Double Degree Master in Social Demography

2022-2023

Exploring fertility intentions after the transition to parenthood

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Abstract

For my Master's thesis, I looked into women's fertility intentions in the form of the intended number of children. Central to this thesis is the (possible) effect of the transition to parenthood on the intended number of children. Research into the transition to parenthood states that this is an important life event that shapes people's lives. It particularly changes household dynamics. This thesis investigates the extent to which women's intended number of children is affected by becoming a first-time parent and how the division of household labour affects these changes across the transition to parenthood. Using the theory of planned behavior (TPB), it is theorised that the intended number of children of women can change due to important life events. Using data from the Netherlands Kinship Panel study, the same women are analysed at different time points (2003-2011). The focus is on those women who did not have children at the beginning of the study, to capture the possible transition to parenthood. To model the possible change in the intended number of children, a multinominal logistic regression analysis is used to predict whether the number decreases, increases or stays the same based on several individual and partner characteristics. The results from the model show that overall, the highest likelihood for women is to keep the intended number of children constant over the year. Moreover, becoming a first-time mother is negatively associated with the likelihood of decreasing the intended number of children, in contrast to expectations. Furthermore, no evidence was found for a mediation effect of the household division of labour. Overall, the findings do not support the hypotheses that were derived from the literature. Despite the limitations of this study, this spikes interest for further research to look further into these fertility dynamics.

Keywords: *Fertility, Transition to Parenthood, Intentions, Household division, Panel data, Multinomial logistic regression, Theory of Planned Behaviour, Life-course perspective*

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List of Abbreviations

Abbreviation	Definition
UN	United Nations
OECD	Organization for Economic Cooperation and Development
TFR	Total Fertility Rate
TPB	Theory of Planned Behavior
CBS	Centraal Bureau voor de Statistiek
NKPS	Netherlands Kinship Panel Study
CAPI	Computer Assisted Personal Interviewing
CATI	Computer Assisted Telephone Interviewing
CAWI	Computer Assisted Web Interviewing
ISCED	International Standard Classification of Education
RRR	Relative Risk Ratio
LR	Likelihood Ratio
H	Hypothesis

1. Introduction

With the very low fertility many countries are currently experiencing, questions regarding people's intentions and desires concerning family formation arise. Past research emphasised that people desire more children than they will end up having in reality (Liefbroer, 2008). Moreover, fertility dynamics are not stable over the life course, but people renegotiate desires and intentions over the course of time (Liefbroer, 2008). The decision to start a family and the intended number of children among women of reproductive age have become increasingly relevant topics in today's changing societal landscape. This thesis explores the possibility of change in women's intended family size, with a specific focus on the crucial life event of transitioning to parenthood, within the context of the Netherlands.

As mentioned, countries worldwide are dealing with very low fertility levels (UN DESA, 2022). With fertility decreasing to below replacement level[1], contemporary societies face growing concerns about the sustainability of their populations. Issues even more pressing in combination with ageing populations. All in all, do these demographic changes pose burdens on the welfare state, making fertility and population dynamics increasingly relevant and challenging for societies to navigate (Ambrosetti, 2022). Besides this pressing societal relevance, in the academic literature, it has also been suggested that fertility has dropped below individuals' desired fertility levels. Indicating a mismatch between the number of children people want to have and their realised fertility, making it also a relevant issue on the individual level (Buh, 2023). In the Netherlands, central to this thesis, the average preferred number of children for men is slightly below 2.2, while for women, it is approximately 2.3. These preferences are slightly higher than the estimated population replacement level of 2.1 children per woman (OECD, 2016). However, this preference is considerably higher than the actual achieved fertility, reflected in total fertility rates (TFR). The Netherlands has had a TFR significantly below the replacement level for a long time, hovering at approximately 1.6 in recent years (OECD, 2022). This so-called "fertility gap" (Ajzen & Klobas, 2013) opens up questions about which factors withhold people from having the desired number of children. This thesis contributes to this understanding by analysing whether women adjust their intended number of children over time and, therefore, keep fertility levels low.

Fertility intentions are a useful way to look at fertility patterns, as they can help predict fertility rates, especially on a macro level (Ajzen & Klobas, 2013). Fertility intentions refer to individuals' intent to have a certain number of children (Preis et al., 2020). Intentions are seen as strong predictors of behaviour (Matsuo & Matthijs, 2016), as fertility intentions are also described as people's plans to have a child (Bernardi, Mynarska & Rossier, 2015). Intentions could also be specifically useful to provide insights into individual fertility dynamics as changes in intentions can show discrepancies in people's fertility desires over time. They can, therefore, help understand low fertility rates across societies. In light of low fertility levels, the transition to a second birth is especially of interest as it is the one that leads to replacement-level fertility (Goldscheider, Bernhardt & Lappegård, 2015). The decision to have a second child is widely acknowledged as a crucial

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[1] Below replacement level refers to a Total Fertility Rate (TFR) of below 2.1, which describes a situation in which natural growth cannot maintain the current population size. TFR is a summary measure that represents the average number of children that would be born to a female over her lifetime.

juncture in contexts characterised by low fertility rates (Aasve et al., 2015), with a significant number of individuals opting not to proceed with transitioning to a second child (Raybould & Sear, 2021). This makes it important to understand what drives people's intended number of children and whether something changes in the decision to have a second child.

Doing a panel analysis of fertility intentions using German data, Kuhnt, Minkus, and Buhr (2021) found that fertility intentions are subject to change over the life course. Especially important life course events, like a change in partnership, can influence this. Also suggesting that the transition to parenthood, seen as an important life event, can cause insecurity when it comes to fertility intentions. Moreover, they found that intentions become more uncertain after the birth of the first child. Furthermore, Moller, Hwang, & Wickberg (2008) point out that the transition to parenthood is a life-changing event for couples, which can cause some struggles. Especially in terms of relationship satisfaction and new household dynamics. Research by Cavalli (2012) delves into the intricate analysis of decision-making regarding family planning. Given the persistent association of childcare with traditional female roles, achieving a balance between family and work responsibilities becomes notably more challenging for women. The study uncovers the non-uniform consensus within couples regarding the choice of having a child. The analysis highlights a trend where women hesitate to embrace a second child if they perceive potential risks to their professional accomplishments. Further research (Andrade and Bould, 2012) supports the idea that mothers shoulder a burden, feeling the unfairness in the division of family responsibilities. This emotional load has a tangible influence on the decision to expand the family. Women navigate the challenge of reconciling conflicting values – the overtly modern and individualistic ideals versus the deeply ingrained traditional beliefs.

The literature suggests that becoming a parent brings along important changes in people's lives, especially women's. In light of the intention to have more children, this could decrease the intended number of children as it seems to increase traditional household divisions and increases a negative work-family balance. The former leads to the following research question that will be central to this thesis: *How is becoming a first-time parent related to women's subsequent fertility intentions?* Based on this research question, an exploratory research will be performed on first-time mothers in the Netherlands, providing an insight into changing fertility intentions related to the transition to parenthood. This thesis, therefore, contributes by adding insights into fertility dynamics after they have their first child, with a focus on the division of household tasks.

The thesis is structured in the following way. Starting with the theoretical framework, section 2 discusses the theoretical insights that guide this thesis, most importantly illustrating the theory of planned behavior. Moreover, this part will combine important insights from the existing literature with the former. After this, in section 3, the data will be introduced, as well as the analytical strategy. In section 4, the results will be presented. Finally, in section 5, the results will be discussed in light of the strengths and limitations of the research.

2. Theoretical background

2.1 Gender equality and fertility

Demographic research on the "demographic transition" initially projected societies to move towards stable fertility rates with marriage as a key process surrounding fertility. However, a new trend emerged: fertility levels dropped below two children per woman, and an increase in non-traditional living arrangements and partnerships occurred, known as the "Second Demographic Transition" (Lesthaeghe & Van de Kaa, 1986). There are several theoretical explanations for these observed trends; but one is sought in women's increased labour force participation and the decreased centrality of having children. The increased labour force participation of women has been associated with a more negative work life balance. Moreover, having children might prevent parents from increasing their returns to their acquired human capital or realising their career aspirations (Lesthaeghe, 2010). This results in many postponing having children and decreasing the intended number of children (Billari, 2006).

It is especially known that mothers can experience an imbalance between family and work life, as gender roles remain to prevail that prescribe household tasks and childcare as (mainly) a woman's job. Additionally, female labour participation has increased substantially, and a dual-earner household has become the norm. As a result, there has been increased pressure on balancing the two domains of paid work on one side and household tasks and childcare on the other (Balbo, Billari & Mills, 2012). However, research has pointed out that the increased labour participation of women is only one aspect of the development and mainly explains the beginning of the gender revolution at the end of the last century (e.g. Goldscheider, 2000).

Over the last decades, the changed relationship between gender equality and fertility has been largely explained by the so-called gender revolution (Goldscheider, Bernhardt & Lappegård, 2015). The gender revolution theory aims to explain the changes in gender roles and relationships over time. In the context of fertility, the gender revolution theory suggests that changes in gender roles and expectations have influenced individuals' attitudes and behaviours towards having children (Torr & Short, 2004). Historically, women were expected to prioritise their roles as mothers and caretakers over other aspects of their lives, such as education and careers. However, over time, societal attitudes towards gender roles have shifted, leading to greater gender equality and the expectation that men and women should share caregiving responsibilities. This shift towards more egalitarian gender roles has had significant implications for fertility. Women are now more likely to delay childbearing to pursue education and career goals, and men are increasingly expected to be involved in childrearing and household tasks. As a result, individuals' attitudes and intentions towards having children have become more influenced by factors such as education, career goals, and gender equality.

This framework suggests that greater societal gender equality is associated with lower fertility rates as having children conflicts with other goals in life (Goldscheider, Bernhardt & Lappegård, 2015). However, since a significant role has been attributed to the incompatibility of various domains in women's lives, taking away some of the burden is expected to alleviate this. That is why gender equity theories argue that increased gender inequality within the household could increase work-family balance and positively affect fertility (Aassve et al., 2015).

Moreover, in reality, almost everywhere, women spend much more time doing housework than men (Armstrong, 2018). This is even more so when there are children in the household, as women generally spend more time on childcare than men, causing a higher domestic load (OECD, 2016). Moreover, the arrival of children in the household seems to exacerbate traditional gender divisions by increasing the time spent by women on household and childcare tasks and highlighting men's breadwinner role (Sayer, 2005).

2.2 Fertility intentions

To understand the reasons behind women's possible adjustments to their fertility intentions after having their first child[2], it is crucial to explore the factors that influence fertility intentions and identify the specific changes that can modify these intentions. By employing the framework of the Theory of Planned Behavior, we can gain valuable insights into the forming of fertility intentions.

2.2.1 The Theory of Planned Behavior and fertility intentions

The Theory of Planned Behavior, proposed by Ajzen (1991), holds significant relevance across various disciplines (Bernardi, Mynarska & Rossier, 2015). According to this theory, individuals' intentions towards specific behaviours are shaped by three key factors: perceived behavioural control, attitudes towards the behaviour, and subjective norms. Perceived behavioural control refers to individuals' perception of their ability to perform the behaviour in question. Attitudes towards the behaviour encompass the evaluation of the anticipated outcomes resulting from engaging in the behaviour (Ajzen, 1991). Subjective norms involve the perceived social pressure to conform to a particular behaviour, encompassing beliefs regarding others' expectations and approval (Liefbroer et al., 2015). This theoretical framework illustrates the process underlying the determinants of human social behaviour.

