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Abstract

This paper investigates how future parents' misvaluations of future employment preferences can contribute to gender inequality on the labour market. To do so, I use a sample of 265 participants, consisting of childless women, mothers, childless men and fathers. By comparing childless women to mothers and childless men to fathers, I found that childless women do not misevaluate the number of hours they will work once they will become mothers, whilst childless men expect working less once becoming fathers than what fathers in reality do. The number of perceived socially acceptable work hours of men are the same as of fathers, whilst childless women have a higher perception of what is socially acceptable for women than mothers. I conclude by pointing out that since mothers want or are not able to work more, whilst fathers want or are forced to work more, this mismatch between expectation and reality of future parents may contribute to persistent gender inequality on the Dutch labour market.

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1. Introduction

Becoming a parent is often described as one of the most beautiful things that people can experience during their lives. The joy children can give is something said to be priceless. Nevertheless, when comparing mothers' and fathers' position in the labour market, a clear gender and parent-based discrimination appears. The differences in socio-economic consequences of becoming a parent suggest that 'priceless' may not be the appropriate term to use when describing parenthood. Motherhood appears to be a source of stagnating careers and professional challenges. Mothers aiming to build careers inevitably face the 'motherhood penalty', referring to the fact that mothers tend to earn 6% to 15% less than fathers per child (Weeden, Cha & Bucco, 2016). Since researchers first dived into the topic, like Becker (1985), until now, little improvement has occurred for working mothers (Boll, Leppin, Rossen & Wolf, 2016; Cukrowska-Torzewska & Matysiak, 2020). In contrast with women who suffer a penalty for having children, men becoming fathers are rewarded in terms of salary. This reward, the 'fatherhood premium', is estimated to be on average 4% to 8% (Glauber, 2008; Wang-Cendejas & Bai, 2018). This implies that for every child a father has, his wage raises with 4% to 8%. Gender and parenthood-based discrimination can be related to cultural beliefs rooted in society. Various studies on the topic show how employers' behaviour is biased due to prejudices and different expectations from mothers than fathers (Benard, Paik, Correll, 2008; Kricheli-Katz, 2013; Boll, Leppin, Rossen & Wolf, 2016; Wang-Cendejas, Bai, 2018). Very often, contrasting expectations between the 'perfect' employee and the 'perfect mother' cause the penalisation of mothers on the labour market. Fathers on the other hand are advantaged by the favourable image associated to them, which results in better working opportunities. The existence of persisting traditional gender roles within the household implies a certain traditional gender conform behaviour, which only causes the confirmation of employers' existing stereotypes and prejudices. This generates the vicious circle of gender and parent-based discrimination where parents find themselves trapped into.

To break this vicious circle, making people aware of their prejudices is a crucial step. Researching whether expectations of future parents regarding housework sharing, childcaring and working coincide with the reality parents face on these topics, is therefore extremely relevant. Research by Endendijk, Derks and Mesman (2018) showed how the views on gender roles are affected by parenthood. To add up to this, this research aims to illustrate the effect of parenthood on employment preferences. The focus will be on observing whether future parents' expectations about employed work hours and socially acceptable work hours are in line with parents' perceived reality. Also, the effect of parenthood on gender norms will be analyzed, in order to control whether the results are in line with Endendijk et al.'s (2018) research. Therefore, the following research question is presented:

‘How do misevaluations of expected and socially acceptable employed hours of future parents reflect the persistence of gender and parent-based inequalities?’

In the next paragraph, I will discuss relevant existing literature on the topic of gender and parent-based discrimination. This will lead to the introduction of the projection bias, which will be used to define the misevaluation of future preferences. After presenting the sub-questions and hypotheses, I will illustrate the design and method used to answer the research question. Afterwards the results will be presented, and an overall conclusion will be drawn. Lastly, I will discuss possible remarks on the external and internal validity of this research.

2. Theoretic framework

Since the beginning of the '80 scholars have been studying gender inequality on the labour market. Overall, two main themes come forward in the literature. First, different beliefs and biases that contribute to the existence of gender-based prejudices in society. Second, how these beliefs contribute to the enforcement of gender inequality on the labour market. They influence the behaviour of individuals, making them (un)conscious contributors to the enforcement of these prejudices. The existence of this vicious circle makes gender inequality on the labour market difficult to wipe out. I will illustrate various theories and past studies on this matter, and I will emphasize the importance of unbiasing people to eliminate the persistent inequality. At the end I will present a short summary which will include the sub-questions and hypotheses that I use to answer the main question of this research.

Cultural beliefs

Prejudices

Research has demonstrated that existing prejudices towards (expecting) mothers contribute to the persistent gender inequality and parenthood penalties on the labour market. Part of this prejudices are due to cultural beliefs about the 'perfect mother' and the 'perfect employee'. The perfect mother is a woman that is completely devoted to her children. Pregnancy is even often seen as a blame. Kricheli-Katz (2013) found that employers' hiring decisions about mothers were affected by their perception on whether their pregnancies occurred voluntarily. In other words, the belief that getting pregnant was a conscious decision made employers more likely to penalise women for having become mothers. It is like women should have foreseen that having children would negatively affect their careers. In the eyes of employers, being a 'perfect mother' creates a conflict with the image of the 'perfect employee', who is entirely devoted to his/her job (Benard, Paik, Correll, 2008). Nevertheless, childless women are not spared by the discrimination. The work of women with high-profile jobs is often seen as less valuable than that of their male counterparts, which is also known as cultural devaluation (Boll, Leppin, Rossen & Wolf, 2016).

