

**Perceptions, Future Narratives and Fertility Intentions
since the COVID-19 Pandemic**

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Abstract

The Covid-19 epidemic has led to several social changes, including an impact on plans to have children. The aim of this paper is to understand what conditions, perceptions shaped the narratives about having a child during the pandemic. Applying qualitative methodology, the research used semi-structured interviews to investigate how the pandemic as a factor is reflected in women's decisions to have children. The interviewees' reacted differently to the pandemic induced changes, some of them used this situation to explore new opportunities. Other interviewees' narratives reflect a sense of uncertainty about the impact of the pandemic on their thinking, plans and future narratives, which in some cases discouraged them from having children. Several women did not link the factors influencing their childbearing decisions to the pandemic, but this situation had an indirect or meditated impact on their fertility plans due to changes associated with the COVID-19 pandemic. The research confirms the role of future narratives in fertility decisions.

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1. Introduction

“Well, who knows what kind of world I'm going to have a baby in. We don't know what's really going to happen in a few years. Now, I'm not that I'm pessimistic, but you think about the fact that I might have given birth this little innocent soul here and it could be a world war. I hope it won't happen, but it's a possibility.” (Lisa)

The COVID-19 pandemic, the social distancing measures and subsequent economic recession has reshaped the lives of many. The Covid-19 pandemic hit the world globally, leading to temporary and possibly long-term social changes. In Hungary, during different waves of the pandemic nurseries, primary and secondary schools, and universities closed, as a consequence of this, children had to stay at home further straining family capacities. A lot of workplaces shifted to home office. Hospitals and social care institutions were strained which placed burden to families. Furthermore, the COVID-19 pandemic caused uncertainty in employment, the unemployment rate increased (Tóth et al., 2021). The social distancing measures separated people from other family members and friends, and the lack of social interaction could have also affected families. Additionally, the closures enabled families and couples to spend more time together, possibly leading to value and plan changes. These aspects could influence people's plans about having children.

In this paper, future narratives and fertility intentions during the pandemic in Hungary will be analyzed. The goal of this paper is to describe the perceptions about coronavirus pandemic and its effect on the fertility plans of young childless people and on those who became a parent during the pandemic. Qualitative methodology with 20 semi-structured interviews were adopted, the interviews were conducted during and after the fifth wave in Hungary. As the first outbreak of the pandemic started almost two years before the interviews, therefore many interviewees did not see the pandemic as a threat that challenges their lives every day. Still, many income, work and habitual changes were addressed, and uncertainty appeared and caused unclear, unpredictable future plans by some participants. Those who were expecting and giving birth since the pandemic, observed differences because of social distancing and restrictions. Many respondents reported mediated effects of the pandemic that indirectly affected their fertility plans. Imaginaries, expectations and narratives of the future shaped the interviewees fertility plans, which confirms the theory of Narrative Framework on fertility intentions (Vignoli et al., 2020).

The literature review contains theoretical and empirical studies about fertility intentions. Uncertainty and events of crises are associated with changes in fertility patterns. After that, the social effects of the Covid-19 pandemic will be presented, with a focus on fertility and the case of Hungary. This will be followed by the description of the research questions and the selected research method. The results are presented according to different topics. First, reactions and interpretation of the pandemic will be reported, which is followed by the changes that the pandemic has caused, with a focus on the experiences of pregnancy and childbirth since the pandemic. Ultimately, the pandemic effect on fertility plans and childbirth will be shown. The paper ends with a discussion and conclusion where main findings will be compared with the literature available and future directions for research will be presented.

The limitation of this paper that it only observes the perceptions and experiences of middle-class participants, which does not represent the Hungarian society. Furthermore, there is lack of data how the participants experienced the first four waves of the pandemic, so the study relies on their recollection of memories which could have altered since then. However, the novelty of this study, that it shows the perceptions and their effect on future narratives and fertility two years after the pandemic. On top of that, this study mentions relevant topics which were not in the focus of sociological studies in Hungary yet, it discusses the perceptions about the pandemic and war in Ukraine as well as pregnancy and birth experiences during this period.

2. Theoretical Background

2.1 Theories about fertility intentions

Fertility research is in the focus of demographers, sociologists and other scientists. From the middle of the 20th century, there is a global downward trend in fertility rate, while in the 1960s one woman had five children on average, it has dropped to a half in the 2000s (World Bank, 2022). According to World Bank data, the total fertility rate was globally 2.406 in 2020. In the European Union, the fertility rate was below the world average, from the 2000s the total fertility rate fluctuated around 1.5, it was 1.558 in 2020 (World Bank, 2022), which is below the replacement fertility rate of 2.1 (Craig, 1994). In Hungary, the total fertility rate was below the average of the European Union, but in the

last 10 years it has slowly increased and reached the average of the EU in 2018. In 2020, the total fertility rate was 1.524, just slightly below the EU average (World Bank, 2022).

In the last century, many studies and theories analyzed what contributes to the decline of fertility. In this paper, the focus will be on social, economic determinants of fertility, biological factors influencing fertility will not be included. Starting from Malthus (1798) who wrote about fertility changes, and mixed societal and biological factors of fertility, scholars have been working on the social-economic factors of fertility. The sociological view about fertility focuses on the social context of fertility because it is said that social factors like cultural norms, religion and ideologies can influence human behavior in terms of having children, e.g., timing the childbearing. There are many social and economic factors that have been studied when talking about fertility: the modernization theory, religion, the change of family form. (Joshi & David, 2005)

Values, social norms, and preferences are relevant factors determining fertility patterns, although there is no clear consensus on the determinants of fertility. In other models, fertility is explained by an economic perspective. In modern societies, fertility is often understood from a demand approach, when fertility control is described as a rational decision-making process. Accordingly, the goal of the decision-maker is to maximize the utility of satisfaction. The individual evaluates the costs and benefits of having a child, decision making about having a child therefore can be understood as a cost-benefit calculation (Joshi & David, 2005). The critique of this model is the social embeddedness of these calculations, mainly, that while this model expects too much individual agency, and describes individuals as homo economicus, in reality, people are embedded in societal sphere, and their action vary according to different circumstances, and the actual number of children mismatches the desired number (Kazanoglu, 2018).

In line with the rational decision making about fertility, there are many theories about fertility that includes fertility intentions and conscious decision-making about fertility behavior. In social psychology, the Theory of Planned Behavior (TPB) by Icek Ajzen (1991; Ajzen & Klobas, 2013) was formed which is an extended theory of reasoned behavior. This theory is widely used in demographic research to explain fertility intentions (Liefbroer, 2011). The theory states, that the intention has a direct effect on fertility, other factors influence only the fertility intentions. This theory includes three dimensions that shape the intentions of a person's behavior. These determinants are attitudes, subjective norms, and perceived behavioral control. Perceived behavioral

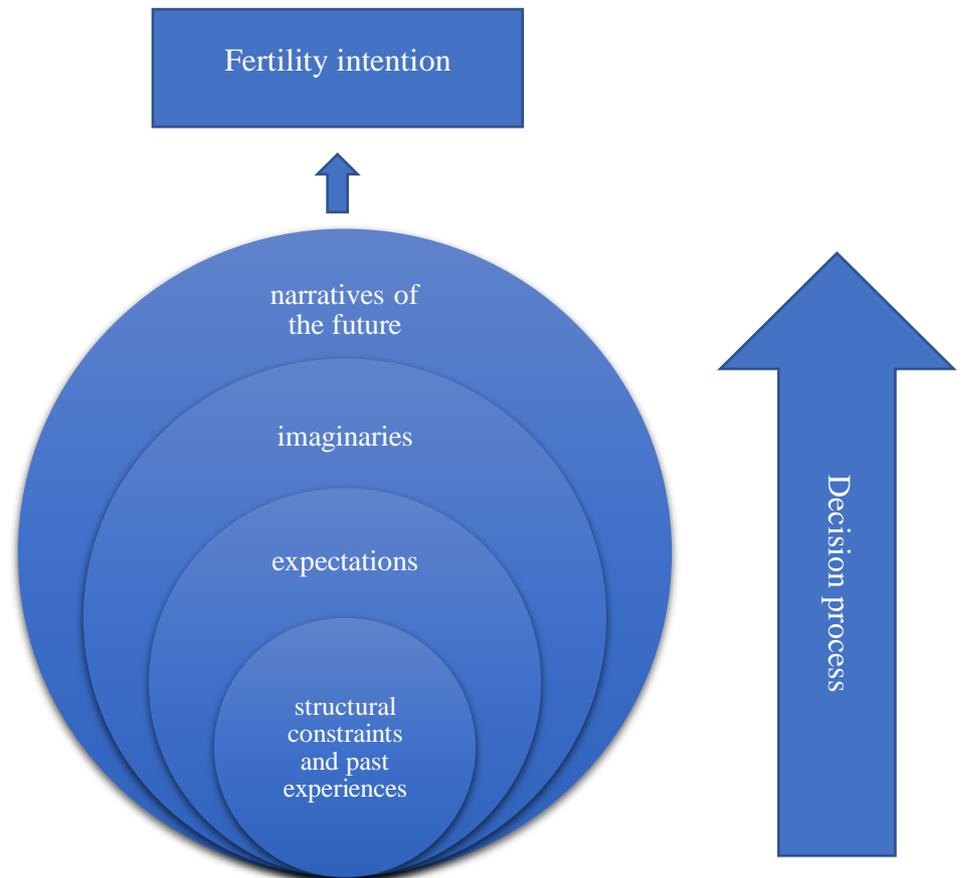
control is an exceptional factor that can also have a direct effect on fertility, not only on intentions. In this theory, these three factors have direct influence on intention. Other factors are considered as background factors: values, experience, social-economic factors like gender, employment status, and education. These only influence these three core factors; hence they have indirect effect on intentions. This group also includes general desires for fertility. (Ajzen, 1991; Ajzen & Klobas, 2013)

Liefbroer (2011) argues that TPB is a good theory to apply to fertility intentions. He states that as in TPB, preferences, norms, constraints, and opportunities are the factors that influence fertility intentions. According to him, this framework is heuristic and focuses only on intentional processes. He argues that this framework has dynamics in it, not a static framework as some critiques state. Furthermore, this model is suitable to catch macro-micro relationships. Overall, he believes that this theory can be used to get answers for questions like what people consider about having a child, and what people believe to be societal constraints about having a child.