The process starts with the formation of specific beliefs pertaining to a particular behaviour, including behavioural, normative, and control beliefs. These beliefs enclose notions of what is considered normal or expected, as well as beliefs regarding an individual's perceived control over

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[2] Throughout the text when referring to the transition to parenthood, the singular form child is used. However, it is important to note that the transition to parenthood can also encompass multiple births.

their behaviour. Such beliefs provide informative inputs that shape an individual's attitude towards the behaviour and their perception of social pressure, thereby influencing their intention to either engage in or refrain from the behaviour (Ajzen, 1991). Additionally, assuming an adequate level of control over their behaviour, individuals proceed to execute their intention (Fishbein & Ajzen, 2010).

The theory of planned behaviour serves as a comprehensive framework to comprehend fertility intentions as it allows for the consideration of both individual and social factors (Klobas, 2011). In addition to biological drivers and constraints, fertility is also influenced by social contextual factors. In contemporary times, as contraception and abortion access have become more widespread, individuals have gained greater control over their fertility outcomes (Presser, 2001). Nevertheless, these choices are situated within the broader social context in which people exist. The three main components (attitudes towards the behaviour, subjective norms, and perceived behavioural control) can help understand people's fertility intentions. For one, perceived costs and benefits associated with parenthood are expected to shape intentions regarding having children, thereby forming attitudes towards parenthood. Furthermore, social pressures and expectations prevalent in individuals' surroundings, such as norms regarding ideal family size, can exert influence on intentions (Liefbroer & Billari, 2010). The third component, perceived behavioural control, affects intentions by influencing individuals' confidence in their ability to achieve their desired fertility outcomes (Ajzen & Klobas, 2013). Generally, the more positive the evaluation of a particular behaviour, in this case, having a child, the greater the perceived control over the behaviour, and the more favourable the norms are towards having a child, the more likely it is that the person will have the intention to have a child (Ajzen, 1991).

The model also allows for change in intentions over time, as it assumes that certain events can cause intentions to change (Fishbein & Ajzen, 2010). As a person goes through adolescence and adulthood, and attains more education, forms partnerships, and goes through other life experiences, attitudes and beliefs about fertility can change, affecting people's intentions (Klobas, 2011). Central to this thesis is the effect that the transition to parenthood might have on fertility intentions.

2.3 Moving on to the second child

2.3.1 The transition to parenthood

The transition to parenthood marks an important transformation in people's lives. Adopting a life course perspective, the transition to parenthood refers to a major life transition in which people take on the role of parents (Umberson, Pudrovska & Reczek, 2010) and which has traditionally been seen as a marker of adulthood (Shanahan, 2000). Moreover, it represents simultaneous changes in people's biological, behavioural, psychological, social and economic spheres (Saxbe, Goldenberg & Rossin-Slater, 2018).

New parents undergo a lot of changes as they figure out how to care for their child. It also has been characterised as a period of uncertainty and sensitivity (Saxbe, Goldenberg & Rossin-Slater, 2018). A lot has to do with changes in roles and demands that new parents undergo, which can put pressure on them. Moreover, with the new roles of parents, there is also a tendency towards specialisation within the couple, where women especially become more likely to switch their focus from their job to being the child's primary caregiver. In contrast, for men, becoming a parent is less tied to changes in employment (Doss & Rhoades, 2017). These are ways in which the transition to parenthood is indicated to be gendered.

The gendered transition to parenthood encompasses the process by which individuals become first-time parents, taking into account the influence of gender on this process (Abendroth, 2022). As mentioned, parenthood brings about substantial changes in personal and social identities, as well as alterations in social roles, relationships, and responsibilities (Elder, Johnson & Crosnoe, 2003). Recognising the significance of gender in this transition is crucial. For instance, women often take on a larger proportion of caregiving and domestic tasks associated with parenting, which can impact their work-family roles and overall well-being (Kamp Dush, Yavorsky, & Schoppe-Sullivan, 2018). Men may also experience changes in their work and family roles but may not face comparable scrutiny or expectations concerning their parenting capabilities and involvement (Cowan et al., 1985). The gendered transition to parenthood thus underscores the manner in which parenting roles and responsibilities are shaped by social and cultural norms (Preisner, Neuberger, Bertogg, & Schaub, 2020).

Research on gendered transitions to adulthood reveals the persistence of gender inequality within households, with women frequently shouldering a disproportionate caregiving and domestic workload (Perry-Jenkins & Gerstel, 2020). Studies consistently indicate that women dedicate more time to household chores and childcare than men, even when both partners are employed full-time (Gershuny, 2003). This unequal distribution of labour can have adverse effects on women's mental and physical health and impede their professional advancement (Perry-Jenkins & Gerstel, 2020).

In addition to the former, such an impactful process could lead to a re-evaluation of intentions. As previously mentioned, the Theory of Planned Behavior (TPB) framework incorporates the notion of changes in individuals' intentions over time. When a significant event, such as the birth of a child, occurs between two time points, it can alter individuals' perceived control, attitudes, and norms, reflecting the new circumstances they face. Such events have the potential to induce modifications in people's belief systems, subsequently impacting their intentions (Klobas, 2011), given that the belief system constitutes the foundational basis for the three fundamental components influencing behavioural intentions (Fishbein & Ajzen, 2010). For one, perceived control can be affected by a

change in the actual control that people have, which can occur due to various factors (Klobas, 2011). One such factor is the inability to reconcile the decision to have a child with work obligations, leading to a diminished sense of control over the situation. Additionally, changes in one's employment status can also impact perceived control. For example, if an individual experiences a change in employment conditions that restrict their ability to balance work and childcare responsibilities, it can further erode their perceived control over the decision to have a child. These changes in behavioural control, arising from the challenges of harmonising work and parenting, can significantly influence individuals' intentions and decision-making processes (Bernardi, Mynarska & Rossier, 2015).

In their qualitative study of fertility intentions, Bernardi, Mynarska & Rossier (2015) found that fertility intentions are dynamic and not static. They can change through various mechanisms, also after the birth of a child. When it comes to attitudes and norms, they found that mothers can deal with an ambivalence towards the desired number of children. Many women have a desired number of children coherent with two-child family norms, which could be due to societal expectations about the ideal family size (Sobotka & Beaujouan, 2014). However, after having a child, there might be a mismatch between their internal motivation and this norm. This might be due to the changes in the work-family balance as mentioned above, or due to a (negative) change in partnership or insecurities about the birth intervals between their current child and a possible other child (Bernardi, Mynarska & Rossier, 2015). Before having a child, parents could be blinded by excitement at the prospect of having a baby; however, after having a child they also experience the constraints that having a child poses on their lives, which can lead to people rethinking their intentions (Bernardi, Mynarska & Rossier, 2015).

In summary, the shift to parenthood is believed to introduce numerous changes and new expectations for new parents, primarily through the assumption of new roles. This process is however gendered and appears to have a more challenging impact on women, contributing to an imbalance between work and personal life. These significant changes can prompt individuals to reevaluate their intentions, potentially resulting in women revising their intended number of children. This has led to the first hypothesis, which states that *women lower their fertility intentions after the birth of a first child* (H1).

2.3.2 Household dynamics

The former suggests that the transition to parenthood can lead to important changes and new challenges. Furthermore, it has been postulated that the introduction of children into the household introduces new dynamics that can reshape existing gender divisions that were previously absent or less pronounced. As a result of prevailing gender inequality in society, the costs associated with parenthood differ for men and women. Research indicates that the arrival of children in the household

exerts greater pressure on women's work-life balance (Goldscheider, Bernhardt & Lappegård, 2015). Although, in recent decades, people have managed to reduce the amount of time dedicated to household tasks, this trend has not extended to childcare responsibilities (Bianchi, 2000). In fact, there has been an increase in the amount of time spent on childcare due to heightened parenting standards (Ishizuka, 2019). Consequently, the time required for child care competes with the hours women allocate to paid work (Goldscheider, Bernhardt & Lappegård, 2015), leading to increased conflict.

The impact of becoming a parent extends beyond the private sphere and affects market participation as well. The gendered implications of parenthood become evident as the mother's paid work is typically more significantly influenced (Grunow & Evertsson, 2016). Due to prevailing gender norms surrounding care, a new dynamic of specialisation and negotiation arises between partners. Mothers are expected and encouraged to take more time off work, or if the male partners have a comparative advantage in terms of paid employment, mothers assume greater responsibility for childcare and household duties. As mentioned, this engenders new household dynamics, reinforcing more traditional structures, with mothers devoting more time to household tasks while men remain heavily attached to the labour market. Moreover, even when women return to full-time employment, they tend to shoulder a larger share of household and childcare tasks, perpetuating an imbalanced situation (Zhou & Khan, 2019).

With recent indications of possible reversals in declining fertility rates, there has been an increasing focus on household characteristics, particularly men's involvement in household work and child care. The Nordic countries, known for their relatively high gender equality, have gained significant attention in this regard, as they show above-average fertility levels (Okun & Raz-Yurovich, 2019). Gender theories on family change have primarily centred around the impact of increased male involvement and responsibility in domestic labour. It is theorised that greater male involvement reduces work-family conflict for women, thereby enhancing their ability to combine paid work with childbearing and subsequently leading to increased fertility rates. Critical in this regard is the gender equity theory. The gender equity theory places a women-centred perspective at the core of its framework. It highlights work-family conflict as the primary contributor to low fertility rates. Moreover, it suggests an incongruence between the relative equality women experience in terms of education and career opportunities and the persistent inequalities that exist within the private sphere (Raybould & Sear, 2021). This incongruence often leaves women torn between multiple spheres of life. By examining the experiences of women outside the context of their partnerships, it is theorised that the existence of the "motherhood penalty" in the labour market influences women's fertility ideals. The motherhood penalty refers to the disadvantages that mothers face compared to non-mothers, including gender stereotypes and biases. Studies indicate that visibly pregnant women

are often perceived as less committed, less dependable, less authoritative, and more emotional, resulting in negative consequences for their careers (Stojmenovska & England, 2021).

Expanding on these theories, it has been observed that a negative work-life balance has a detrimental effect on fertility intentions (Goldscheider, Bernhardt, and Lappegård, 2015). Conversely, a more balanced work-life situation may have the opposite effect. Greater gender equality within households has the potential to increase fertility intentions among both men and women (Aassve et al., 2015). In cases where men contribute more to household tasks and childcare, the negative work-life balance experienced by women is diminished. This allows for greater possibilities to reconcile family life with work and to increase their fertility intentions. Additionally, this balanced involvement of men in the household can positively impact on men's fertility intentions, as increased investment in the household tends to foster a stronger family orientation and happier relationships (Goldscheider, Bernhardt, and Lappegård, 2015). Consistently, in their research, Aassve et al. (2015) find that women who have gender-equal attitudes and are in a situation of gender-equal housework division are more likely to have a second child compared to women with gender-unequal gender attitudes who are in a situation of unequal divisions, or both. Also, in their study, Mills et al. (2008) found that mothers (of one or more children) who perform 75% or more of the household tasks have significantly lower fertility intentions compared to childless women.

