343>
46. Wang, Y., Gozgor, G., & Lau, C. K. M. (2022). Effects of pandemics uncertainty on fertility. *Frontiers in Public Health*, 10, 854771. <https://doi.org/10.3389/fpubh.2022.854771>
47. Wilkins, E. (2019). *Low fertility: a review of the determinants*. (UNFPA Technical Division Working Paper No. 2). https://www.unfpa.org/sites/default/files/pub-pdf/FINAL_Determinants_of_low_fertility.pdf
48. Winter, J., & Teitelbaum, M. (2013). *The global spread of fertility decline: Population, fear, and uncertainty*. Yale University Press.
49. Zilinskiene, L., & Ilic, M. (Eds.). (2022). *Soviet and Post-Soviet Lithuania—Generational Experiences*. Routledge.

LIST OF PUBLICATIONS AND PRESENTATIONS

List of publications

1. Norgėlaitė, A. (2021). Gimstamumas ir jį sąlygojantys netikrumo aspektai: 1970–1984 m. kohorta Lietuvoje. *Kultūra ir visuomenė: socialinių tyrimų žurnalas*, 12(1), 33-54. <https://doi.org/10.7220/2335-8777.12.2>
2. Norgėlaitė, A. (2022). Globalių veiksnių formuojamo netikrumo poveikis gimstamumo sprendimams. *Socialinė teorija, empirija, politika ir praktika*, 25, 100-113. <https://doi.org/10.15388/STEPP.2022.50>

List of presentations

International conferences:

1. Alina Norgėlaitė, Fertility and Social Uncertainty in Lithuania: the Analysis of 1970-1984 Birth Cohorts, European Sociological Association, August-September, 2021.
2. Alina Norgėlaitė, Uncertainty aspects faced by Lithuanian cohorts of 1970-1984: how uncertainty is related to fertility? Vytautas Magnus University, September, 2021.

National conferences:

1. Alina Norgėlaitė, Vaiko priežiūros išmokų gavėjų struktūros pokyčiai Lietuvoje (Changes in the Structure of Child Care Beneficiaries in Lithuania), XII Lietuvos sociologų draugijos konferencija, November, 2020.
2. Alina Norgėlaitė, Socialinis neužtikrintumas mažėjančio gimstamumo visuomenėje: ką atskleidžia Lietuvos 1970-1984 gimimo metų kohortų analizė? (Social Uncertainty in the Society of Decreasing Fertility: What is Revealed by the Analysis of the Birth Cohorts of 1970-1984 in Lithuania?), XIII Lietuvos sociologų draugijos konferencija, January, 2022.

3. Alina Norgėlaitė, Vaikų susilaukimas ir neužtikrintumas: globalių veiksnių vaidmuo (Childbearing and Uncertainty: the Role of Global Factors), IX nacionalinė jaunųjų sociologų ir antropologų konferencija, April, 2023.
4. Alina Norgėlaitė, Makro ir mikro lygmenų sankirta: sprendimai susilaukti vaikų ir globalių veiksnių formuojamas neužtikrintumas (Intersection of Macro and Micro Levels: Childbearing Decisions and Uncertainty Shaped by Global Factors), XV nacionalinė Lietuvos sociologų draugijos konferencija, December, 2023.

ABOUT THE AUTHOR

Education:

- 2020-2024 Doctoral Studies in Sociology, Institute of Sociology
 at Lithuanian Centre for Social Sciences
- 2018-2020 Master of Sociology, Vytautas Magnus University
- 1997-1999 Master of International Communication,
 Vilnius University
- 1993-1997 Bachelor of Informology, Vilnius University

Research interests: Fertility, Family Demography.