Vignoli et al. (2020) criticize the Theory of Planned Behavior by pointing out that this model does not include future orientation of cognitive processes and expectations, imaginations. The TPB is based on social norms, subjective perceptions, and attitudes, but the imaginative capacity about the future is missing. Vignoli et al. (2020) argue that economic uncertainty plays a central role in contemporary European fertility dynamics. There was much empirical research about structural constraints like education level, employment, and partnership that could not fully explain fertility intentions. They highlight that available demographic studies are missing the future orientation, since they only focus on the “statistical shadow of the past” (Davidson 2010: 17; Beckert and Bronk 2018 in Vignoli et al., 2020). They argue that fertility decisions are embedded in the global phenomenon of uncertainty and cannot be fully predicted from demographic characteristics and past events. (Vignoli et al., 2020)

Therefore, Vignoli et al. (2020) created the Narrative Framework to describe fertility intentions, that includes imaginaries and narratives about the future. In their model structural constraint and past experiences are the first layer of decision making, which is followed by expectations, imaginaries, and narratives of the future. Expectations are strongly related to their past experiences; they refer to expectations about the future considering available information. Imaginaries include more creativity, how people can place themselves in imagined situations, and imagine alternative actions. Narratives of

the future are based on all these layers mentioned before, they contain projections about the future and plan how the individuals wish to reach their goals based on their expectations and imaginaries. (Vignoli et al., 2020)



Source: Vignoli et al., 2020

Vignoli et al. (2020) state that in this uncertain world, having a long-term plan like a child is a hard decision, and uncertainty may lead to postponing or abandoning fertility plans. However, uncertainty can be reduced by having positive expectations, imaginaries about future scenarios. For example, even in an uncertain situation like being unemployed positive expectations about future employment condition can reduce uncertainty, hence with an image of a wishful future it will not be an obstacle to have a child. They describe that uncertainty reduction is an important driving force for decision making. Furthermore, they mention that in some cases having a child can reduce uncertainty: “having a child changes life from uncertain to relatively certain” (Friedman et al.1994: 383 in Vignoli et al., 2020: 7).

Future narratives as a factor of fertility intentions are relatively rare in demographic studies. In a qualitative study in Canada about fertility intentions, it was found that societal and familiar factors, such as health problems and financial stability, play a role in timing fertility. The projection of the life plan and the feeling of readiness and a stable relationship play a crucial role when preparing for motherhood. (Benzies et al., 2006) One experimental study among Norwegians found that exposure to negative economic scenario will lead to decline in fertility intentions, while positive economic scenario caused an increase in fertility intentions, regardless to gender, income and employment status (Lappegård et al., 2022)

Research on fertility intentions

In the last decades, there have been many empirical studies about fertility intentions (Billari et al., 2009; Liefbroer, 2009). In recent years a systematic analysis was carried out on short-term intentions (2-3 years) and their realization (Régnier-Loilier & Vignoli, 2011; Spéder & Kapitány, 2009; Spéder & Kapitány, 2014, Kapitány & Spéder, 2021). It is believed that exploring the fertility intentions and realization lead to a better understanding of fertility itself (Régnier-Loilier and Vignoli, 2011, Kapitány and Spéder, 2012). Spéder and Kapitány (2014) analyzed short-term fertility intentions and their realization in five European countries, including Hungary, to understand the post-communist countries' fertility transition. Their results are similar to many empirical studies (Kapitány & Spéder, 2012) on the difference between Western and Eastern European countries, namely that the realization of intended fertility is significantly lower in eastern European countries (Spéder & Kapitány, 2014). They argue that the discrepancy between the desired and realized fertility in post-communist countries stems from the social anomie that comes from the disparity between slow value shift and hence rapid structural changes after the transition to market economy in the 1990s.

Although there is a gap between the intended fertility and the realized fertility, but it has appeared as a good indicator for fertility prediction, the difference between the desired fertility and realized reflect on situational constraints (Billari et al. 2009; Régnier-Loilier and Vignoli 2011). Changes to realize are dependent on biological factors, commitment to intentions, partner intentions, and other demographic factors (Spéder & Kapitány, 2009). In another article, Kapitány and Spéder (2021) analyzed the realization of short-term and long-term fertility intentions. They found that there are differences in realization of fertility intentions between countries; Hungary is in the middle; in this

country the one third of short-term fertility intentions (within 3 years) are realized in years after 2004 (Kapitány & Spéder, 2021 pp.60) They state that uncertainty decreases, while family subsidies and social networks are increasing the ratio of realization of short-term plans. Furthermore, younger women, people in better financial condition, and those who have a stronger detection of the family expectations of their environment are more likely to realize their short-term fertility intentions. In this study, Kapitány & Spéder (2021) also studied the realization of long-term fertility intentions. They found that there is still a gap between the number of children wished and realized in Hungary, but this gap has decreased during the research period.

2.2 Uncertainty and fertility during crises

There has been much research on how uncertainty and crisis affect fertility. In times of social changes, uncertainty becomes important. Knight (1921) defines uncertainty when people have to make decisions and when they are unable to decide about the probability of a possible future outcomes. Beckert (2016) defines fundamental uncertainty, where the outcomes of actions in presence cannot be predicted with confidence. In his book, he writes about how fictional futures drive capitalism, and it is perceived as crisis, when these expected futures do not realize. He states that these imagined futures embedded in cultural frames, and he highlights the role of media and parental narratives to develop individual narratives of the future. In post-socialist countries uncertainty was especially high after the transition, during 1990s and 2000s (Philipov & Dorbritz 2003).

In the past decades, there were several events that caused uncertainty in people's lives, and which was detectable in fertility rates, too. Uncertainty effects childbirth, during the years after the transition, there was a decline in fertility in Eastern European countries, people were more likely to postpone their fertility plans (Ranjan, 1999).

Disruptions to everyday life like blackouts were also found to have an effect on fertility. Burlando (2014) found that power outages and power instability in Zanzibar caused higher live births. Aassve et al. (2020) described the trend of short-term fallback in fertility after natural disasters like earthquakes and hurricanes, but later it is followed by increasing fertility. They explain that the increase in fertility after a natural disaster is to replace lost children, but also there is a structural shift in expectations of people about children. Having children after a crisis or disaster can be a sign of a return to normality and a positive reframing of those times.

There are studies on the effect of economic shocks and perceived economic uncertainty. Economic recession is associated with mostly negative effect on fertility, during and after the global financial crisis, there was a decline in fertility in developed countries (Sobotka et al., 2011; Goldstein et al., 2013) Perceived uncertainty was also applied in fertility research, and it was found by Schneider (2015), that in the United States after the Great Recession there was a decline in fertility not only because of economic hardship but also due to increased economic uncertainty. The effect on perceived uncertainty on fertility also depend demographical factors, like gender and employment status. When men perceive higher uncertainty, it will lead to lower fertility, while in societies like Japan, when the traditional male breadwinner model is dominant, unemployment and uncertainty in the labor market by women might increase fertility (Raymo and Shibata, 2017). In a study in Italy, higher social trust was associated with higher fertility (Aassve et al., 2021). Studies showed that postponement of having a child among young people is common in times of economic uncertainty (Mills and Blossfeld 2013).

Many of the studies that focused on epidemics and fertility use macro-data analysis to detect trends. These studies state that the epidemics had an effect on fertility, but not only because of the biological consequences of the virus, but the epidemic is associated with behavioral change in childbearing plans. During the 1918-1919 influenza there was a drop in fertility by Maori people in New-Zealand (Wilson et al., 2019). Mamelund (2004) and Boberg- Fazlic et al. (2017) analyzed fertility rates after epidemics: the Spanish flu in Norway in 1920 and influenza in Sweden in 1918-19. They both found that there is a baby-boom after the epidemic, but Boberg-Fazlic et al. (2017) add that this increase in fertility is short-lived, they detect a strong long-term fertility decline after the epidemic caused by various factors connected to fertility like disruptions in marriage market and income uncertainty. Boucekkine, Desbordes, and Latzer (2009) analyzed fertility in sub-Saharan Africa, finding that net fertility decreases because of adult mortality risks in this case dying from HIV / AIDS. Recent epidemics, like the Zika virus outbreak in 2015-2016 also caused a decrease in birth and fertility in Brazil (Rangel et al., 2020) Tan & Pang (2022) examined the effect of the Zika virus on fertility in Singapore in 2016-17; they state that the *perceived infection risks* lead to a decrease in fertility.

In conclusion, many studies show that sudden risks and epidemics cause a negative shock in fertility which is followed by a correction. This can be understood that people postpone

their fertility plans in times of epidemics but realize it shortly after the epidemics is under control.

2.3 COVID-19 and fertility intentions

Social-economic effects of COVID-19 pandemic

COVID-19 led to several changes in society and changed the lives of the people due to the health emergency, social distancing, and the following economic crisis. At the beginning of the pandemic, there were theories about how COVID-19 and the following changes will affect society. An article analyzed the possible outcomes of the coronavirus pandemic from a life course perspective. They have differentiated between infected and affected people of the epidemic. The article stated that young adults entering the labor market and will face difficulties due to the economic recession will blame the pandemic for their limited possibilities. They will feel that they have less control and choices, and many of them will enter “survival mode”. The authors predicted that those who are transitioning from school to work will have to accept more precarious jobs, and others go back and start education or training programs. They state that those in their 30s will have a feeling of ‘insult to injury’, since they have already been hit by the global financial crisis when they entered the market force. For those who are transitioning to parenthood, they expected hardness due to giving birth alone, but more chance of bonding and more private time, so fathers could be more involved due to lockdown and home office. And lastly, the authors state, that the COVID-19 will result a more intensive interaction and interdependence on family. (Settersten et al., 2020)

The COVID-19 pandemic resulted an increase in inequality in Hungary, more than after the financial crisis in 2008-2009. Remote work was introduced in many sectors to maintain social distancing, but the study found that it was available mainly for those who had college or university degrees. The well-off could accommodate to the changes easier, young workers, unskilled labor were more affected by the crisis. There was also a gender aspect, female employment was more affected than males, especially with small children. (Köllő & Reizer, 2021)

The consequences of the pandemic affected people's mental health as well. Szabo et al. (2020) found that during the first wave of coronavirus disease in Hungary, women and young people and those with worse health conditions reported higher levels of stress. Depression and anxiety were also associated with intolerance for uncertainty and

meaning of life during the pandemic. Those who reported higher level of intolerance to uncertainty, or lower level of meaning of life were significantly more likely to have depression or anxiety. (Korkmaz & Güloğlu, 2021)

The outbreak of the pandemic resulted changes in the health care system too. In Hungary, a general visitor ban in hospitals was introduced. However, the presence of the father (or one birth partner) at birth was an exception, since they were considered as helpers for the childbirth, so they could attend at the labor under certain circumstances. Many hospitals introduced additional rules for the fathers such as requirement of a COVID-test within 72 hours. Furthermore, fathers could not attend at the labor when babies were delivered through a cesarian section, and the presence of the accompanying was forbidden after labor. There were different reactions from hospitals leading to different regulations, and the information on restriction was not sufficient in many cases. Due to the visitor ban in maternity ward, some hospitals shortened the compulsory hospital stay for mothers and newborns. (Lengyel & Ács, 2021) On top of that, since doulas are not employees of the hospitals, they could not attend at the birth, when the restriction of one birth partner was introduced (Searcy & Castañeda, 2021). Overall, giving birth during the pandemic had many challenges for women, and in some cases mothers had to deliver their babies without the presence of their partners.