In summary, the former indicates that persistent societal gender inequality also influences gender divisions within the household. Along with the existence of gender beliefs, the labour market also reinforces stereotypes and expectations from mothers and fathers. These dynamics become more pronounced following the transition to parenthood, placing a heavier domestic workload on women. Existing literature suggests that as the burden of household responsibilities increases, it is likely to have an adverse impact on work-life balance, which, in turn, is expected to have a detrimental effect on fertility intentions. This theory resulted in the following second hypothesis: *the household division of labour mediates the association between the transition to parenthood and fertility intentions* (H2).

2.3 Other factors

Fertility intentions are not stable over time and age, but people tend to adjust them to changing circumstances. For example, for the Netherlands, Liefbroer (2009) finds that most people reduce family size intentions as they get older. On average, the trend is toward decreasing family size intentions as individuals age. However, it is important to note that some people either maintain their intentions or adjust them upwards. These variations in age-related patterns can largely be attributed to changes in the partnership, educational, and professional trajectories of young adults, which cause a re-assessment of their intended family size (Régnier-Loilier, 2006). Factors such as not finding a suitable partner and pursuing a career, especially for women, play significant roles. Additionally, the

timing of one's fertility journey is a crucial factor. Those who postpone parenthood until their thirties are more likely to adjust their family size intentions downward compared to those who embark on their childbearing journey at an earlier age (Liefbroer, 2009). Since the analysis is here on those who have not had a child yet at the beginning of the study, the expectation is that a higher age is associated with a higher likelihood of decreasing the intended number of children.

Additionally, some other factors can lead to change in the intended number of children. For one, labour market involvement is often considered to be an important predictor. Research shows that women's involvement in the workforce tends to lower fertility, and conversely, higher fertility influences women's labour force participation (Shreffler & Johnson, 2013). The workplace structures, along with the persisting gender-based division of household responsibilities and childcare, are believed to create challenges when it comes to balancing work and raising children (Coltrane, 2000). Especially for fertility intentions, it seems to matter whether women are in a situation of part-time/flex work. Work-family conflict is deemed to decrease for women who reduce their labour market participation after the transition to parenthood, especially when reducing their working hours, as there is less time pressure (Grunow & Evertsson, 2016). Research by Mills et al. (2008) indicates that combining a relatively high proportion of household tasks with a high number of working hours is associated with lower fertility intentions. It also seems to be associated, whereas young adults on average do not differ much, people above thirty who work relatively many hours seem to decrease their intentions compared to those who work fewer hours (Liefbroer, 2009).

Moreover, educational attainment has been commonly associated with women's fertility intentions, but different perspectives have been presented in the literature (Testa & Stephany, 2017). Education has been associated with gender egalitarianism in attitudes and equal relations within the household (Kaufman, Bernhardt & Goldscheider, 2017). Literature, therefore, suggests that women with higher levels of education tend to express higher fertility intentions. This is attributed to their capacity to negotiate a more equal distribution of household responsibilities, possess greater economic resources, and have the capability to challenge traditional gender roles (Mills et al., 2008). On the other hand, particularly among women with higher educational levels, who generally aspire to build their careers, the challenge of balancing motherhood with paid employment may be more pronounced. As a result, highly educated women and those dedicating more hours to their professional careers might tend to hold smaller family-size aspirations. Furthermore, it is suggested that they express reduced family size intentions when they start to get actively engaged in educational pursuits, as education and the desire for parenthood are often perceived as activities that are not easily reconciled (Blossfeld & Huinink, 1991). They might, therefore, be more likely to adjust their intended number of children downwards.

Furthermore, when considering women's higher-order fertility intentions, so after the transition to parenthood, both the educational level of the women themselves and the educational level of their partners are deemed to have a significant influence. A woman's own level of education and the educational background of her partner play a role in shaping her intentions regarding having additional children beyond the first, whereas higher education is associated with a higher intended number of children, as they might have more resources and stability for higher-order children (Billingsley & Ferrarini, 2014).

Lastly, the family size intentions of young adults are significantly influenced by their living arrangements (Sobotka & Testa, 2008). Research by Liefbroer (2009) shows that in the early twenties, there is little divergence in family size intentions among young adults in various living situations. However, these differences become more pronounced as time progresses. Among married individuals, family size intentions remain relatively consistent throughout young adulthood. Conversely, those without a partner are most likely to experience a substantial decline in their family size intentions. Deviating from the expected timing of partner relationships can prompt a re-evaluation of one's plans regarding family size. Moreover, cohabiting young adults consistently express lower family size intentions than their married counterparts throughout their early adulthood.

2.4 The Dutch context

For a long time, the Netherlands sustained a relatively high fertility rate from a European comparative perspective, close to replacement level (Mills, 2015). The Netherlands' total fertility rate (TFR) has fluctuated between 1.55 and 1.8 since the beginning of the 2000s (World Bank, 2023). Crucial aspects contributing to this are deemed the presence of family-friendly policies as well as cultural attitudes. The government has implemented a range of supportive measures, such as flexible working arrangements and affordable childcare options (Mills, 2015). These policies enable parents to balance their work and family responsibilities and alleviate some of the financial burdens associated with child-rearing. The availability of these supportive measures contributes to a more favourable environment for individuals contemplating having children (Mills, 2015). Moreover, importantly, the Netherlands is known for its expansive part-time culture (Frey, 2019). The prevailing model in the Netherlands, known as the "one-and-a-half earner model", is characterised by the majority of couples consisting of a man working full-time and a woman working part-time, irrespective of whether they have children or not. While the Dutch government has made efforts to enhance women's labour force participation to reduce their financial reliance and expand their professional prospects, the outcomes have primarily resulted in a transition from short part-time hours to longer part-time hours among women (Van Breeschoten & Evertsson, 2019). As a result, the gender disparity in working hours and

financial rewards persists. Although the overall labour market participation is high[3] (Eurostat, 2023), about 60% of women that are active on the labour market work part-time, which is far above the OECD average (OECD, 2023). Although the Netherlands also knows a high average of men working part-time, the share of women is significantly higher.

In the Netherlands the transition to parenthood marks an important event that impacts women's careers. In the early stages of their careers, women tend to have full-time jobs more frequently than later in their professional lives. On average, they work nearly 35 hours per week during this period. However, this changes with the arrival of children. Almost 45 per cent of women reduce their working hours or stop working altogether. Fathers, on the other hand, rarely adjust their work patterns after the birth of their first child; they predominantly continue to work full-time, although most of them take paternity leave. Until the mid-2010s, the proportion of women who reduced their working hours after the birth of their first child declined, while the proportion who maintained the same number of hours increased. However, this trend has reversed since then. Women are increasingly opting to work fewer hours after the birth of their first child, and the percentage of mothers who continue to work the same number of hours has decreased after 2015 (Centraal Bureau voor de Statistiek, 2022).

This phenomenon seems to have both positive and negative outcomes regarding gender equality (Van Breeschoten & Evertsson, 2019). The transition to dual-earner households has posed challenges in achieving a satisfactory balance between work and family life, as it does not align anymore with persistent traditional gender roles that assume family responsibilities primarily for women, while men serve as primary breadwinners. This has resulted in an increase in work-family conflict. So, on the one hand, the part-time culture enables women to remain active on the labour market after becoming a mother and therefore being able to maintain a more favourable work-life balance (Van Breeschoten & Evertsson, 2019). On the other hand, it perpetuates gender inequality, as it affects gender gaps in earnings, positions of power, pensions, as well as inequality within the household (Frey, 2019).

3. Data and methods

3.1 The Netherlands Kinship Panel Study

For this thesis, secondary data from The Netherlands Kinship Panel Study (NKPS) has been used to answer the research question. The NKPS is the Dutch participant of the Gender and Generation Survey (GGS), which is a cross-national survey dataset aimed at providing a picture of the changing

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[3] In 2022, 79% of the female labour force was active in the labour market, which is among the highest of the EU countries.

relationships between gender and family dynamics across multiple generations. The data provides longitudinal information on representative samples of a large number of European countries. The dataset includes information on a wide range of topics related to family, work, and gender roles, and therefore the data is suitable for the research question central to this thesis. The survey was conducted in several waves across Europe between 2004 and 2011. The focus here is on the Dutch sample, which is thus conducted by the NKPS. The first three waves were conducted in 2002-2004 (wave 1), 2006-2007 (wave 2) and 2010-2011 (wave 3). The sample covers the population of the Netherlands aged 18 to 79 at the first wave, that live in private households. For data collection they used a mixed method approach, making use of Computer Assisted Personal Interviewing (CAPI), Computer Assisted Telephone Interviewing (CATI), as well as Computer Assisted Web Interviewing (CAWI). Moreover, there were both interview questionnaires and self-completion questionnaires. When it comes to the panel, the study is designed to collect information on the same persons at multiple points in time. This way, changes in relationship and family dynamics can be captured (Dykstra et al., 2022).

The first wave consisted of 8161 respondents, which corresponds to an overall response of 45%. In wave two eligible[4] panel respondents were re-contacted to participate in the new round of data collection. From this pool, eventually 79% participated in the new wave, leading to a sample size of 6091 (Dykstra et al., 2005). When it comes to third wave, 72.1% of those that were part of wave 2 also participated in wave 3, which corresponds to a sample size of 4390 (Merz et al, 2012).

Despite the considerable non-response at the start of the study, which is considered typical in studies investigating family dynamics (Huijnk & Liefbroer, 2012), the selected sample has been determined to be representative of the Dutch population (Dykstra et al., 2012). When it comes to attrition in the subsequent waves, analyses of the non-response shows that although in wave 2 and 3 the response rate is relatively high, there are some indications for selectivity of the remaining sample. The analysis shows that when it comes to demographic characteristics, nonrespondents are slightly more likely to be men, young, non-church members, to be living in urbanised areas, and to hold lower levels of education. This is important to take into consideration, as this might make the sample less representative (Dykstra et al., 2012; Merz et al., 2012). However, importantly, analysis shows that the response rate did not affect differences in the reported quality of relationships with family members (Dykstra et al., 2012).

Additionally, it has been analysed whether there are significant differences in those respondents that remained in the sample and those that dropped out. When it comes to variables that are central to this analysis, there are some differences. For example, those that did not remain in the

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[4] Eligible respondents were those respondents that were eligible for interviews in wave two, which was based on whether they: gave permission to be re-contacted to participate in the next wave; were still alive at the moment fieldwork started; and were still residing in the Netherlands.

panel, were more often a parent than those that participated in both waves (Chi2 = 31.77, p < .05). Furthermore, those that dropped out have a little lower fertility intentions, 2.29 compared to 2.03, but this difference is significantly different (t = -3.65, p < .05). This is important to keep in mind when interpreting the results, they might make the group analysed more selective in terms of certain characteristics and therefore less representative of the total population.

3.2 Study population and data preparation

When it comes to the merging of the various waves of data (the three time points of data selection), a series of multiple steps have been taken. First, wave one and wave two have been merged, resulting in a sample size of 6090. The variables for both waves have been recoded into general variables that represent the variable at t (first time point) or t+1 (second time point). Also, two new variables have been created, one that represents the transition to parenthood and one that represents the adjusted fertility intentions. This transition to parenthood variable represent whether respondents have had a child between the two time points. The adjusted variable for intended number of children is created for t+1 to control for the children respondents could have had in between the time points (see section 3.3 for how it is constructed).