There is limited information how mothers experienced birth during the pandemic in Hungary, but studies in developed countries with similar policy responses to covid (visitor ban in hospitals) analyzed pregnancy experiences during the lockdown. A qualitative study in Australia explored the experiences of becoming a mother during the 1st wave. They found that giving birth during lockdown was an isolating experience for many women, and they wished to have had more social support (Sweet et al., 2021). Another study in the same country found that visitor ban in hospitals caused a “missing out” experience in partners and support persons and they reported more feelings of uncertainty and feelings of isolation (Vasilevski et al., 2021).

The challenging situation of the first lockdown in 2020 increased solidarity in different countries, in Hungary, too. In this country, confinement was associated with higher level of solidarity (Voicu et al., 2021). Another study found that during the first wave of the pandemic in Hungary, solidarity was detectable primarily in family ties, and personal relationships, friendships (Sík & Zakariás, 2021).

The effect on fertility of the COVID-19 pandemic

As well as other social crises in the past, the COVID-19 outbreak in 2020 around had a direct and indirect effect on individuals, families, and their childbearing plans. Aassve et al. (2020) theorized that coronavirus disease could have different effect on fertility by countries. the authors envisioned fertility in high income countries due to the hardship in work-life balance, decreased access to assisted reproductive technologies and increased economic losses and uncertainty. They state that in times of uncertainty, people tend to postpone their long-term plans like having a child. In urban areas of low- and middle-income countries they described an unsure outcome, whether fertility will increase or decrease. They have depicted main factors that influencing fertility behavior of these countries during this period. These are economic losses and uncertainty, which would decrease fertility, and one factor that can increase fertility is the lack of access to contraception.

Voicu and Bădoi (2021) created a theoretical framework about the effects of the COVID-19 pandemic on fertility behavior. They detected direct effects that include health emergency, social distancing, and economic crisis. Furthermore, they depict mediated effects that are the gender roles and changing social values. They set up different hypotheses about the Covid-19 effect on fertility. One hypothesis is that the COVID-19 will not have a direct effect on fertility, but the health emergency and economic crisis and social distancing will lead to a decline in fertility. Furthermore, they mentioned the effect on social distancing on gender arrangements. They hypothesized that there is a U-shaped relationship between social values and gender roles and fertility, whereas more traditional gender culture and less traditional gender culture will have higher fertility rates.

Guetto et al. (2022) applied the Narrative Framework of fertility intentions on the COVID-19 pandemic. They argue that narratives of the future are crucial factors for decision-making, especially in times of uncertainty like the pandemic. Not only the health, economic effects and government restrictions are relevant, but the exposure to (social) media and its content about the pandemic affects people's views. (Social) media creates shared narratives that shape individual narratives. They hypothesize that the feeling of insecurity due to the coronavirus pandemic will have a negative effect on pre-pandemic fertility intentions. The authors included the predicted length of the pandemic; those who believe that return to pre-pandemic conditions will take a long time are more

likely to postpone or abandon their fertility plans, while those who exposed to the shared narrative of the quick return to pre-pandemic conditions will have a positive effect on their fertility intentions. Using data from Italy during the first wave of the pandemic, they found that besides traditional predictors (age, sex, number of children etc.) subjective perceptions, expectations and imaginaries were important factors for their adaptation to the new situation. Those people that expected long time of return to the pre-pandemic situation, decreased their fertility intentions. In case of higher level of expected happiness from having a child, fertility intentions have increased during this period. Guetto et al. (2022) therefore highlights the role of future narratives, expectations and imaginaries when researching fertility intentions.

There is early evidence available how the coronavirus changes fertility statistics. The Covid-19 pandemic had an effect on childbirth in many countries and caused a birth decline around the world (Taiwan, United States, many European countries) 9 months in December 2020 and January 2021 (Sobotka et al., 2021). In Hungary, there was an increase in fertility throughout 2020 (probably due to the pronatalist family policies), but a decline in December 2020 and January 2021 – just nine months after the first lockdown (Sobotka et al., 2021; Kapitány & Spéder, 2021). After this, there was a rebound in fertility in the following month, until April 2021 the lockdown caused fallback was made up. This trend was similar in many European countries like Austria, Croatia, and Czechia. In some countries like Italy, Slovenia and Romania, the fallback was not followed by a rebound. In other countries, mostly Nordic European countries, there was no fallback due to the COVID-19 (Kapitány & Spéder, 2021). The birthrate remained flat or even showed a small peak in the Netherlands and Nordic countries (except Sweden) in December 2020, and January 2021 (Sobotka et al., 2021).

Another study compared the birthrates of January - September 2021 to the same period in 2020, therefore it shows the effect of the first waves on fertility. In Southern and Eastern European countries like Portugal, Ukraine, and Lithuania there was a more than 3% of fallback in birth rates. In Central European countries like Hungary, Slovakia, Czechia but also Sweden, the birthrate stayed the same. In the third group of the countries, the fertility rate increased. This was particularly pronounced in Norway, Iceland, Netherlands and Finland, where the increase in fertility was +5% or even more (Gassen et al., 2022: 37). The pandemic resulted a baby boom in these countries can be explained by the social safety nets and gender and social policies available in these

countries, such as financial initiatives for having a child, which are available for a longer period now, but pandemic caused accessibility of flexible working conditions and home office could have increased the desire for families to have children. Other explanation for the baby boom is the lower mortality rates due to the pandemic compared to other European countries, and also the economic fallback was not as steep in these countries. (Gassen et al., 2022)

There have been several empirical studies on how the pandemic has affected fertility intentions during the first wave. A recent study in Western-European countries confirms the short-term effect on childbearing plans: those who had negative expectations about their future employment situation because of Covid-19 are more likely to abandon fertility plans (Luppi et al., 2020). In New York, many respondents decided to postpone or abandon their fertility intentions, people with lower income, less financial stability, or higher stress level were more likely to cease to contemplate. Those who were newly considering pregnancy were more financially stable, highly educated people (Kahn et al., 2021) Another empirical study by Malicka et al. (2021) in Poland concluded that 79% of the respondents did not change their intentions about having a child, but 16% postponed their childbearing plans due to Covid-19. Mental well-being and a feeling of financial security were significant reasons for the postponement. Additionally, to their quantitative analysis, they conducted qualitative analysis to understand people's decision to postpone childbearing. They describe that behind postponement of childbirth are health-related fears, employment, and financial instability and the general feeling of uncertainty. The positive effects of the pandemic on childbirth are the shift in priorities and the possibility of more careful attempts for pregnancy (Malicka et al., 2021). In case of Moldova, there was a rise in sexual activity after the lockdown, but there was a decline in those who were actively trying to get pregnant, but there was no difference identified in medium term fertility plans (Emery & Koops, 2022).

3. Context: Fertility during the pandemic in Hungary

The total fertility rate in Hungary was around 1.4 and 1.5 in the last 5 years (World Bank, 2022). In this country, the most intense age of childbearing was delayed from 23-24 to 30 just within 20 years (Spéder, 2021), but the age-related delay was stopped after 2011 (Kapitány & Spéder, 2021). Spéder (2021) found that fertility patterns in Hungary can be described as status differentiates in the last decades. He identified an increase of

heterogeneity of timing the childbearing. There is a difference in fertility according to the highest level of education, the highest fertility rates appear among the less educated and the highest educated. Delay of childbearing is a trait by those who have a school leaving exam, and their fertility is the lowest among these status groups. Those who have obtained a university degree are more concentrated about the timing of childbearing. Their childbearing falls between 28 and 34. Furthermore, voluntary childlessness is not a widespread lifestyle in Hungary, but it is spreading in recent years, and the childlessness rate is greater among the higher educated (Szalma & Takács, 2015; Szabó, 2015, 2019)

The increase in fertility rates is associated with reforms of family policy. Since the introduction of the family policies, more children were born within marriage, and getting married due to pregnancy has also increased. These changes are related to the new family policies. The new family tax allowance system also increased fertility, but most likely among those who obtain a university degree (Kapitány & Spéder, 2021). Family policy reforms are pronatalist and support familialism; highlighting the role of motherhood, traditional division of work, emphasizing that the women's role is upbringing children. But, in fact, these subsidies build on women's participation in the labor market and well-off families are supported by tax-allowance and housing subsidy (Szikra, 2019). The family policy system is grounded on the support of traditional gender values and roles among Hungarians (Dupcsik & Tóth, 2014).

The COVID-19 pandemic and the following government restrictions increased gender inequalities in domestic work. Many of the schools has closed, which put an extra duty on mothers (Fodor et al., 2021). The state of emergency was declared in March 2022 and still has not been lifted yet (until the end of April 2022).¹ The first wave was followed by four more, with high infection and mortality rate. The fifth wave officially ended on the 4th of March 2022. The government communicated about pandemic and stated that

¹ portfolio.hu <https://www.portfolio.hu/gazdasag/20211214/dontott-az-orszaggyules-nyarig-marad-a-veszelyhelyzet-magyarorszagon-516076> Retrieved at: 2022.04.19.

vaccination is the solution for ending the pandemic², and provided many exemptions from restrictions for those, who were vaccinated³.

There are early findings about Covid-19 effects on fertility in Hungary. As it was described before, there was a decline in fertility during the Covid-19 pandemic, nine months after the first lockdown (Aassve et al., 2021 ; Sobotka et al., 2021), followed by a rebound after January 2021 (Kapitány & Spéder, 2021). However, the rebound effect did not last long, compared to the same period in 2020, between January and September 2021, fertility decreased overall of 0.4 percent (Gassen et al., 2022). According to the Hungarian Central Statistical Office (2022a), live birth statistic shows a decline in the first quarter of 2022, compared to the previous year. Until end of March this year, live birth declined by 12% compared to the statistics of 2021. (Hungarian Central Statistical Office, 2022b). The number of births increased only in the capital (by 1,1%), there was a decline everywhere in Hungary outside of Budapest in the last 12 months (Hungarian Central Statistical Office, 2022b)

4. Research questions

In the literature review, theories about fertility and intentions were presented. Uncertainty, especially during crises decreases childbearing desires, however, this uncertainty can be reduced by having positive expectations, imaginaries about the future (Vignoli et al., 2020). During the COVID-19 pandemic, fertility patterns were affected due to the social changes. In Hungary, since the end of 2020, fertility shows rather a decline compared to the previous years (Hungarian Central Statistical Office, 2022a). It is relevant to observe, how young adults perceived the pandemic, who were childless before the COVID-19 breakdown has started, and how it might have shaped their views about their future.

The purpose of this research is to explore what aspects and factors influence fertility plans as a result of COVID-19. Therefore, the research is divided into two main parts.

² koronavirus.gov.hu <https://koronavirus.gov.hu/cikkek/domotor-az-oltas-jelenti-megoldast-vedekezesben> Retrieved at: 2022. 04.19.

³ koronavirus.gov.hu <https://koronavirus.gov.hu/cikkek/gulyas-februar-15-etol-oltasi-igazolvanya-alakul-vedettsegi-igazolvany> Retrieved at: 2022. 04.19.

How interviewees reacted and interpreted the pandemic? What changes in their lives and future plans do they attribute to the pandemic? In this section, the understanding and interpretation of the pandemic will be analyzed, how do they perceive the pandemic, and the pandemic related restrictions since the pandemic has started in March 2020. Additionally, pandemic related changes in life of the interviewees will be presented. This study not only focuses on present and past adjustments, but also on future expectations and narratives, whether the respondents observed uncertainty and how this have affected their imaginations and future plans. After this, a special focus will be given to pregnancy and birth experiences during the pandemic. Secondly, fertility intentions will be discovered. *What factors and aspects influence people's decision about having a child, and how the pandemic possibly modified these?* The goal is to detect the conditions and motivations, future plans of people about childbearing who did not have a child before the pandemic. The aim is to understand how the pandemic affected their short- and long-term plans about fertility, and what circumstances led them to change or not to change their views about having children.

Teti et al. (2020) highlighted the importance of qualitative studies on the COVID-19 pandemic in order to understand emotions and thoughts related to pandemic, which can help to better understand quantitative models and improve policies. Conducting interviews can provide answers to understand what factors played a role in views, future plans, and motivations about having a child during the pandemic.

5. Methodology

In order to answer the research questions, qualitative methodology was chosen to explore what views, aspirations, narratives do people have about the pandemic and having a child during the COVID-19 pandemic. Data were collected through semi-structured interviews. This way it is ensured to have common core questions that were asked from all interviewees. Nevertheless, sufficient flexibility was allowed to have the possibility to follow interesting lines connected to the research questions (McIntosh & Morse, 2015).

The interview guide is the modified version of the interview guide on Covid-19 and childbearing conducted by Ivett Szalma (funded by the ELKH Center for Social

Sciences, Institute for Sociology). The semi-structured questionnaire consisted of some polar-, but mostly of open-ended questions. It had 4 sections; the first section was about sociodemographic questions of the interviewee. It was followed by questions of topics; first about COVID-19, then about childbearing plans and finally about climate change. The interview guide can be found in Appendix. The interviews were conducted in Hungarian and later translated by the author of this paper.

The subjects of the interviews were selected by convenience sampling; there was an intention to gather respondents from different geographical locations within Hungary. The interviews were conducted between February and March 2022, when several lifts of pandemic-related restrictions had happened. Most prominently, on the 4th of March, the prime minister of Hungary declared the end of the fifth wave⁴.

Before the study, the interview guide was tested with two respondents with characteristics similar to those of the sample. In total, 20 interviews were conducted with people aged 18 to 35 years, who do not have a child, or have a child younger than 3 years old, so the child was born during the pandemic era, after March 2020. In the sample, 10 interviewees did not have a child, there were 2 interviewees currently pregnant, and 8 interviewees with a child. The interviews were conducted mostly online via video-conferencing software, some of them were in person or conducted by phone. All interviewed participants were informed in advance about the research and the fact that the interviews would be recorded and analyzed anonymously, fictional names were given by the author for the analysis. The lengths of the interviews were between around half an hour and one and a half hour.

Sociodemographic characteristics of the participants can be found in the Appendix under Table of Interviewee Characteristics. The interviewees had a middle-class background, usually with a university degree or enrolled university students. About their financial situation, they mostly perceived it as having no financial difficulties. Among the childless interviewees, 3 had no partner at the time of the interview, and 7 were in a relationship. Pregnant interviewees as well as interviewees with a child were in a

⁴ “Orbán: We have defeated the fifth wave”: <https://koronavirus.gov.hu/cikkek/orban-legyoztuk-az-otodik-hullamot> Last download: 2022.05.01.

relationship with the father of the child, most of them were married too. The respondents were either students, were employed or were on maternity leave (in this case, their partner was employed). All the interviews were taken with females.

Transcribed interviews were analyzed using NVivo software. After reading the transcripts several times, to gather a deeper understanding of the data, the texts were coded into different themes using reflexive inductive coding method (Braun & Clarke, 2006). The main themes and subthemes were identified.

6. Findings

6.1 Reactions and Interpretation of the Pandemic

The interviewees reacted to the COVID-19 outbreak differently. Some of them highlighted that they are **taking the pandemic seriously** even two years after the first outbreak in Hungary (Isabella, Emily, Jessica, Amy), and taking additional steps to prevent it. The opposite response was the **ignorance of the virus** (Olivia, Emma, Lisa, Michelle, Lily, Susan). Emma reported that she had continued her business illegally during the first lockdown and has broken the regulations. Olivia expressed annoyance because of the restrictions and minimal adjustments to the restrictions: *“to say the truth, I followed the regulations that were made, but I did not sit at home dreading when I was going to be sick.”* (Lily). An interviewee added that the pandemic according to her was nothing more than a “media hysteria” (Susan), a moral panic created by the media, but not a real threat.

Relative stability and feeling safe in this generation might be linked to the risks connected to the virus; young adults are less likely to die or have severe condition (Levin et al., 2020). However, those who become pregnant or have a child might become more cautious. Several women told that since they become **mothers**, they are more careful and **take COVID more seriously**. *[..] I feel somewhere between the two extremes. There is an epidemic, I don't deny that, obviously now that my daughter and I are home together we are one unit more aware of these things.* (Madison) Mothers (to be) in some cases follow extra preventive steps voluntarily, limit social contacts, do not go shopping with

the newborn baby and do not use public transportation. During this period, these mothers might be more isolated than usual.

Others recalled adjustments to the COVID-19 situation over time. The interviewees were scared, scared, or panicked at the beginning of the pandemic, but gradually **got used to** it.

“It was a very scary situation at the beginning, and I watched a lot of the little show every day on the [governmental information show], and I was hooked on the subject, and I read everything on the subject, and I could feel it in my state of mind, it put a pressure on me. I don't read the news about it now, I don't look at case numbers, and it's had a good effect on me. Since the second wave, I have not looked. It has been more pressing, you know the new situation is that there was a big looting in the shops, I went into a store here in the area and you couldn't get meat. It was a very new situation, really, like a time of war, and that was probably the scary thing about it. You can get used to anything, it doesn't affect me in that way.” (Hannah)

Many initial perceptions about the pandemic was crisis-like, which reflected the government's communication, that had framed the pandemic as a war (Linnamäki, 2021) This shared narrative appeared in the interviews, too. *“It was a very new situation, really, like a time of war, and that was probably the scary thing about it.”* (Hannah) This perception about the pandemic was prominent during the first few month after the pandemic was declared, in many cases there was decline in COVID-19 related anxiety and fear. Generally, the first and second wave was understood as the “COVID period” for many respondents, and when asked how the pandemic affected their lives, they referred to these periods. By the time when the interviews were taken, people usually felt that they have gained their “normal life” back, and COVID meant only “wearing masks”, “washing hands”, “getting vaccinated”. They felt that the situation stabilized relatively, and even if they have predicted upcoming waves, they only forecasted known scripts (lockdown). Almost everyone said that the current COVID situation is not affecting their lives, they follow the news about the pandemic not as intensively as before: *“it's like it's not there, I mean, I know it's there, but it's back to what it was, so it's like it's not there anymore.”* (15) *'Now I don't even know which [wave is it], I don't really follow it, I know when the numbers go up and down, but that's it.'* (Jessica). *“I already hate this topic so much, I completely exclude it.”* (Emma)

The COVID-19 related restrictions in Hungary eased during the interviewing period, starting from 7 March 2022 wearing masks indoors, and requiring immunity certificate at events was no longer necessarily, almost all restrictions were lifted⁵. The release of restrictions left doubt in some interviewees. Susan even confessed her concerns about the opening, she thinks that this too early opening will have its consequences soon: *“I am not so relieved yet because I feel like I am sure there is going to be a fasting period for this, and I am sure it will get worse.”* (Susan) Hannah noted that although there are no virus-related restrictions, the flexibility of the pandemic era was also abolished, e.g., online examination is not provided even in case of infection:

“ [...] but now there are no restrictions, but if I get sick, it affects my ability to go, for example, I'm going to take a language exam or my state exams are starting, I don't want to postpone because of [the virus] but we don't get the opportunity to take online exams now, which I don't think is fair.[...] Currently, my biggest fear about the epidemic is that I will fall ill at a time when I really need to perform, when I will miss my classes for some reason. ” (Hannah)

6.2 The effect of the pandemic on the life of the interviewees

Work and income

The pandemic and the lockdown changed the daily life of most of the interviewees during the lockdown; those who were studying at the university during this period had to move online. Some interviewees teach in schools, similarly, they started to teach online. This group was usually not affected financially.