In the second step, the data from both wave two and three have been merged together, which resulted in 4389 matches. Then the same steps have been undertaken as described for the merging of wave one and two in the first part. The variables have been recoded into variables that indicate whether they were measured at time t or t+1. Now the variables will be coherent between the two new datasets. Also, the two new variables have been constructed that indicate the transition to parenthood and the adjusted fertility intentions. Due to this data restructuring, moving forward, the discussion of distinct time points will now be in terms of t and t+1 instead of the different waves.

As the third step the two separate datasets have been appended. Now the combined dataset contains those respondents that have participated in wave one and two, or all three. In this combined dataset the data have been sorted by ID and time, which means that those who participated in all three waves will have two separate rows and those that only participated in the first two waves will have only one row with data. As a last step the data have been selected to get the right sample for the study population. First, only women have been selected for the study. Second, the data have been selected on age, as the focus is on women of reproductive age. The minimum age of respondents that are part of the overall study is already set at 18, so no adjustments have been made to the minimum age. However, for the maximum age the data have been selected on those that were younger or equal to 45 at time t+1. Lastly, as the focus is on the transition to parenthood, only those respondents were selected that did not have any children at t. After, these selection criteria, a final sample size of 390 respondents remained, leading to 519 observations, as a big proportion of these respondents have

been measured between both the first and second wave, as well as between the second and third wave.

In summary, the study population consists of women of reproductive age (Aged 18-45) without children at time t. This way, those who become first-time mothers in between the waves, so between 2002 and 2011, are represented in the sample. This means that the sample selection process was based on gender, age, and the presence of children. When it comes to reproductive age, women were selected who were aged 18 to 45 (at t+1) to make sure they are still of reproductive age. Although data is also collected from alters (family members), the focus is solely on the main anchors, with some information on their partners that is used. The characteristics of this reduced sample are given in Table 1 for the important variables.

3.3 Measures

The main variable of interest (the dependent variable) in this study is *change* in women's intended number of children. As the intended number of children has been measured at all time points, it provides the opportunity to model possible changes in women's intentions. The intended number of children is based on the following question: [a/b/c626] *How many (more) children in total do you intend to have*? This question has been asked to female respondents aged under 45. Respondents could answer this question with any numerical value, but the answers ranged from 0 to 10. For the variable at time t+1 this variable has been transformed into a new variable that accounts for the number of children respondents have had in the meantime, recording the total intended number of children, and therefore ensures consistent measuring of the fertility intentions. Since, the question is formulated in a way that it refers to how many more children the respondent want if they have children already. In this case, if a respondent had an intended number of children of two at the beginning of the study, and had a child in between the time points, then their intended number of children will be two if they indicated to have one child more. This construction comes however with some considerations. In order to ensure a comprehensive understanding of change in women's intended number of children, it was sought to include all reproductive women. Although the focus of the thesis is on those that transition to parenthood, also those that indicated not to want any children have been included in the sample. As the dependent variable is change in intended number of children, also those that indicated at the beginning to not want any children, could have changed this intention at a later time point, therefore providing valuable information. Nevertheless, this also requires some cautiousness when talking about intentions. Particularly in cases where women, especially those initially not considering motherhood, experiencing pregnancy between the different time points, need to be considered. As the birth of children has been included in the dependent variable, this arguably cannot always be the same as intention. Since those who had a child in between waves, it cannot be completely determined whether the intended number of children really increased, or if the pregnancy

was unintentional. So in not all of the cases the dependent variable "intended nr of children" will accurately reflect women's real intentions, as it also includes actual fertility.

Furthermore, to construct the actual dependent variable, the variable for the intended number of children at time t, and the adjusted intended number of children at time t+1, have been combined and constructed into a new variable that indicates change. This final dependent variable consists of the following three categories: (1) increase, (2) constant, and (3) decrease. The categories are based on the difference between the former two variables for the intended number of children.

Transition to parenthood. The key predicting variable in the analysis is a dummy variable indicating the transition to parenthood. It indicates whether respondents have had a first child between the waves. This new variable has been constructed using information about the total number of children. The variable has categories 0 = no transition to parenthood and 1 = transition to parenthood. Category 1 consists of those who indicated at variable *numallchild* to have zero children and at the same variable at time t+1 to have one or more children. On the other hand, category 0 consists of those that did not have a child at both time points.

Household division of labour. When it comes to the household division of labour, this has been measured by taking information on the perceived division of various household tasks. The question posed for the different tasks is: "Who does the following tasks in the household?" This question was asked about: preparing daily meals, shopping for food, vacuum-cleaning the house, small repairs in or around the house, and paying the bills and keeping financial records. Respondents could answer with: (1) always the respondent, (2) usually the respondent, (3) the respondent and partner equally, (4) usually the partner, and (5) always the partner. These different tasks are taken together and considered as a whole and made into a scale variable that represents the average share of the former tasks. Subsequently, a new variable has been constructed that indicates whether there is an equal division of household tasks, i.e. if the respondent primarily performs household tasks, the division is more equal, or the partner performs a bigger share. The newly constructed variable consists of the following categories: (1) most of the household tasks performed by respondent, (2) an equal division, (3) most of the household tasks performed by the partner of the respondent, and (4) no partner. The last category has been added for those that do not have a partner and therefore did not answer this question. To not exclude those respondents from the analysis they have been added in the additional category.

Partner status. When it comes to partnership status, this is measured by the following question: [a/b/cparstat] What is you current partner status? Respondents could answer this question with the following: (1) co-resident partner; (2) non-resident partner; and (3) no partner. This variable has also been used to create the 'no partner' categories on some of the other variables.

Employment. Regarding women's employment status, multiple characteristics could have been taken to categorise their paid work. However, in light of women often reducing their working hours after having a child, the dimension of full-time and part-time is important, especially when it comes to unpaid labour in the household. Respondents were, for example, asked whether their work is full-time or part-time? [a/b/c834]. However, since the Netherlands knows a large part-time culture, a large majority of the women in the sample indicated to work part-time. Moreover, it is crucial to consider the number of hours worked by women, as part-time employment encompasses everything distinct from full-time work. Especially for household labour, it matters whether this is 20 hours or 32 hours a week of paid work (Plantenga, Schippers & Siegers, 1999). Thus, in the analysis respondents' working hours have been considered, measured by the question: [a/b/c835] How many hours per week do you normally work in this job or business including overtime? Which respondents could answer with any number of hours.

Educational attainment. When it comes to educational attainment, the data provides an international categorisation of educational levels (ISCED). Respondents were asked about the highest level of education they have successfully completed [a/b/c148]. Answer categories consisted of: (0) pre-primary education; (1) primary level; (2) lower secondary level; (3) upper secondary level; (4) post-secondary non-tertiary; (5) first stage of tertiary, and (6) second stage of tertiary. The same question was asked about the highest level of successfully completed education of the current partner of the respondent [a/b/c308]. Because of a low number of observations in some of the categories, the variables have been transformed into a dummy variable with categories: (0) non-tertiary, and (1) tertiary education. For partners' education an additional category is added for those without partner, similarly to the variable for household division of labour.

Age. Lastly, respondent's age is also included in the model, which is the age of the respondents at the time of the interview [a/b/cage].

3.4 Analytical approach

To analyse the possibility of change in fertility intentions, the longitudinal information provided by the data is taken into account. As mentioned, data is collected at different points. This makes it possible to analyse changes in the intended number of children over time as well as taking into account the birth of a child in between waves. To investigate the relationship between the former, a hierarchical multinomial logistic regression analysis has been conducted. The analysis focuses on modelling the changes in the total intended number of children by analysing the effect of becoming a first-time mother. The change in the intended number of children between two time points is modelled as the response variable, constructed as three categories: keeping the intended number of children constant over time, increasing the intended number of children, or decreasing the intended

number of children. Because, the response variable consists of three outcomes, multinomial logistic regression is required to model the expected likelihood of the three outcomes based on multiple independent variables. Multinomial logistic regression is a widely used technique for modelling nominal outcome variables, in which the log odds for the outcomes are represented as a linear combination of the predictor variables (Sen, 2006). It can be seen as an expansion of the binary logistic regression model, offering separate logistic models for each pair of response categories. By simultaneously considering all pairs of categories, the model defines the odds of the outcome in one category compared to another (Agresti & Finlay, 2009).

Within this framework, one of the categories is chosen as the reference, while the regression model concurrently calculates the odds of being associated with each remaining category in relation to this reference category. In this case, no change in the intended number of children is the reference category, which means that the odds of increasing and decreasing are calculated in reference to no change. As mentioned earlier, longitudinal information from respondents is used to construct the dependent variable change in the intended number of children. When it comes to the independent variables, most of them are taken at time t, so prior to the change. However, to look at whether a possible change in household division of labour is associated with the change in the intended number of children (hypothesis 2), this variable is added at both time t and t+1 in an additional analysis. Adding variables at different time points to the model allows to interpret the effect of the change in this variable on the dependent variable (see Byers, 2005).

The main multinomial model is constructed in three steps. First, the transition to parenthood variable is added to analyse its relation to the change in intended number of children. Second, household division of labour at time t has been added to see its effect on the dependent variable. Third, the control variables working hours, education level respondent, educational level partner, partner status, and age (at time t) are added to the final model, which will be used to answer the first hypothesis. Additionally, to test hypothesis two, the mediating effect, an additional analysis will be performed. In a regular OLS linear regression, a mediating effect will be tested by comparing two models. If by including the mediator variable, the size of the main predictor decreases, then there is indication of a mediation effect. However, since a multinomial logistic regression is used here, this is a bit more complicated, which will be discussed in section 4.4.

One thing that needs to be taken into account is the correlation of errors due to the longitudinal nature of the data in which answers are related to each other by each respondent. However, this has been controlled for by adjusted standard errors (see section 3.5 Model evaluation).

3.5 Model evaluation

As discussed, a multinominal logistic regression has been carried out to test the hypotheses. This regression method estimates two regression simultaneously; both in reference to the baseline category, which in this case is "holding the intended number of children constant". The output of the model shows the outcome of regressing the logit of the probability of increasing intended number of children over time or decreasing the number over time instead of holding it constant. When it comes to the assumptions that should be considered when running the model, the same assumptions apply as in a binary logistic regression: independence of observations and linearity in the parameters. Moreover, the influence of multicollinearity and influential outliers should also be considered. Additionally, multinominal logistic regression holds the assumption of independence among the dependent variable choices. This assumption states that the presence in one category is not related to the choice of another category. The assumption of independence can be tested with the Hausman-McFadden test. However, the outcome of the test indicated that it cannot accurately be determined due to the clustered data. Note that there is however no consensus in the literature about the use of this test (see e.g. Williams, 2021).

The linearity assumption is tested using the Box-Tidwell test. The null hypothesis for the Box-Tidwell test is that there is no relationship between the independent variable and the log-odds of the dependent variable in a logistic regression model. In other words, it assumes that the effect of the independent variable on the log-odds of the outcome variable is linear. The results show p-values higher than the critical value .05, showing no indication that the assumptions is violated. When it comes to multicollinearity, correlations have been checked between the independent variables. Spearman's correlation is used to check the association, to more accurately predict correlations with categorical variables. The outcomes (See table A1 Appendix A) show no unexpectedly high correlations between the predictors.