Those who were working in service sector admitted economic fallout that caused hardship. Two interviewees working in cafes had to close and live from savings (Olivia and Christine), others had a significant loss in their income or lost their job. Another self-employed interviewee (Lisa) lost most of her income and her client cycle has not yet been fully restored. One of the students was supporting herself by undertaking student work before the pandemics, but these student jobs were not available during the

⁵ koronavirus.gov.hu <https://koronavirus.gov.hu/cikkek/ktk-hetfotol-megszunik-maszkviselesi-kotelezettseg> Last Access: 2022.05.01.

lockdown, which caused financial loss for her. Another student, Susan managed to change her student job and started working in health care.

There are interviewees who managed to increase their income during this period. Emma's workplace was temporarily closed during the lockdown but working illegally allowed her to earn more than before.

The home office was introduced shortly after the outbreak by a few respondents. A woman expressed that the home office was offered differently within the company, and the negative projection about the home office and the lack of trust initially led to increased surveillance.

“My boss told me that if you are at home, you don't work, you just cook, wash and clean. [...] S/He was constantly checking up on us, calling us on the company phone, but on a private number, to see if we would answer, so s/he was testing us. And he told us to reply to an email within fifteen minutes. [...] they really think we are doing nothing?! [...] Also, he made it for me at the beginning to keep writing what I was doing, minute by minute, and I had to send this to my bosses at the end of every day. [...] I did that for two weeks, and then I said to my boss, thank you very much, but I would rather give up the home office and go into the office and let him/her stay at home forever, but I can't stand it, I can't work like that. The work was very stressful from that point of view.” (Betty)

Another interviewee was also partially moved to his home office during the lockdown. She reported that during this period, many work was collected and in summer 2020, when they returned, *“the atmosphere [in the office] has become much more tense”* (Ashley). According to her, it was a burnout period after the home office ended.

The home office can allow partners to spend more time together, which can be especially useful when there is a newborn child in the family. Many women reported that the home office of their partners was perfect when they had the child; therefore, partners could help more with housework and spend more time with the child: *“The home office can also be a family-friendly solution if it does not put more of a burden on the employee than usual, as traveling can save a lot of time. It's so good that my husband is home a lot and he has such a flexible work schedule, he can be more involved in everyday tasks.”* (Ashely)

Habitual changes

The pandemic led to several changes in the lifestyle of the respondents. Most of them reported increased awareness of hygiene, such as washing hands: *“I started to place a much higher emphasis on my health. For example, I started taking vitamins, which I had never taken before, and I smoked, I quit for six months, I tried to smoke less.”* (Amy) Spending more time outdoors, in nature, also appeared as well as other relaxing activities such as reading. Only Lily said that she stopped doing sports and has not restarted it since then. Another respondent stopped using public transport due to infection concerns. Increased usage of cars appeared by many women.

Perhaps the greatest effect of the pandemic in everyday life was on friendships. Many respondents expressed hardship because of the reduced social connections. Lockdowns increased the importance of social connections: *“One thing is certain, personal meetings have become very important and I really enjoy them, perhaps more than I did a few years ago.”* (Sophia) *“We have learned to appreciate the importance of both travel and personal encounters.”* (Ashely) For other interviewees (Olivia and Christine) family became more important, and Olivia met more with her family during the lockdown than usually. Due to the lockdown, people could not meet in person, and some people remained cautious and reduced meetings with friends.

Others got used to isolation during the lockdown. Still after reopening, staying home, being alone was the comfort zone for them, so going out became difficult for them. Some of them reported social anxiety caused by the isolation period:

„I find it much harder to get out on my own. I also crave it a lot more, but still. [...] the more I am at [my home], the harder it is to get myself out with people, but if I go out with people, I get back into it and I like it, but if I have to stay at home again, it's like, ‘oh my god, I have to go out with people again.’” (Sarah)

„I'm so used to being at home and not going anywhere that I've had a comfort zone of being at home and not going anywhere.” (Isabella)

„I don't know how good or not good it is, is a kind of mild social phobia that I have noticed in myself. I get anxious when I have to go into a crowded room or I realize how

many people are around me and it is just like... yeah. I didn't have that before. I didn't like large crowds, but I didn't feel this level of anxiety before the epidemic. ' (Hannah)

For some interviewees, the lockdown period caused depression, and some women admitted that they sought professional help due to the hardship that this situation caused. Anxiety and depression increased during the lockdown according to Szabo et al. (2020). However, free time due to isolation was beneficial for some people to successfully plan and manage their daily tasks and housework.

„I have been trying to be more focused since then. We have started to make sure that we plan our weeks better, in terms of what we buy, and we more or less keep that up now, that we try to be more focused.' (Ashely)

“Maybe I pay a little more attention to things. I mean I am more independent at home, I don't know, doing my own errands and cleaning, so it is not just my mum telling me to do it, I am starting to do it myself. It is probably due to the epidemic situation that it turned out that way. ' (Ruth)

Changes due to COVID-19 in pregnancy

Next, I will focus on those interviewees who became pregnant during the COVID-19 era. I will describe what how these mothers experienced pregnancy, giving birth and raising a baby during these years and changes that they attributed to the pandemic. These mothers gave birth to their first child; therefore, they cannot compare their experiences to pre-covid era. However, their understanding of giving birth during different times can show how their decisions and experiences were modified that they associate with the pandemic.

Usually, mothers revealed that they were **more taken care of** during pregnancy and after giving birth. By that they usually meant that visitors were more careful, and they were more likely to share when they were sick, so they could protect the mother and the baby from potential infections. *“I feel that if someone is sick, they don't come or tell me not to come near. Maybe that is one advantage, they care about me better.” (Amy)*

For some mothers, the possibility of **home office** was also an advantage of the pandemic. Many employers became supportive of the home office and especially for mothers. *“My*

bosses were much more supportive of me staying at home, so then I went into full home office.” (Ashley) One interviewee could continue to work during pregnancy and after giving birth because of the possibility of home office.

The visitor ban in hospitals and even the ban of fathers from being present when giving birth was an obstacle for many couples. In some cases, mothers said that the father was allowed to attend at birth, but in other cases not.

Childbirth

Giving birth was a bad experience for many women. Many of the interviewees could not deliver their child in a natural way, some of them had cesarean section. On top of that, due to visitors ban, many felt more insecure without her partner:

“You have to stay in the hospital for 72 hours. That was very difficult, but the hardest part was that my husband was not there. ’ (Betty)

“It was very bad. Because visitors were not allowed in, but on the one hand it was good, let us say it was a paternal birth, my husband could be there, [...] we had those privileges, but afterward he couldn't come in, and because it was a caesarean, it was very difficult for my milk to come in, the hospital food was very little, my husband could not bring any food. [...] I actually had a very bad time, I was crying for my milk to start, I wanted to go home. For me, it was incredibly negative. So yes, it did affect it.” (Lisa)

“The disadvantage may be - which was intended to be an advantage for the decision makers - that I really missed the visit to the hospital. I was tortured there for two days, I will put it this way, [...] And it would have been nice those two days that I was suffering there, it would have been really nice, especially because I was healthy, but I had to lie there and I couldn't go out, I couldn't go down to the canteen, and I couldn't walk in the fresh air, I had to be there like in a prison. So that's a disadvantage.” (Michelle)

Emily were a supporter of visitor ban by childbirth. In her explanation, she could have a more peaceful birth because there were no visitors allowed in.

“It was very advantageous that there was a visiting ban, no visitors to the delivery room, so it was more peaceful [...]. So far I have only seen how it is in the wards during my

hospital placements, but to have strangers around you all the time, buzzing around, while you are in your pyjamas and bleeding and barely alive after giving birth... no offence, but this visiting ban should be maintained, at least in the maternity ward.” (Emily)

Ashley highlighted that she could not had a chosen doctor for the childbirth because of the new regulation that was introduced in health care during the pandemic, and probably due to the pandemic. According to her, the health care system condition caused her a traumatic birth:

“Pregnancy and childbirth are affected by the pandemic. After giving birth [...] we didn't have a particularly good birth experience; in fact, we had a particularly bad birth experience and we both had the feeling that we wouldn't want to repeat that for a while, well it was traumatic. We plan to go to therapy to work through that. Of course, the birth itself is difficult, but what has influenced it is the current hospital conditions, so I wouldn't say that is good; it is very overwhelmed, not enough people, and now you cannot even bring in the doctor of your choice, and all of those have contributed to making this a bad birth experience. [...] We are also considering making the next one a home birth. And it is also linked to covid, measures taken under covid have not helped the health service get back on its feet either. (Ashley)

In Hungary, the cesarean section rate is over 40 percent, while the recommended ratio is 15% by WHO (Baji et al., 2017, pp. 89). My interviewees' background was middle-class, therefore it is assumable, that they have more agency to reach better labor conditions for themselves than members of lower social groups. Yet the birth experience was traumatic for many women, so some of them even postponed planning the second child. Even childless interviewees expressed that they are afraid of giving birth because of the stories they hear about childbirth in Hungarian hospitals:

“The hardest thing for me now, at this age, as a woman, is hearing horror stories about childbirth. It causes a lot of stress and I have to think about whether I really want this or not. And then the physical pain that comes with it, whether it is breastfeeding, postpartum scars, well yeah, lack of rest, so it is a physical burden on women.” (Sophia)

When the interviewees were asked about the family policy, many of them mentioned that what is really missing from these policies is the support of natural childbirth, hospitals

should be improved to be able to provide a better birth experience for women. *“And if they really wanted to support it, it would be more humane to support more natural childbirth ... To have enough doctors and midwives and a decent attitude, I think that would be more important.”* (Ashley) Anxiety from childbirth and the actual experience of childbirth may lead to postponed childbearing or even abandoning fertility intentions as it appeared in some of the interviews.

After the birth of the baby, many interviewees stated that they are more careful when meeting people. Many of them avoid crowded places and social contacts. In some cases, when their partner is working from home, they feel that the pandemic restrictions has allowed them to have more times with their partners and enjoy raising a baby together. However, because of social distancing, many of them cut meetings with friends and cannot participate in events organized for mothers.

“When I have a child, I will go to one of those baby and mummy gym sessions and I will take her to one of those rocking classes and music. So, we would have liked more events, if I didn't have a covid, then I would probably take her to more children's clubs and more any other clubs and then I would probably get her on public transport more, so I see more disadvantages to these things.” (Madison)

6. 3 Uncertainty and future plans

The pandemic not only changed the daily lives of the interviewees, but it has also left a deep impact on their thinking and, in some cases, future plans. Narratives about the future and future expectations can influence childbearing intentions (Vignoli et al., 2020). The pandemic and the subsequent social changes were unexpected and resulted reevaluation of life by many respondents.

Olivia expressed the need that during this time she hoped that she can gain back her pre-pandemic life, but later she had to realize that it will not happen:

“we'll be fine for a little while longer, then everything will be the same, then the epidemic will be over, and then I'll be able to do exactly the same activities, but lately I've realized that it's not the case and that it's going to last for who knows how long, and we have to

change the way we think and live, so I've lost my sense of security . even though I never panicked.” (Olivia)

Feeling loss of security, uncertainty appeared in many interviews. The interviewees not only referred to physical changes that they had actually experienced, but also put it into a larger context, where their existence is uncertain: *'I made my human existence a little uncertain, what had seemed certain before, now it seemed that I had no legs left to stand on.'* (Mary) The uncertainty caused by the pandemic in this generation who are still students or just entered the workforce can be especially challenging. The transition from school to work in Hungary is characterized by a long transition and weak stability (Zamfir et al., 2018), and this period is uncertain and young adults are vulnerable. Going through a pandemic and economic recession followed by it intensifies the uncertainty of these people.

The interviewees chose different coping strategies to deal with the situation. Susan explained her conclusion from the pandemic, she decided to start studying something different added to her previous studies to secure herself:

“Of course, that's why I actually started grooming dogs, really. That's why I was looking for another profession, to make sure I had a plan B, because I realized that so many people were unemployed that it doesn't hurt to have a plan B.” (Susan)

Not everyone was resilient to the changes, the pandemic and the following global social changes made some interviewees to predict always the worse that can happen. The pandemic was the first shock that might have prepared them for other events that had happened since then. Interviewees with increased sense of uncertainty are started to prepare for potential crises yet to come. The pandemic highlighted the importance of health and financial stability that they need especially if they are self-employed. Therefore, many interviewees started to create savings budget and consider a different future path from what they had before.

Future plans

The pandemic related restrictions created a situation where some of the interviewees had to reconsider their plans. When the participants were asked about long-term plans that

changed due to the COVID-19 situation, they usually mentioned that they had to cancel or postpone traveling plans, buying a house, postponing the wedding, and even reconsidering work-related objectives.

Two women talked about the postponement of marriage due to the pandemic. The wedding day was planned when the first wave of the pandemic hit; therefore, they needed to postpone it, which they found emotionally hard too:

“I can honestly tell you that in April 2020, when this all started, we were supposed to get married on April 4, 2020. When it was announced on 16 March that everything was going to change, I cried for two days, and then the rescheduling came, but it is very difficult to live through the uncertainty and think about when we are going to have the wedding.” (Madison)

Not only were family events cancelled, but others had to give up their work plans. One interviewee shared that she wanted to go abroad for work, but this option was not available during this period:

“My ex-boyfriend and I were going to go abroad for a summer job for the season, we couldn't do that either due to the epidemic, so we had to reschedule our lives. I had many aspirations that I wanted to do, so I wanted to travel, and finally school was over, and I wanted to travel. They are all limited in that way. The way I think it affected me the most was that I didn't really dare to plan for the long term because I didn't know what was going to happen, now it is even more uncertain, so I am less sure of things that I was sure of before. I appreciate it more now that it has subsided.” (Mary)

Betty talked about the potential positive side of the pandemic; she feels that there is a larger demand for her business idea now, because of the changes in social interaction:

“I don't feel the impact at the moment, at most in a positive direction, because I have a plan at work that can only be good for me, because [...] I want to start a private kindergarten, and they have been quite rampant during the epidemic, also because they are more flexible than a kindergarten, with much smaller numbers of children. It has even had a positive effect on my plans.” (Betty)

Having a positive effect on future plans is rather rare; most of the interviewees see their future with more shadow. They feel generally uncertain to plan anything for the long term:

“I'm so confused about my long-term plans that I have no idea how long this will last and I don't know how it will affect things going forward.” (Sarah)

Postponing travelling and working plans led to abandoning these plans in some cases completely. Some women expressed that their desire to travel has decreased and an image of peaceful life has appeared, with the hope of a stable relationship. Sometimes the change of plans was supported by other moral factors as well: *“I was more eager to travel then, but since then I've let it go a bit, I'm not so eager to go everywhere anymore, especially because it was restricted under your covid, and I can see that it's not the best from an environmental point of view.”* (Mary) Olivia expressed that her family became more in focus, she became slower, and her desire for a child has strengthened: *“Infinite children are being born around me [...] it's also somehow so valued. I don't know if it's because I'm 30 or because I've slowed down under the covid, but now I'm also quite keen to have children.”* (Olivia)

War in Ukraine

During the interviewing period, Russian invasion of Ukraine started on the 24th of February, 2022⁶. Therefore, the interview guide was extended with a question about the war, and eight interviews were conducted before the start of the invasion. Lifting pandemic restrictions was associated with the start of the war, and the crisis of the pandemic seemed as pathetic compared to the war: *“Well it changes from moment to moment, because the war that broke out here in the neighborhood has suddenly put the whole community in the background, and now it will be completely pushed into the background because of that. and I don't know [...] what the real situation will be, and what the media will report, I don't think it will be close to reality, because the topic will certainly be about the war.”* (Amy)

⁶ BBC: <https://www.bbc.com/news/world-europe-56720589>

For many interviewees, the war in a border country caused distress and their perceived uncertainty has increased more. *“I am shocked that a war is happening so close to us. I don't know, you lost the little life you thought you had, and now I feel the same way, that it could happen here, and it could happen here too. This little life that we thought was safe... I feel such uncertainty and anxiety, and I read a lot of news at the beginning, and then I tried to read less, because I don't know, I'm so emotionally drained by this news.”*(Mary) For some couples, the war affected their narratives of their future about having children: *“Whether we wanted children didn't affect that [COVID-19] either. The current situation, the war situation has me feeling more mentally shattered than he was.”* (Betty)

Some interviewees expressed their doubts in the reliability of the media about the war: *“I feel sorry for people, and obviously I was afraid, because you see and experience so many things, but you don't know which is true and how true they are.”* (Christine)

Overall, since the pandemic has started two years ago, respondents had shown more stability toward the possible future orientation of this crisis. However, the Ukrainian invasion happened recently, and although it does not directly affect Hungary, respondents addressed a general uncertainty and fear connected to this geopolitical event.

6.4 Childbearing intentions

Factors influencing the planning of a childbirth

The interviewees mentioned several factors that influence their decision and timing of childbearing. Most of them listed structural conditions: *stable partnership, suitable living conditions, suitable partner and adequate financial background, or stable employment status*. The **difficulty of financing** a child emerged in all interviews. In addition to a few interviewees, almost everyone highlighted that the cost of children is an aspect to consider. Most of the respondents generally felt and described that they have a relatively stable financial situation, if both them and their partners had a stable job for 3-4 years and were living in their own flat or house. Furthermore, many respondents talked about the immobile prizes that are unaffordable due to the housing subsidy (CSOK). They also added that since the pandemic has started everything became more expensive.

In addition to materialist conditions, many respondents have talked about post-materialist values (Inglehart, 2007). **Mental preparedness and self-expression** were mentioned mostly by childless individuals. Some interviewees highlighted **uncertainty** as a factor that prevents them from having a child. Others were worried about left alone after having children, and from the enormous **responsibility** that comes with a child.

“I'd be afraid of being lonely, because the expectation is that you'll be with the child for 2 years and be very happy, because it's the happiest time of your life, and it's embarrassing to talk about that, that you might feel terrible, that there's somebody who's 100% dependent on you and you're 100% responsible for them, but at the same time your needs and how you are and how you can be helped and we're not really dealing with that, and that's scary for me, that the world is closing in and you're alone and everybody thinks you're super happy now.” (Olivia)

Some women also expressed their need to have a child earlier because it is **biologically** more beneficial, and the need to have a child earlier has increased when the interviewee had some health-related problems. Others were not as concerned about the age, especially when they have highlighted postmaterialist values:

I want to be well and achieve what I want, and then I want to have children, and I'm not worried that I'll be 35 by the time I have children. I don't feel that time is pressing. I don't stress myself out about the fact that I am almost 30, because I know that now is not the time for me.” (Mary)

Shared narratives 1. Family patterns

Family patterns also influenced childbearing intentions. The expectations and imaginaries many interviewees were shaped by what they have seen when they had grown up. Those who wished to remain childless highlighted their difficulties in their families when growing up, and their imaginaries about having a child are similar to what they have experienced. Susan altered her narratives of the future regarding having a child, when she had found her partner. Due to her problems with her parents, she originally did not want to have children, but it had changed after she met her current boyfriend and could imagine creating a happy family with him.

Other past experiences also shaped their future narratives in terms of the desired number of children. Many respondents have referred their own family, and their siblings that formed their ideas about their own children, and about the timing. Age was also a factor that they have considered when they wanted family.

“We talked about that a lot, how many we wanted, and we came up with one or two. Two is good because he's going to have a brother. I didn't know when, I just said to myself that it would be good before 30 because I want to be a young mother.” (Lily)

Shared narratives 2. Pronatalist family policies

Since this social strata is the main beneficiary of the family support policies, therefore these subsidies were mentioned, but none of the interviewees connected these policies directly to the cost of children. Although, most of them admitted that these policies ease their financial burdens, but some expressed critiques towards these policies. Some respondents expressed their unwillingness to use most of these subsidies, especially loans.

“On the one hand, we were in favor of making the money ourselves, because if we couldn't meet the conditions, we'd be in trouble.” (Christine)

“We, for example, have not taken out anything, a housing subsidy or a baby loan, because we are a bit skeptical about the whole thing, so we are waiting to see how it will work out, because it's too good to be true.” (Amy)

“In the long run, we will see if it was really the support, we feel it was, or if it will backfire or reverse, we will see. I'm skeptical, come on, come on, [everything is perfect] [...] to me these sorts of things are always suspicious. Especially in times of war and conflict, when everything is such a big problem, but come on, but the family allowance has not changed for twenty years or thirty, sorry, but my mum knows how much I get because she got the same amount after us, so for thirty-two years it must have been ten thousand or eleven thousand, what is it?” (Michelle)

These skeptical interviewees pointed out their lack of trust in the government and uncertainty that discouraged them from these subsidies and wanted to rely exclusively on themselves and their family for financial support.