Additionally, it's important to note that the presence of clustered observations, which are not entirely independent, has been considered. As a result, adjustments have been made to the standard errors, by indicating that the observations are clustered by ID. This specifically corrects for the risk of autocorrelation. Autocorrelation occurs when there is a correlation between the residuals of a regression model at different time points or observations. This implies that the assumption of independence among residuals is violated, leading to patterns or trends in the residuals over time or across observations (Agresti & Finlay, 2009). However, in this case, this has been adjusted for.

4. Results

4.1 Descriptives

Table 1: descriptives of main variables (for time t) showing the mean or percentage distribution; standard deviation, minimum and maximum.

	Mean; %	SD	Min	Max
Dependent				
Change intended nr. of children			1	3
Constant	53.37%			
Increase	14.26%			
Decrease	32.37%			
Key independent				
Transition to parenthood			0	1
No	81.80%			
Yes	18.20%			
Household division[1]			1	4
Respondent most	18.60%			
Equal division	40.88%			
Partner most	2.25%			
Control				
Working hours	36.25	9.12	6	60
Education resp.			0	1
Non-tertiary	50.21%			
Tertiary	49.79%			
Education partner[1]			1	4
Non-tertiary	34.55%			
Tertiary	22.82%			
Partner status			1	3
Co-resident	47.54%			
Non-resident	17.45%			
No partner	35.01%			
Age	29.45	6.08	18	42
N	519			

Notes: The values indicate means for continuous variables with their standard deviation; and percentages for categorial variables, listed per category of the variable.
[1] An extra category is added to the variable that represents those that do not have a partner. This prevents excluding those respondents without a partner from the analysis and therefore losing valuable information.

The key variables are presented in table 1 above, displaying their means or proportions as observed in the samples. The presented values reflect descriptive statistics pertaining to women of reproductive age.

First, the dependent variable, change in women's intended number of children, indicates whether a change has taken place between the two survey points in the intended number of children of women. The table shows that the majority (53.37%) of women keeps their intended number of children constant in between the different time points. Especially a very high proportion of those that start with an intended number of zero children, keeps this constant over time (see table B1 Appendix B) Moreover, also a substantial amount, 32.37%, decreased the intended number of children, with especially a high proportion for those that initially had an intended number of children of three or

more (see table B1 Appendix B). Lastly, a smaller proportion of women increase their intended number of children, 14.26%.

Second, moving on to the main independent variables, when it comes to the transition to parenthood, 81.8% of respondents did not undergo the transition to parenthood, while 18.2% became first-time mothers. For the household division of labour, a large proportion (40.8%) of the respondents has a relatively equal distribution between respondents and their partners. Only a small proportion of the respondents indicated that their partner performs more household tasks (2.25%). On the other hand, 18.60% of the respondents indicated that they generally perform more of the household tasks than their partner.

Regarding the control variables, the education levels of both respondents and their partners reveal that there is a relatively balanced distribution of those that achieved tertiary education and those that have non-tertiary education. Although when it comes to the respondents, a small majority has completed non-tertiary education. When it comes to the partner, also a bigger proportion has non-tertiary education as completed educational level. Moreover, again an additional category has been added for those without partner. When it comes to partner status, a big proportion is in a co-resident partnership (47.54%). A smaller proportion is in a non-resident partnership (17.45%), and 35.01% of the respondents have no partner. Additionally, the general age of the sample is relatively young (28.77), as it exclusively comprises women of reproductive age and those that did not have a child yet.

4.2 Bivariate associations

Table 2: Intended number of children indicated for the different time points

	First wave		Second wave		Third wave	
	Mean; %	SD	Mean; %	SD	Mean; %	SD
Intended nr of children						
Overall	1.75	1.26	.96	1.19	1.26	1.06
Intended nr of children						
0	28.25%		54.01%		38.65%	
1	4.42%		8.02%		11.11%	
2	46.08%		28.06%		39.61%	
3+	21.24%		9.92%		10.62&	
Intended nr of children						
Partner	1.73	1.21	1.13	1.23	1.43	1.15
No Partner	1.59	1.35	.57	.99	.80	1.12
Intended nr of children						
Non-tertiary	1.72	1.32	.90	1.24	.95	1.17
Tertiary	1.62	1.19	1.02	1.15	1.45	1.14

Notes: the intended number of children for wave two and three are controlled for the birth of children in between the waves.

Table 2 provides information on the intended number of children for the study population. The variables are reported separately for each wave. It is important to note that the separate samples consist of the same respondents tracked over time. However, the sample size in the third wave is

smaller compared to the first two waves, as some respondents may have dropped out in the third one, but their data for the first two waves still contributes valuable information. As the data is selected on women without children, all the respondents in the first wave are childless, to be able to capture the transition to parenthood. During the second and third waves, it is possible that some individuals have had a child, for which the intended number of children is controlled for.

What the table shows is that in the subsequent time points, the average intended number of children decreases. For the first wave the mean intended number of children is 1.75, with a standard deviation of 1.26. In the second and third, it is subsequently, .96 and 1.07. This trend can be attributed to the questionnaire design. Which is in line with the descriptives in table 1, showing that many of the women decreased their intended number of children over the time points. The intended number of children is small, but keeping in mind that the data was selected on those that did not have a child yet, so this might be selective in the sense that the proportion of those not wanting any children might be bigger in this sample. That the intended number of children is quite higher in wave 3 than in wave 2 might be because of the significantly lower sample size in wave 3 (N=207), where those with higher number of respondents have more influence on the average. Moreover, the table shows the intended number of children differentiated by those that have a partner and those that do not, and those that have tertiary education and those that do not. It shows that in all the waves, those that have a partner have a higher average intended number of children than those that do not have a partner. When it comes to education, the table also displays the distribution of respondents based on the number of intended children they indicated. In the first wave, most respondents indicated an intended number of children as 2, while in the subsequent waves, a significant majority reported zero intended number of children.

Furthermore, Figure 1 depicts the percentages of respondents within the groups, categorized by their initial intended number of children, that increase, decrease or maintain their intended number of children over time. As can be seen, regardless of the initial intended number of children, a large majority keeps the intended number of children constant between the different time points. However, with higher initial intended number of children, there is a growing proportion of women that decrease their intention over time. When it comes to increasing the intended number of children over time, the proportion is highest for those that started with an intended number of children of one. But this is still a small proportion, smaller than 10%. Important to note is that those that started with an intended number of children of zero, so those that indicated to have no intention to have a child, cannot decrease this number over time.
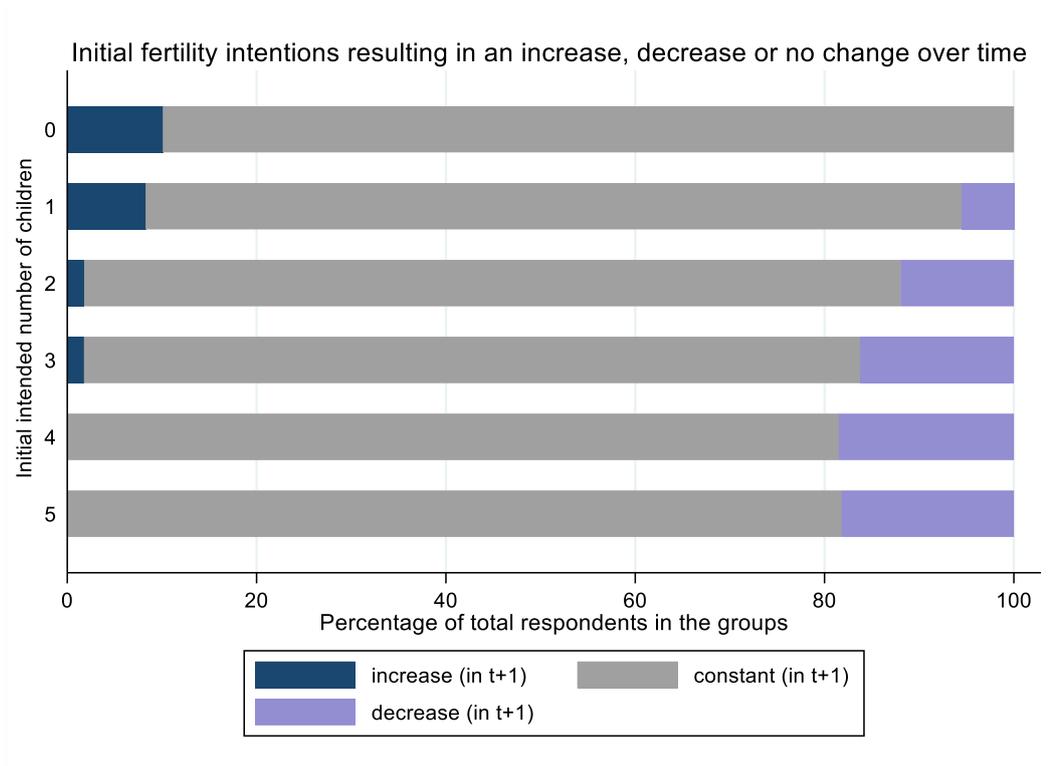
Figure 1: Initial fertility intentions that result in an increase, decrease or no change over time.

4.3 Change in the intended number of children

To test the hypotheses a stepwise regression analysis has been performed. This resulted in three models, which are displayed in table 3. The coefficients of the predictors are displayed as relative risk ratio's (RRR). The RRR's indicate the ratio between the probability of selecting one outcome category and the probability of selecting the baseline category, which here is having the same intended number of children over time. To obtain the relative risk, the log-odds that the model produces are exponentiated. This coefficient can be interpreted as this ratio for a one-unit change in the predictor variable.

Table 3: results of the multinominal logistic regression with change in fertility intentions as dependent variable.