The social climate in Hungary and the propagation of family policies appeared by many respondents. The pronatalist policies and familialism ideology sets a role for women (Szikra, 2019) so they might feel selfish, if their future plans do not meet the expectation of shared narratives channeled by the media and family. In addition, some interviewees felt that there is a discrepancy between pronatalist communication and the policies that they actually introduced:

“And there is an expectation to have a child, and a very strong propaganda, but I wouldn't say that, I don't think that anyway, if someone is influenced by such things [as family subsidies], I didn't have a child for that reason either, and as a woman I feel a bit like that expectation, that especially after a birth I feel that it is a huge responsibility and a huge undertaking with my own health and a big risk, and compared to that I don't feel valued enough” (Ashley).

Shared narratives 3: The role of media and information flow

Nowadays many mothers rely on internet sources to gather information about child raising. Sharing experiences with other mothers can be useful for mothers for finding the ways of good parenting. Learning about how to raise a child is a central question for mothers, and which is sometimes a hard task:

“And what I see is that I am obviously in a good position because I have learned how to raise a child, what to look out for, but a lot of people don't learn, and that creates a huge difficulty for mothers, because they don't know, they have not read the literature, they don't participate in training, they could learn a lot that would help their situation.” (Lisa)

However, many interviewees who were pregnant of recently had a child shared that one of the hardest things of becoming a mother, is the amount of information available for parenting. They expressed that the tones of information from the media led them to uncertainty of what they should do with their child.

“The most difficult is that we have too much information about child rearing and other things related to the child, which is good on the one hand because we have a lot of information, but it creates a lot more uncertainty in the mother. I don't think there is such

a thing as the perfect mother, but I have many friends who have recently given birth and there are many questions in mothers' minds about whether they are doing it right." (Madison)

"The hardest thing: a lot of information that comes at me as a new parent. [...] you find so much false information on the internet, and the worst thing is that you search the internet, and you just don't know what it is and why it is, or you just really get lost in the flood of information that [...] how do you feed your child, everybody says different things. [...] I felt there was too much information and too many products." (Betty)

Mothers worried about not only their mental health that is affected by the media and information, but their child's health, too. *"Maybe [the hardest thing in parenting is] the influence of media and social networks, which reach the child very early and thus distort their personality development, and which seems to be an unstoppable process."* (Hannah)

In the last two decades, intensive mothering or intensive parenting became the popular parenting style among middle and upper classes (Lareau, 2003), which places the responsibility on the mother to foster children's skills and education. Hays (1996) identifies intensive mothering as an ideology that prescribes unrealistic standards for how to be a good mother and how to responsibly raise a child. The problem about much information, shows how mothers are overwhelmed because of the unrealistic expectations that they receive about parenthood, and the information flow that creates a feeling of uncertainty about childraising. During the time of the pandemic, many women cut their social relationships to protect themselves from becoming infected. However, frustration and information sharing with other mothers might help these mothers overcome the stress of intensive parenting, but during COVID-19 times, they are left alone. Furthermore, the expectation of intensive parenting can scare mothers to have more children, as appeared in some interviews. Women wished to have one or maximum two children so they could provide them with everything they needed.

6.5 Fertility plans

In the following I will introduce how fertility intentions were shaped during the pandemic. First, I will analyze the cases where fertility plans have not changed in the last

few years. Then, fertility intentions or realizations that have changed since the start of the pandemic will be described.

Unaffected childbearing plans

Two interviewees stated that they do not want to have a child at all. One of them are relatively young, in her early 20s. Ruth expressed that she is not independent, and even if that would change, she cannot imagine herself being in a stable relationship. She said that there is a possibility that her thoughts about this topic will change in the future, but her future expectations are unlikely to change. The other woman is in her 30s, but she does not see herself as grown up: *'I see myself as a grown up child, so when my mother and father discuss this, I say I need a normal relationship first'* (Emma). She never had a relationship in which she could have imagined having a child and connects this with her upbringing, where she did not get what a child needs, therefore she is unsure whether she would be able to provide this to her child: *"I think the problem here is that I cannot imagine it because I didn't grow up that way, and I am distancing myself from the whole issue because I know how bad it was for me, and I don't want that for the child."* (Emma) She believes that childbearing is frightening, so she completely distracts herself from the topic and felt uncomfortable talking about this topic during the interview.

For some women having a child is not a priority, their focus is on other goals at the moment. One woman expressed that although she detects some pressure from her family to have children, and she has all circumstances for a child (stable relationship, financial stability), she would like to focus on her career first. She expressed the hardness of finding the right timing for a child and not losing opportunities at work:

'This may sound selfish, but I am considering my career [...] I definitely don't want to have children before the bar exam. This gives me a 3-year time frame, as long as I don't have the opportunity to do so in any case. After that, it is also difficult, I want to become a judge, which is a very long process, and after that it will be difficult to define the right time to do it, so that I do not lose my opportunities, but I do not have to give up my family.' (Hannah)

Another interviewee does not have a clear image whether she wants to have a child or not: *„maybe once in the future [I'll have child]"* (Mary). She has broken up with her

boyfriend during the covid period, and now she is focused on other goals. She believes that it depends on whether she is mentally prepared for that. Furthermore, she mentioned that finding the ideal partner is also an important aspect, which might not be as central for other who want to have children: *'to build a relationship with someone you can really have children with. I think people look at it more from a financial point of view, and if they are well-off they will have the child because they want the child more, I think it is more important to have a more ideal partner and then we can sort out the financial problems afterwards.* (Mary) Therefore, she is not worried about the financial part of having a child.

For others the image of a future with a child is more certain but the circumstances are not satisfactory for them yet. These women have a stable relationship in which they imagine starting a family, however, they are still students, or the partner is a student. They highlighted the importance of financial stability, suitable housing, and marriage as preconditions for a child. One of them stated that finding the right partner had motivated her to have a child: *"I didn't want to have children before I was in a relationship, and when I found the right person, I realized that I really wanted a child"* (Susan). The intentions of childbearing came to the spotlight recently due to a gynecological condition that can cause problems with time.

The pandemic did not influence the birth of a child by three mothers. Christine became pregnant a few months before the pandemic reached Hungary. The child was not planned but the couple did not exclude the possibility of a pregnancy, since the woman had to stop taking contraceptives due to hormonal problems. Emily became pregnant in November 2020, which was a detailed planned decision. For Emily, COVID-19 was not an obstacle to starting a family, she and her husband had clear detailed plans and prepared themselves for a childbirth before (by even changing to a healthy lifestyle that can facilitate conception). When they have reached all the prerequisites, they have started to try conceiving. Jessica became pregnant in August 2021, according to her, the pandemic was no longer a factor when they decided to have a child: *"In the first year I might have thought about it [having a child in a Covid situation], but now I don't know how reliable what I say is. We might not have started during the first wave, but now I didn't feel the great threat of why not have a child due to covid."* (Jessica)

Family plans influenced by the pandemic

Women usually do not mention the pandemic as an influencing factor when asked about their fertility plans. However, when telling their stories, it manifests that there were pandemic-related changes that effected their plans about starting a family.

For some women getting married is an important step before starting conceiving. Three interviewees revealed that they had to **postpone the date of the wedding**, therefore having a child was delayed. They were certain about starting the family and all conditions were met for this but getting married was important for them. After they could hold the wedding, they could continue their plans and got pregnant.

“The covid did not affect it, only the timing, in that the wedding had to be delayed, as well as when we could start trying. If it had slipped to September... we really wanted the baby, and we certainly didn't want to have the baby out of wedlock, and we would have gotten married then, if it had gone that way, we would have had the wedding party later, but we were able to have the wedding party in the end.” (Lisa)

They have highlighted that the pandemic, otherwise, was not an obstacle; only barrier was the impossibility of having a proper wedding. *“Who knows how long we would have waited if we had made it depend on when this was all going to end, because obviously you have a date you hope for, but who knows how long it will drag on, so we didn't want to wait because of that.”* (Madison)

Others said that the **uncertain situation** that the pandemic has caused had changed their mindset about their future plans. Isabella revealed that she had recently become uncertain whether she wanted to have a child or not. She is in a stable long-term relationship and childbearing intentions were discussed with her partner. She talked about changes in the last two years, which are related to the transition from high school to university, and the pandemic. She said that although before she was sure about having children, but right now she cannot imagine this to happen, it does not depend on any material condition for her. She cannot foresee a date when she would be able to decide to have a child. The intention to stay childless is not supported by her partner and friends. Therefore, staying childless is considered as morally bad according to her: *“I feel a bit selfish not to see myself having children at such a young age”* (Isabella)

Fear of the future that was caused by the pandemic and subsequent events like the Ukrainian-Russian war has influenced Lily's future plans. *"I can't put it so well. There is so much information flowing around, like, oh my god, the end of the world, I don't know, UFOs, you hear so much, and war, so everything that is happening now, climate change is so scary, I feel like how long we are going to be here on this Earth. It may sound silly, but it is."* (Lily) She listed many of these global events that had changed her mind about having children. She highlighted that too much information about a dystopian future and fear of childbirth had led her not to have her own biological child but to *adopt* one: *"So on social media there is quite a divide of opinion about whether to have a baby or not to have a baby, and it made me think a lot. I don't know, I want to have a baby, but I am scared of the future, I don't know what is going to happen, I am even more scared of giving birth. And I think about how many children grow up in institutions, and it makes me want to cry."* (Lily) Adopting instead of having her biological child is a new plan for her, and she wants to start this process later, when they have all the conditions, they need for starting a family: job, financial stability and a suitable home.

The lockdown was especially stressful for Ashley. She said that before the lockdown they had other plans, and having a child was not on the table with his husband: *"at that time we clearly didn't want to, we wanted to get closer to each other, to travel, and I was learning,"* (Ashley) During the first lockdown they spent time with friends who had young children, that made them to realize that they are ready for having a child: *"and actually when we went to Germany to study [...], we had friends who were young children and we saw their lives and it had an effect on us to think that we were slowly getting the ready for [having children]."* (Ashley) According to him, the first two waves of the pandemic were stressful for him and his husband, so they could not even think of a child: *"It was a tense atmosphere, we were not thinking about what it would be like to have a child arrive, it was beyond the question"* (Ashley). Although the child was not planned, it was conceived in December 2020 when they managed to sort things out at work, and with each other.

The uncertainty caused by the pandemic led another interviewee to postpone her fertility plans. Michelle and her partner wanted to get married and had children afterwards. Due to the lockdown and family issues the wedding was postponed. She expressed general

uncertainty about her life, which had increased during the pandemic, that made her think whether it is worth having a child at all.