Change in intended number[a]		Model 1 RRR (SE)	p	Model 2 RRR	p	Model 3 RRR	p
Increase	Constant	.22** (.04)	<.01	.11** (.04)	<.01	20.31** (28.19)	<.01
	Transition to parenthood	2.23** (.67)	<.01	4.96** (1.88)	<.01	4.08** (2.17)	<.01
	Household division (ref. equal division)[b]						

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		Model 1		Model 2		Model 3	
	Respondent most			.80 (.36)	.61	.58 (.37)	.40
	Partner most			.49 (.51)	.48	.81 (1.03)	.87
	Partner status (ref. co-resident partner)						
	Non-resident					1.03 (.89)	.98
	No partner					.26* (.18)	.05
	Working hours					.97 (.02)	.15
	Tertiary education (ref. = non-tertiary)					1.61 (.74)	.74
	Tertiary partner (ref. = non-tertiary)[b]					1.75 (1.01)	.33
	Age					.85** (.03)	<.01
Decrease	Constant	.64 (.07)	<.01	.61** (.11)	.01	23.68** (22.84)	<.01
	Transition to parenthood	.66 (.19)	.15	.85 (.26)	.60	.80 (.31)	.57
	Household division (ref. equal division)[b]						
	Respondent most			.77 (.24)	.40	.71 (.28)	.39
	Partner most			.34 (.26)	.19	.26 (.27)	.19
	Partner status (ref. co-resident partner)						
	Non-resident					.72 (.56)	.67
	No partner					1.31 (.59)	.55
	Working hours					1.01 (.02)	.69
	Education (ref. = non-tertiary)					.77 (.23)	.37
	Education partner (ref. = non-tertiary)[b]					1.71 (.67)	.17
	Age					.87** (.02)	<.01

Chi2	13.52**	374.71**	68.17**
Pseudo R2	.01	.03	.12

In Model 1, the analysis presents the results of using the transition to parenthood as a factor to explain potential changes in the intended number of children. The constants for the estimated model for change in the number of intended children indicate the expected likelihood of increasing/decreasing rather than holding the same fertility intentions when respondents did not transition to parenthood. So, those that did not become parents, have a 0.22 (SE =.04) times lower likelihood of increasing their fertility intentions rather than holding their fertility intentions constant and a 0.64 times lower likelihood of decreasing the number of children instead of holding this number constant. When it comes to those that did make the transition to parenthood, the RRR for the "Transition to Parenthood" variable is 2.23 with a standard error (SE) of 0.67 for the first part of the model. This means that women who experienced a transition to parenthood have a 2.23 times higher likelihood of increasing their fertility intentions rather than holding their fertility intentions constant compared to those who did not experience a transition to parenthood. In other words, a relative risk ratio of 2.23 indicates that the first-time mothers have an 123% higher risk of increasing the intended number of children instead of holding this constant. The p-value for this variable is 0.007, indicating that the effect is statistically significant. Looking at decreasing fertility intentions relative to holding them constant over the years, a consistent effect can be observed, contrary to hypothesis 1. When it comes to decreasing the intended number of children the transition to parenthood shows that the RRR is 0.66 with a standard error (SE) of 0.19. This means that individuals who experienced a transition to parenthood have a 0.66 times lower relative likelihood of decreasing the intended number of children compared to those who did not experience a transition to parenthood (i.e. 34% lower likelihood). However, the p-value for this variable is 0.15, which is greater than the conventional significance level of 0.05, indicating that the effect is not statistically significant. When it comes to the goodness-of-fit statistics, the pseudo R-squared of 0.01, indicates the proportion of variance in the outcome explained by the model. In this case, the model explains approximately 1% of the variance in changing people's intended number of children. The Wald Chi-square of 13.52 with a p-value of <.01 indicates that the model fits the data significantly better than the empty model. Meaning that the predictor, transition to parenthood in this case, adds some predictive power for the change in intended number of children.

In the second model, household division of labour at time t is added to the model. When

adding this variable, the transition to parenthood shows the same effect. Positive and significant for women that transition to motherhood on the likelihood of increasing their intended number of children. A non-significant effect for decreasing instead of holding constant. Looking at its effect, the first part of the model shows that the household division does not have a clear effect on the change in intended number of children. In those instances where the partner of the respondent does more of the household work, the likelihood (RRR = .49; SE = .51) of increasing the intended number of children instead of holding them constant reduces, compared to those with an equal household division. The same goes for those instances where the respondent does more of the household work, also a lower likelihood (RRR = .80; SE = .36) of increasing than holding constant compared to those with a equal distribution. This seems contradictory, also both of the effects are statistically insignificant. Looking at the second part, a similar non-consistent effect can be found. Comparing decreasing intended number of children to holding it constant, the likelihood decreases in both instances where the respondent or the partner does more compared to when there is an equal distribution (RRR= .77 and RRR =.34, respectively). Again, this effect is not statistically significant. What has to be kept in mind is that this is the household division before a possible change in the intended number of children, this raises the question of how much predictive power this can have.

The final model (model 3) includes the control variables and provides a comprehensive view of the factors influencing the outcome. Model fit statistics indicate an improvement in predictive accuracy, as evidenced by an R-squared value of 0.12. This indicates that the additional variables enhance the ability to predict changes in the intended number of children. Additionally, the Wald Chi-Square test for model fit suggests that the model is a good fit for the data (Chi2 = 68.17, p < 0.01). Looking at the main effect, transition to parenthood, the same results are found as in the earlier models. A significant effect is found for those that transition to parenthood (RRR = 4.08, $p < .01$). They are more likely to increase the intended number of children instead of holding them constant, compared to those that do not transition to parenthood. This contradicts the first hypothesis, which suggested a higher likelihood of a decrease in the number of children following first-time motherhood.

When it comes to the other variables, the age of the respondent shows to have a significant result on the change in the intended number of children. The results show that the older respondents are, the less likely they are to increase the intended number of children over time instead of holding them constant (RRR = .85, SE =.03). At the same time, the older respondents are, the less likely they are to decrease their intended number of children (RRR = .87, SE = .02). This indicates that the older women are, they will be more likely to hold their intended number of children constant, relative to increasing or decreasing them. This finding contradicts the earlier expectation stated in section 2.3,

which anticipated that as age increases, individuals would be more inclined to reduce their intended family size. Another interesting finding regards women's partner status. The output shows that those without a partner are less likely to (RRR = .53, SE = .18), almost 50% less likely, to increase their fertility intentions over time instead of holding them constant than those that are in a co-resident partnership. No evidence was found that those that are in a co-resident or in a non-resident partnership are significantly different in their likelihood to change their intended number of children over time.

Next, the analysis did not reveal any significant findings regarding the relationship between the educational levels of both the respondent and their partner and any changes in the intended number of children over time. However, it is worth noting that the data does suggest a potential trend: when the respondent finished tertiary education, there appears to be a slightly higher likelihood of them wanting to increase their intended number of children over time rather than maintaining the same number. Similarly, this trend is observed when the partner has tertiary education compared to non-tertiary education. Likewise, the data shows a lower likelihood of decreasing the intended number of children if the respondent has tertiary education as opposed to maintaining the same number. Conversely, when the partner possesses tertiary education compared to non-tertiary education, its suggests a somewhat higher likelihood of wanting to decrease the number, but these findings also lacked statistical significance. These findings are however in line with theory suggesting that those with higher education might increase their intended number of children over time (Billingsley & Ferrarini, 2014). Many of results here are not statistically significant, which could also be due to the low number of observations (N=519).

Lastly, no effect was found that depending on the initial hours worked by women have an effect on the likelihood of changing the intended number of children. Although, the data suggests a trend towards a slightly higher likelihood of decreasing the intended number of children, when working more hours, and a lower likelihood of increasing the intended number of children when working more hours, compared to holding them constant.
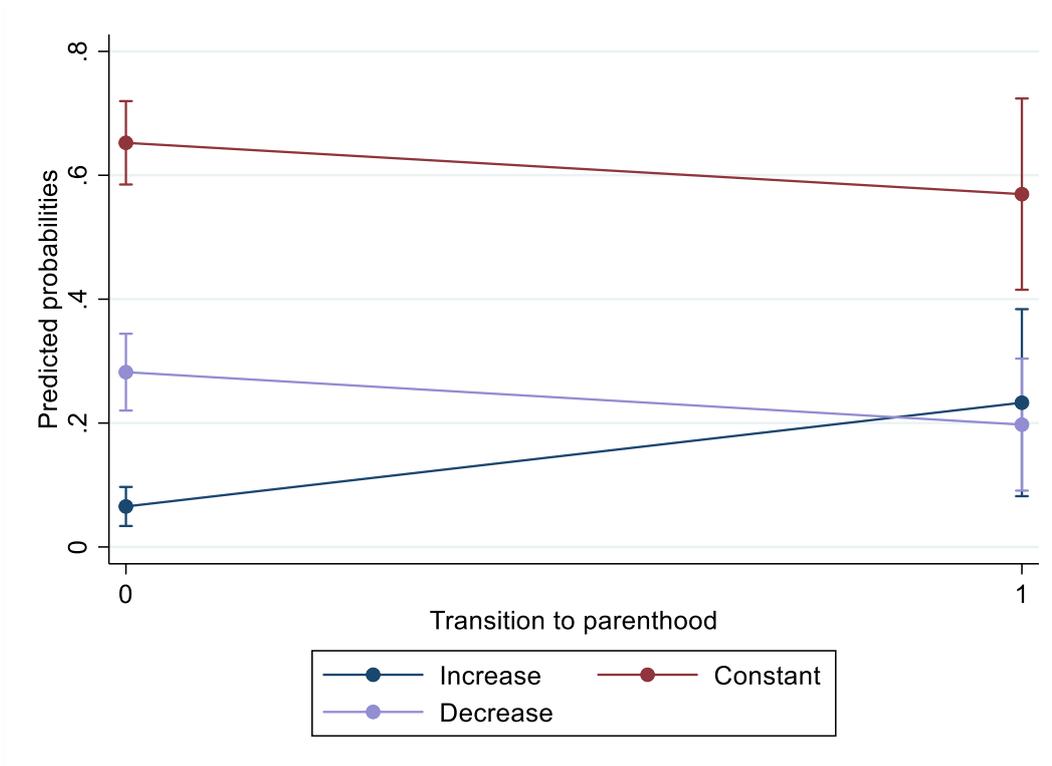
Figure 2: Probability of increasing, decreasing and holding the intended number of children constant, with a 95% Confidence Interval

The Marginsplot (figure 2) shown above provides predicted probabilities calculated from the output of the multinomial logistic regression. They provide a more tangible insight into the relationship between the transition to parenthood and the intended number of children, while holding the other variables in the model at their means or reference category. The y-axis of the plot represents the predicted probability of the three outcomes, each one represented by a graph. The two categories of the transition to parenthood are shown at the x-axis. The graph shows the predicted probabilities for the different outcomes. The graph shows that for both non-mothers and first-time mothers the highest probability is to hold the intended number of children constant over time. Keeping in mind that the probabilities shown here are at the means of the other variables, which in this case means women with an equal household division, average number of working hours, tertiary educated, with a partner who has also tertiary education, in a co-resident partnership, and with an average age (30 more or less). See Appendix B1.2 for plots with different categories taken for the other variables; which does not change the results. What can be seen is that when it comes to experiencing the transition to parenthood, this has a positive effect on the probability of increasing women's' intended number of children and a negative effect on decreasing them. It also has a slightly negative effect on the probability of holding the intended number of children constant, but this still has the highest

probability. Moreover, in line with the results shown in table 3 first-time mothers have a higher probability to increase the intended number of children than non-mothers.

4.4 Household division as a mediator to fertility change

Baron and Kenny (1986) presented a framework to establish a mediating relationship within a methodological path model. According to their framework, three conditions must be met for a variable to act as a mediator. Firstly, there should be a relationship between the independent variables' levels and the variables in the assumed mediating variable. Secondly, there must be a relationship between the mediator and the variables in the dependent variable. Finally, after accounting for the previous two conditions, the significant relationship between the independent and dependent variables should be diminished or eliminated. In this case, a possible mediating effect of the household division of labour on the relationship between the transition to parenthood and change in the intended number of children has been analysed.

For the first step in establishing an mediation effect, a separate multinominal logistic regression has been performed, with the household division as dependent variable. The dependent variable has been transformed to eliminate the "no partner" category, thus upholding three remaining categories: equal division, respondent assuming a greater role, and the respondent's partner assuming a greater role. Additionally, the focus is on the household division at time t+1 as the dependent variable, to take time sequence into account. This sequencing is essential to ensure the logical progression of events, as independent variables should precede the dependent variable, with the transition to parenthood occurring between time points t and t+1. Consequently, the transition to parenthood was incorporated into the model as an independent variable. The results from the multinominal regression show no significant effects for the transition to parenthood on the household division of labour, in contrast to hypothesis 2. The direction of the two estimated effects also give no conclusive picture about the nature of the hypothetical association. The first coefficient of the transition to parenthood (RRR = 1.07, SE = .27) shows that for new mothers compared to those without children have a slightly higher likelihood (times 1.07) to be in a household where they do more of the household work than to be in a household where there is an equal division. The second coefficient (RRR = 1.45, SE = .66) of the transition to parenthood shows that those that transition to parenthood, compared to those that do not, have a 1.45 times higher likelihood to be in a household where the partner does more of the household work instead of being in a household where there is an equal division. This first step already informs the lack of evidence for a mediation effect. However, looking at the steps of the medication effect might still provide valuable information.

Table 4: Multinomial logistic regression with household
division as dependent variable, and the transition to parenthood as predictor

Household division of labour[a]		Model	
		RRR (SE)	p
Respondent	Constant	.52** (.07)	<.01
	Transition to parenthood	1.07 (.27)	.78
Partner	Constant	.09** (.02)	<.01
	Transition to parenthood	1.45 (.66)	.42
Chi2		.67	
Pseudo R2		<.01	

* significant at .05 level ** significant at .01 level

[a] The reference category is an equal division of household labour

For the second step, the association between the mediator, household division, and the dependent variable, intended number of children, has been analysed. To look more closely at this association, an additional regression has been performed for easier interpretation, where the household division of labour variable is continuous. The household division will have the original constructed scale, where a low score indicates that the share of household tasks performed by the respondents are high, while a high score represents a high share of the tasks done by the partner of the respondent. Scores closer to the middle, as the average in the sample, indicates an equal division between the respondent and their partner. Table 5 shows the output of the multilinear logistic regression, where the household division variable is added at two time points to predict change in the intended number of children. The analysis shows only a significant result for the household division at time t+1 regressing *increasing* against holding *constant*. Having the variable at two time points in the model, controls the value on one for the other, meaning that the coefficient can be interpreted as change. As the coefficient is positive (RRR = 2.81, SE = 1.41), it suggests that an increase in the household division of labour (i.e. increasing the share done by the partner) from t to t+1 is associated with an increase in the likelihood of increasing the intended number compared to holding them constant.

For the third step, controlling for the effects in the prior two steps, it is analysed whether the significant relationship between the independent and dependent variables is reduced or eliminated. However, what the output in the models show is that the transition to parenthood remains significant over the models (on the part of increasing/holding constant), which does not change by inclusion of the household of division variable. In conclusion, the conditions for a mediating effect are not met.

Table 5: multinomial logistic regression with household division of labour at two time points predicting change in the intended number of children

Change in the intended number of children[a]		Model	
		RRR (SE)	p
Increase	Constant	.03* (.05)	.05
	Transition to parenthood	4.51* (3.09)	.03
	Household division t1	.45 (.19)	.07
	Household division t+1	2.81* (1.41)	.04
Decrease	Constant	1.52 (1.55)	.68
	Transition to parenthood	.66 (.27)	.30
	Household division t1	.69 (.27)	.34
	Household division t+1	1.08 (.42)	.85
Chi2		11.74	
Pseudo R2		.04	

* significant at .05 level ** significant at .01 level

[a] The reference category is: intended nr children constant (category 2)

5. Discussion and conclusion

This thesis has explored the relationship between entering parenthood and its implications for individuals' intended family size, with special attention to how gendered household role divisions play a role in this. This is an issue of great relevance given that fertility levels are at lowest levels and family dynamics have been changing a lot in the last decades (Mortelmans et al., 2016). Nowadays, women get very few children in their lifetime (OECD, 2022). This trend is evident in countries such as the Netherlands, where the average number of children per woman is at 1.6 (World Bank, 2023). Given that this figure falls below the population replacement level of 2.1, there arises a pertinent need to understand the underlying reasons behind this declining fertility rate. Interestingly, research suggests a general inclination towards desiring familiar larger than the realised fertility. Consequently, investigating the barriers that hinder individuals from realizing their preferred family size becomes crucial.

Throughout the years, many theoretical explanations have been developed to explain why fertility is low and why people do not realise their desired family size. One of theoretical streams

focuses on gender equity. This theoretical perspective was taken in this research as having the potential to help explain low fertility in Europe. This perspective presents the idea that extremely low fertility is linked to inconsistencies in the levels of gender equity between social institutions that prioritise the individual and those that prioritize the family (Raybould & Sear, 2021).This theory suggests that while women in developed economies have the capability to participate as equals in education and the job market, they face a dilemma if their roles within the family, a family-oriented institution, restrict their ability to achieve their personal aspirations (Aassve et al., 2015). With this perspective in mind, this thesis focused on how becoming a first-time mother affected women's intended number of children, as this had the potential to bring about significant changes in their daily life and may have exacerbated the mismatch between the public and family spheres. With regard to the research question, "How is becoming a first-time parent related to women's subsequent fertility intentions?" This research produced three main results, which are detailed below.

First, contrary to the first hypothesis, the result of this thesis shows no indication that the birth of a child makes women lower their intended number of children (H1). First-time mothers are not more likely to decrease their intended number of children than women who have not transitioned to parenthood. Contrary to the hypothesis, the findings actually reveal a counterintuitive trend among first-time mothers. Rather than witnessing a decline in the intended number of children after experiencing childbirth, it appears that first-time mothers are actually more likely to increase their intended number of children, instead of holding them constant (compared to those that have not transitioned to parenthood). Second, what also has been come forward in the analysis, is that there is a tendency to keep the intended number of children constant. Most women start of with either zero or two children as the intended number of children, and, as the descriptive data shows, many of them keep this constant over time. Third, no support was found for the second hypothesis, which stated that the association between the transition to parenthood and change in the intended number of children is mediated by the household division of labour (H2). Since the expected association was not found between both the transition to parenthood and the intended number of children, as well as no association between the transition to parenthood and the household division of labour, no evidence for such a mediation effect was found. Moreover, the results on the impact of household division of labour on change in the intended number of children was not conclusive. The household division at the starting point does not impact the likelihood of changing the intended number of children over time. However, when looking at the household division at different time points, the results indicated, that an increase in the share of household work done by the partner is associated with a higher likelihood of increasing the intended number of children by women.

The emerging trend identified in this study regarding first-time mothers' intentions to increase

their family size despite childbirth aligns with the concept of the 'two-child norm,' which is still deemed relevant as discussed by Sobotka and Beaujouan (2014). The concept of a 'two-child norm' posits that despite changing societal dynamics, a significant number of individuals still aspire to have, on average, two children. This norm reflects a balance between individual aspirations, socio-cultural influences, and demographic considerations. In this context, the findings of this thesis might indicate the continued existence of this norm. The persistence of the desire for additional children, as observed among first-time mothers, suggests that the 'two-child norm' exerts a substantial influence even after experiencing childbirth. Moreover, although the focus here was on the possible costs children can have on women's lives, children also fulfil fundamental human desires like providing love and nurturing. The parent-child bond is often viewed as a significant and lasting connection in people's lives, possibly contributing to parents' enhanced sense of purpose and life fulfilment, and can therefore encourage people to have more children (Simon, 2008).

In line with the two-child norm, what also has been come forward in the analysis, is that there is a tendency to keep the intended number of children constant. Most women start of with either zero or two children as the intended number of children and keep this constant over time. Billari (2006) addresses the issue of low fertility by highlighting that different combinations of the number of children can lead to the same low fertility level across countries. This phenomenon often results in a 'polarization' of the distribution of the number of children among parents. In some countries, such as those with a high prevalence of childlessness, a pattern emerges where parents tend to have two or more children, while others remain childless. Conversely, in countries where childlessness is less common, a significant proportion of the population opts for either one or two children. For instance, the Netherlands exhibits a high percentage of women who consider having zero children as their ideal family size. This suggests that the situation described earlier, characterized by polarization in the distribution of family sizes, is likely applicable to the Netherlands, as many women indicate to intend have zero children. Which means that the low fertility in the Netherlands could likely be due to this polarization, and less because of the lack of women moving from the first to the second child.

The former implies an existence of distinct groups, those who do not desire children and those aspiring for two or more, which can have implications for policy. As it underscores the need for a multifaceted approach that caters to diverse preferences. Policies should not only accommodate those who opt for larger families but also consider those who have consciously chosen to remain childless, or those that are unable to meet their desired fertility. Understanding the factors driving these differing desires can guide the design of targeted initiatives that provide support for both groups. Another crucial aspect to consider is the question as to how women can realise their intended fertility. If they hold a consistent intention of two children, a pivotal question emerges: to what extent can these

aspirations be fulfilled? Especially depending on the social context, there remain gaps between people's desired and achieved fertility (Liefbroer, 2008), which raises questions about why they are unable to do so.

Although the NKPS provides rich data on family formation, and has the advantage of following people over time, the data has some limitations. For one, the use of older data for this thesis is not without its limitations. This introduces the potential for inaccuracy in portraying current family dynamics. A span of two decades has brought about significant changes, from shifts in gender dynamics and a transformed gender equality index to alterations in the work-family balance. This temporal gap might affect the applicability of the observed trend to the contemporary context. Moreover, while the study encompasses an overall reasonable sample size, a crucial aspect comes to light when considering the subset of those transitioning to parenthood. This subset, although forming a smaller portion of the total sample, was central to this study. However, the limited size of this subgroup might pose challenges in capturing the full spectrum of effects. Family planning decisions are complex and, influenced by various individual, societal, and contextual factors, can be nuanced and multifaceted. In instances where the subset is small, the statistical power to detect these effects might be reduced, potentially leading to results that may not fully reflect the diverse range of influences at play. Hence, while the study provides valuable insights, acknowledging the potential limitations imposed by the subset size is essential in comprehending the robustness of the observed trend.

Moreover, due to inherent data limitations, the study encountered the necessity of making difficult decisions during its course. The inconsistent information from three distinct waves posed a particular challenge, as certain variables exhibited discrepancies across these waves. A notable instance was the central variable of household division of labour, which was constrained in its scope, focusing solely on general tasks in the initial two waves. Although the third wave presented a more comprehensive version, the decision was made to adopt a simplified version to ensure uniformity across all waves. However, this approach came with a trade-off, as it only encompassed general household responsibilities, omitting childcare-related tasks. Consequently, a potentially important aspect was overlooked, potentially leading to an incomplete depiction of the household division after the transition to parenthood. This limitation could contribute to the absence of findings concerning the correlation between parenthood transition and household division, as well as the limited connection between household division and intended number of children. Furthermore, the study was compelled to omit crucial variables such as relationship satisfaction and partnership dissolution, despite their established significance in fertility-related research (e.g., Luppi, 2015; Doss & Roades, 2017). These omissions potentially hindered a comprehensive understanding of the interplay between

these factors and fertility dynamics after the birth of the first child.