“But now the uncertainty is much greater. I think that our generation, I think I can speak for you, we have had to live and grow up in an uncertainty by default, at least for me for sure, because I know that by the time I found this job, I got my first indefinite contract, I waited years for that, and what a joy it was to finally be able to buy a fridge on credit, because you couldn't get credit anywhere else, you got credit, we don't know how, so I had to have that contract, and until then, life was full of uncertainty. Because even if you had thought about having a child, you would not have done it, because what for, to get fired afterwards, and then you wouldn't have a job and you would not have any care during the birth? there has always been insecurity, and in our mothers' time, but even more so in ours, they took advantage of the benefits, you had to have it as long as you had a start card, ... maybe insecurity I would say.” (Michelle)

“It's serious, so much so that I even asked my husband if I should have a baby?’ Can he even grow up? Will there be a war? So you had these thoughts in your mind.” (Michelle)

She delayed her fertility plans for a year because of the uncertain times, which was confirmed by an astrologer too:

“Well, obviously it is different for everyone, we are both family-oriented, for us it was a no brainer, we were waiting for the right time [for having a child]. We were thinking about it during the lockdown, but now you might think I am stupid, I have been to one of those astrologers and the predictions said there could be a problem with the pregnancy [...] But I went to see this astrologer and asked him if this was a good time to have a baby, and he said: it is not, because it is a stressful situation in today's world anyway, it is basically an anxious, stressful situation, I shouldn't start in the middle of it, because who knows what will happen, but rather wait until it calms down and he sees that things will be a bit better by then. It has reinforced a fear I had already. It was just enough that we didn't start to try to get pregnant.” (Michelle)

But after postponing her plans for almost a year, having a child became so important for her that she had abandoned marriage as a precondition for pregnancy.

For three interviewees, the **pandemic was an intensive for having a child**. The first lockdown allowed many couples to spend more time together, therefore, some articles predicted a baby boom, or quarantine-babies (Aassve et al., 2020). In one of the interviews.

Olivia is in her 30s, and she explained that when she is asked about pregnancy, she always says that she will have a child in 2-3 years, so she postpones her plan all the time. The main reason for waiting is the fear that your entire **life and lifestyle will change** after the pandemic. Furthermore, she mentioned that in this **rushing world** she does not have time to think through this decision. During the lockdown, she had to slow down and had more time with her boyfriend, which was beneficial for the relationship. She also spent more time with her family. All the changes she had experienced during the covid period had increased her desire to have a child: *“Infinite children are being born around me [...] it is also somehow so valued. I don't know if it's because I'm 30 or because I've **slowed down** under the covid, but now I'm also quite keen to have children.”* (Olivia) She still wants to wait a few years before having a child, but the pandemic forced her to reevaluate her life and she started to see childbearing as a positive plan for the future.

Changing working conditions also influenced the timing of pregnancy by another respondent. Betty and her husband planned to have a child around two years after she starting to work full time. She explained that she loved her job and wanted to stay for longer time before having children. But when she was moved to home office, the working conditions became toxic. Therefore, she told her husband not to wait anymore to have children:

“When I got there I was like, I loved what I was doing, it was great company, and I was like, wait, it's still so much fun here. I'd like to do it for a couple more years and then we'll figure it out. But when it came to [home office] with these totally unfair regulations and when you are stigmatized as being bad because you are at home and I don't have a dog or a cat anyway, I just live with my husband on my own, so I have nothing to do, then yes I can work until 7 pm on Fridays. Well, my brain went crazy and I told my husband that we could do it [start trying to conceive]. We obviously did not know how long it would take to have the baby, and that is actually why I said not to wait, because it is not the job I want to retire from.” (Betty)

She became pregnant in September, 2020, which was around one year earlier than she had planned before the pandemic.

7. Discussion and Conclusion

Changes in working conditions, friendships, values and expectations about the future were associated with the COVID-19 pandemic. The global social and economic changes because of the pandemic were detectable in Hungary, too. The first lockdown was associated with lower fertility rate in Hungary, which was followed by an increase in fertility, but overall, fertility seems to have decreased due to the pandemic caused uncertainty (Hungarian Central Statistical Office, 2022a). In this research, qualitative analysis was adopted to understand, how people perceived the pandemic, and how it have changed their lives. The analysis included the experiences of respondents who had a child after the COVID-19 outbreak. Furthermore, people's childbearing's desires analyzed to evaluate why people have or have not changed their fertility plans as a consequence of the pandemic.

The analysis included the perceptions about the pandemic; most of interviewees were not so concerned about health effect of the virus. Pregnancy and motherhood, however, led to a behavior change, a more cautious attitude by most of the respondents. In the end of the fifth wave, when the interviews were conducted, most of the interviewees had believed that they have returned to "normal", to their pre-pandemic lives, although in fact, their lives have usually changed. Most of them shared the narrative that the future of this pandemic is 'certain uncertain', most of them expected more waves and variants to come, but with a predictable policy response. However, by those who were interviewed after 24th February 2022, expressed increased uncertainty due to the war in Ukraine.

About the future of the pandemic, many respondents have accepted the idea of "short-term" solution of the pandemic, but then have left with social anxiety, feeling of uncertainty, and in some cases, they even have lost trust in media and professionals. Therefore, the respondents usually did not associate changes in fertility intentions directly with the pandemic, but many times they have shared indirect effects that changed their childbearing plans. Becoming pregnant led many respondents to an adaptation to

pandemic circumstances and a more rigorous follow-up of the social distancing measures.

It is questionable how related is childbirth to COVID-19, but the experience of childbirth during the pandemic had a profound impact on the respondents. Even childless interviewees highlighted the ignorance of hospital conditions, obstetrics and midwifery care in family policies. Visitor bans and the rearrangement rules of health care workers had led to traumatic birth stories. Conditions in maternity units, medicalization of childbirth (Tari & Hamvai, 2019) and obstetric violence (Searcy & Castañeda, 2021)) not only cause traumatic experiences for women, but also scare women away from having a child.

There were different coping mechanisms to deal with social changes caused by the pandemic. Some of the interviewees could adapt to the new circumstances and adjusted their future plans to the new situations. Examples for this are signing up for a training, finding a different job that they could invest in, or even planning to start a business thanks to the effects of the pandemic and the freedom of motherhood. For others, who were not as resistant or adaptive, this period became an extremely stressful situation, and they have turned into “survival mode”, where they just waited for the pandemic to be over. Perceived uncertainty led some of the respondents to postpone their fertility plans, which confirms quantitative studies (Luppi et al., 2020; Kahn et al., 2021; Malicka et al, 2021) Covid-related uncertainty has changed the goals of many respondents, and their focus concentrated on stability. They try to ensure their financial balance or the possibility of returning their 'normal' pre-pandemic lifestyle.

For many women, who had a belief that having a child would increase their happiness, did not postpone their fertility plans. In some cases, even motivated some participants to get pregnant earlier, due to changed working conditions. On one hand, home office allowed couples to spend more time together and have the possibility of an increased involvement of the father in parenting. On the other hand, social distancing measures and increased burden of the home office shifted some interviewees attention to family, which provided them a more certain image of their future. As the interviewees were middle-class, childless or having maximum one small child (younger than 3), therefore they did not experience the burden of homeschooling or huge economic losses. Still, respondents who were self-employed expressed increased perceived economic uncertainty.

Analyzing the expectations, imaginaries and narratives of future of the participants led to a deeper understanding of their thought about fertility. This confirms the relevance of including future narratives in fertility research (Vignoli et al., 2020; Guetto et al., 2022). The participants shared what shaped their views about having children, and it appeared by many interviewees that their expectations were shaped by past experiences, which have trapped them in negative imaginaries and uncertainty about the future, or in some cases they could envision a brighter future. Shared narratives about fertility appeared through social media, family and friends and due to the pronatalist fertility policies.

The findings of this study can be understood as the first observation of future narratives and fertility intentions in Hungary since the COVID-19 pandemic. Future research should consider the potential effects of future narratives in fertility intentions in Hungary using experimental and quantitative methodology. Furthermore, future studies could fruitfully explore this issue further by extending the research to participants from different social class. Future research should further develop and explore in more detail the initial findings of childbirth experiences during the pandemic. Research about experiences and expectations about childbirth in Hungarian hospitals might decrease fertility intentions by women is encouraged. Further research and this study can highlight the urgent need for a general human-centered, mother-centered obstetric care in Hungarian hospitals.

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9. Appendix

9.1 Table of Interviewee Characteristics

Name	Date of the interview	Status	Year of birth	Residence	Level of education	Marital status	Perceived financial situation ⁷	Date of conception
Olivia	2022.02.15	no child	1991	capital	university	in a relationship	5	
Emma	2022.02.15	no child	1992	capital	school leaving exam	single	4,5	
Sophia	2022.02.15	no child	1998	capital	university	in a relationship	3	
Isabella	2022.02.18.	no child	2001	capital	university student	in a relationship	5	
Madison	2022.02.22	have a child	1990	capital	school leaving exam	married	4	2020.12
Hannah	2022.02.22	no child	1995	town	university student	in a relationship	5	
Ashley	2022.02.22	have a child	1995	capital	university	married	4	2020. 12.
Emily	2022.02.25	have a child	1996	capital	university	married	5	2020.11.
Lisa	2022.02.25	have a child	1988	capital	university	married	5	2020. 08.
Jessica	2022.02.26	pregnant	1996	capital	university	married	4	2021.08.
Sarah	2022.02.27	no child	1998	town	university student	in a relationship	5	
Amy	2022.02.28	pregnant	1995	village	university student	married	4	2021.09.
Michelle	2022.03.01	have a child	1990	small town	university	married	4,5	2021. 05.
Sandra	2022.03.30	have a child	2000	capital	school leaving exam	in a relationship	3	2020. 03.
Lily	2022.03.18.	no child	1998	town	university student	in a relationship	4	

⁷ 1 to 5 scale: 1 : living between deprivations, 2 having financial problems from month to month, 3 just getting by, 4 living acceptably, 5 living without problems

Susan	2022.03.21	no child	1999	town	university student	in a relationship	4	
Mary	2022.03.22	no child	1994	small town	university	single	4	
Betty	2022.03.23	have a child	1995	town	university	married	5	2020. 09.
Ruth	2022.03.24	no child	2000	capital	university student	single	4	
Christine	2022.03.28	have a child	1996	town	school leaving exam	in a relationship	4	2019. 12.