The sample size used in this thesis is relatively small. However, the number of observations is increased by drawing from data collected across three distinct waves. This increases the sample because individuals who took part in all three waves provide data for two distinct instances: firstly, during the transition from wave one to wave two, and subsequently, from wave two to wave three. This dual measurement arises due to the possibility of these individuals experiencing the transition to parenthood between all the three successive waves. However, an important consideration is the statistical technique employed in this study, which entails utilizing a cross-sectional model while incorporating longitudinal data. It is worth noting that more extensive longitudinal models capable of accommodating time-varying factors might have been more suitable. In the analysis, only changes in the household division of labour were considered, as the other variables remained constant over time. Although the time invariance of certain variables, such as educational attainment beyond a certain age, may not significantly impact the analysis, the inclusion of information regarding changes in partnership status over time, for instance, could have provided valuable insights. Future research should consider this.

Despite its limitations, this study has contributed to the literature by showing the consistency of the intended number of children over time, the persistence of the two-child norm in contemporary society, and the polarisation of women's fertility desires in the Netherlands.

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APPENDIX A

METHODS

1.1 Assumption testing

Table A1: Spearman's correlation between all variables in the model

	Change	TTP	HH	Edu R	Edu P	Partner	Work	Age
Change	-							
TTP	-.13	-						
HH	-.01	-.34	-					
Edu R	-.08	.11	.04	-				
Edu P	-.01	-.33	.82	.15	-			
Partner	.15	-.34	.90	.01	.89	-		
Work	.05	.01	.13	.22	.10	.08	-	
Age	-.07	-.18	.06	-.01	.10	.08	-.02	-

Note that Spearman correlations can be negative in contrast to the standard used correlations. Spearman correlation measures the strength and direction of the association between two variables. Also, the correlations between *household division of labour*, *partner status*, *and education partner* are high, which is because they share the same category of 'no partner'. However this will not bias the results as the categories of education partner and household division are left out of the regression analysis.

APPENDIX B

RESULTS

1.1 Bivariate results

Table B1: Cross tabulation between respondent's intended number of children between the different time

Intended nr. of children at t	Intended nr. of children at t+1			
	0	1	2	3+
0	74.87%	2.62%	17.28%	5.23%
1	22.56%	44,69%	32.75%	-
2	32.86%	11.43%	49.05%	6.67%
3+	32.00%	4.00%	29.00%	35.00%

Table 1 displays the percentages of participants within each specified category of the intended number of children during the initial time point, categorized by the corresponding intended number of children during a subsequent time point. For example, of those respondents that indicated at the first time point to have a intended number of children of zero, 74.87% also indicated to have zero intended number of children at the later time point. This shows that a very large majority of those with zero intended number of children keep this intention constant over time. The constant number of intended number of children is especially striking for those that had zero intended number of children, but also for those with an intended number of one, two, three or more, the highest proportion kept the same intended number of children. Moreover, also quite a big proportion of those that started with an intended number of children of two or more, adjusted this intention to zero children over time. This is striking, keeping in mind that this is controlled for possible children that were born in between the time points. Lastly, not many respondents increased the intended number of children, only of those that started with an initial number of one, a relatively big proportion (32.75%), adjusted this to two over time.

1.2 Model analysis
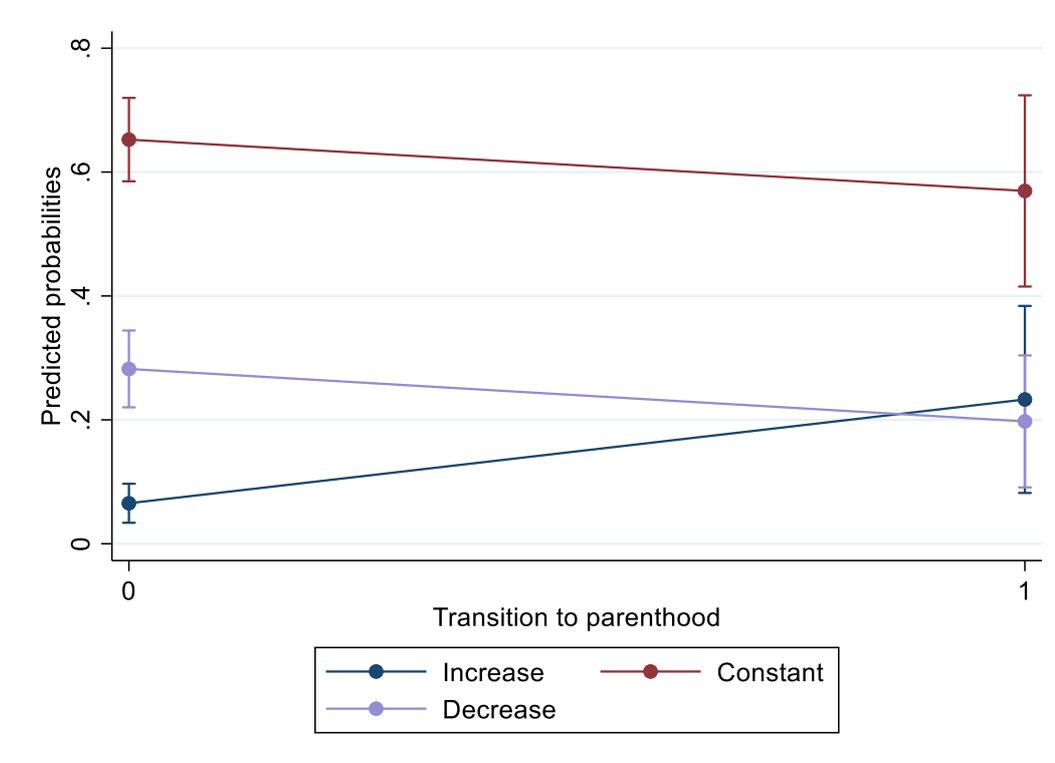
Figure B1: predicted probabilities for those that transition to parenthood and those that have not [no partner]
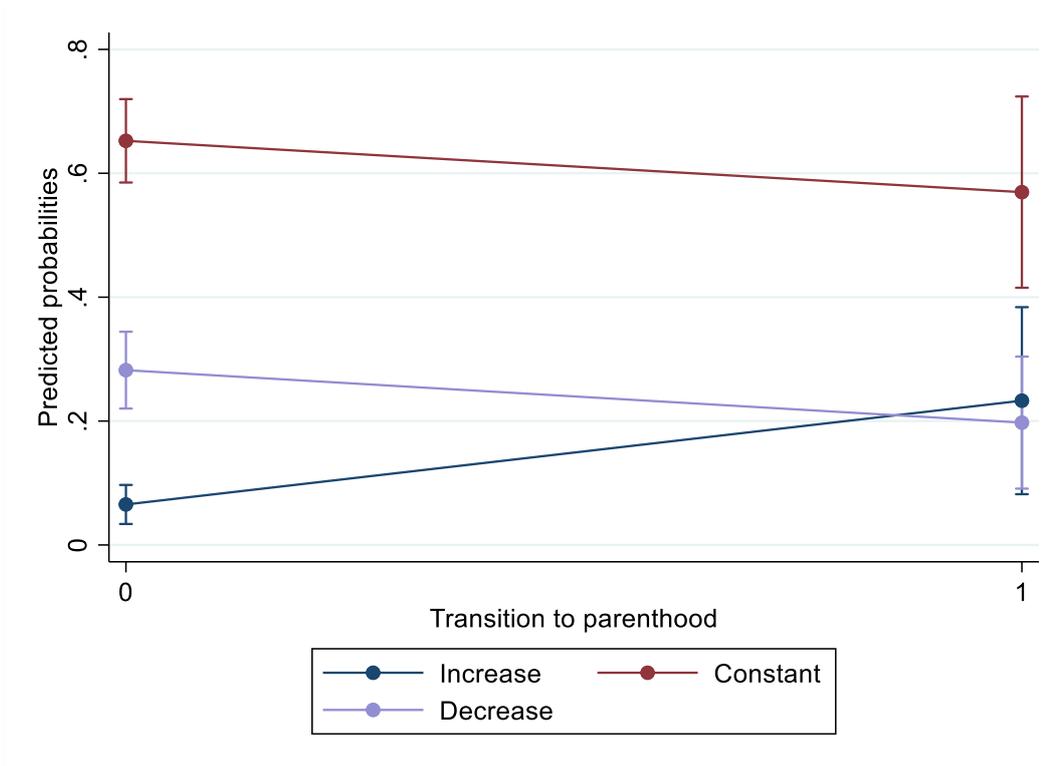
Figure B2: predicted probabilities for those that transition to parenthood and those that have not [non-tertiary education]
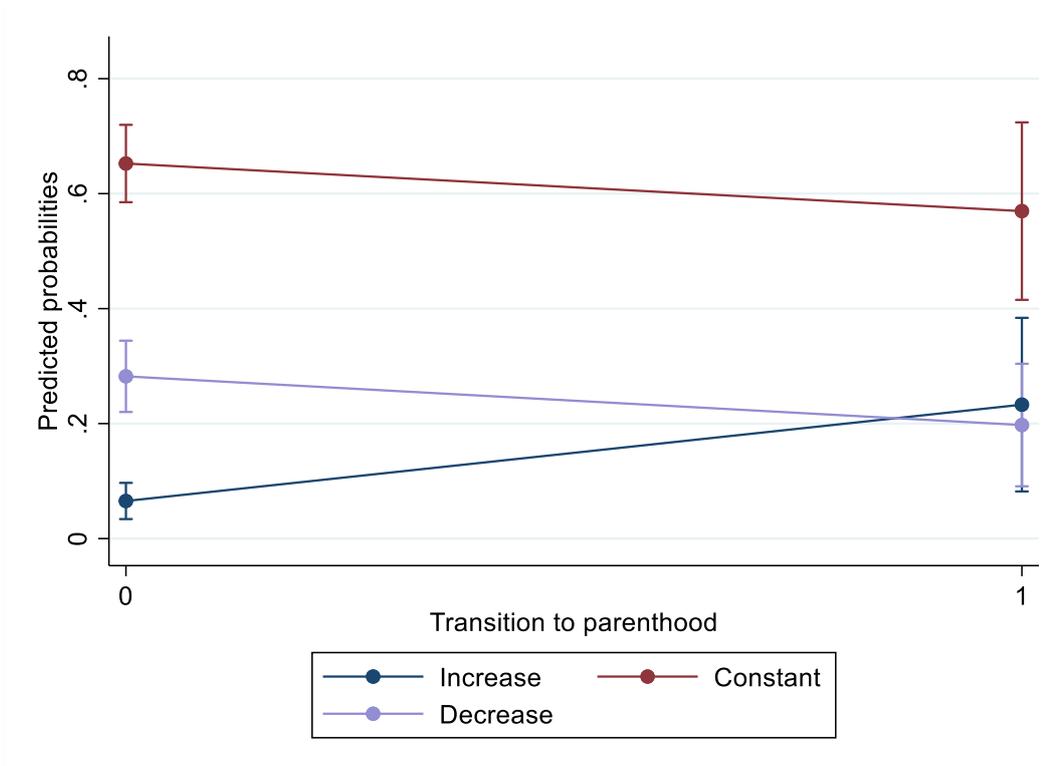
Figure B3: predicted probabilities for those that transition to parenthood and those that have not [unequal household division – respondent taking on biggest share]