The reaction of employers toward men becoming fathers is the opposite compared to the one towards mothers. Fathers are perceived as more serious and devoted compared to childless men. This makes them attractive employees, since they will not 'chicken-out' facing difficulties at work (Wang-Cendejas, Bai, 2018). This results in associating them to being better candidates for promotions and important positions within their working environment (Coltrane, 2004). In the eyes of men, being the provider of the family is what makes them successful males and fathers. Even men with working wives often feel mainly responsible for the family's income (Coltrane, 2004).

However, not all fathers are privileged to the same extent. For instance, there are significant differences between various ethnic backgrounds and marital statuses. Married fathers tend to benefit from a bigger fatherhood premium than unmarried fathers. Killewald (2012) found that the status of marriage itself was not the reason for the higher fatherhood premium. Married men were more likely to fit in the image of family's caregiver compared to unmarried men, which resulted in a higher fatherhood premium. Stepfathers, fathers who did not live near their children and fathers with part-time working wives did not equally benefit from the premium either (Killewald, 2012). Furthermore, human capital and work-related characteristics negatively impact the fatherhood premium too. This indicates that next to ethnic background and marital status, there are other significant characteristics affecting the premium (Wang-Cendejas, Bai, 2018). There seems to exist also a relevant difference between high, middle and low incomes. The higher the income, the larger the fatherhood premium (Glauber, 2018).

The stereotype content model

The stereotype content model (Fiske, Cuddy, Glick & Xu, J.,2002) can explain cultural prejudices. According to this model, people often stereotype others using two dimensions: competence and warmth. In the case of women this creates two conflicting images. Mothers are seen as warm but not competent, while childless women are perceived as competent but cold. This means that, regardless from the choice women make concerning having or not having children, they are associated with negative characteristics (Benard, Paik, Correll, 2008). Consequently, women are penalized in the hiring process and on the labour market (Benard, Correll, 2010). Benard and Correll (2010) further expanded their research on the topic of mother penalisation, by researching normative discrimination towards working mothers. This kind of discrimination is induced by descriptive stereotyping, defined by Benard and Correll as 'widely shared beliefs about different traits and abilities men and women possess'. It leads employers to (un)consciously associate skills needed for success in the work environment with typically masculine characteristics. The research was conducted by asking individuals to determine whether unambiguously well qualified job applicants, consisting of both men and women, were suitable for a certain job. Surprisingly, women penalized mothers more than men. Benard and Correll hypothesized that this was caused by jealousy of female participants towards women who succeeded in having both children as well as a successful career (Benard, Correll, 2010).

Employment decisions of parents

Occupational segregation

Occupational segregation refers to the segregation that arises on the labour market, dividing mom-proof and dad-proof jobs in different categories. According to a recent study commissioned by the European Union, the main cause of occupational segregation is that women are mostly guided towards jobs that fit better with the image of 'the perfect mother' (Boll, Leppin, Rossen & Wolf, 2016). In other words,

mothers often switch to jobs that can be easily combined with their motherhood duties. Consider jobs with regular working hours, where travelling is not necessary or without important responsibilities. Furthermore, mothers often start working part-time, which has negative consequences on their income and thus financial independence. In addition, part-time work is often considered less efficient and valuable. Due to increased coordination and employment costs for the employer, part-timers tend also to be paid less for the same quality of performed work per hour. Besides, increased costs discourage employers to permit working part-time for high-profile jobs. This barrier makes most mothers unable to aspire to high-level careers (Boll, Leppin, Rossen & Wolf, 2016). Men on the contrary tend to start working more hours once they have children. Wang-Cendejas and Bai (2018) found fathers to be more determined bearing harsher conditions at work. They cannot afford to jeopardize their regular incomes as the family's provider. This makes them more likely than childless men to hold on to their jobs, even when they face difficulties.

The persistence of occupational segregation

Occupational segregation is hard to reduce. Mainly because the factors causing the segregation keep enforcing each other, making it difficult to achieve a real change. There are various studies that try to understand the underlying reasons for this. Most scholars seem to agree that as already mentioned before, cultural beliefs play a big role. Furthermore, traditional gender roles within the household better enable men to focus on their career. With the birth of children, the number of hours that must be spent on housework increases. In traditional households, the majority of this work is done by mothers. This implies that fathers are less affected professionally by it (Glauber, 2008). Men, working mostly full-time, earn more money and work experience. Gaining experience helps them becoming more productive and valuable employees (Wang-Cendejas, Bai, 2018). Both these factors subsequently help them to get successful results within their working environment, enhancing chances of getting a pay raise or being promoted (Weeden, Cha & Bucco, 2016). Mothers on the other hand are less productive on the work floor, but not because they are less intelligent or capable (Budig & England, 2001). Traditional gender roles encourage them to work part-time, causing mothers to accumulate less working experience. Furthermore, taking care of their children and managing the household leaves them little energy left to have high-profile jobs. Mothers are more likely to 'save' energy at work, to meet the requirements of a 'good' mother (Budig & England, 2001). Multitasking between mother duties and work is one of the causes women experience more feelings of stress and work overload (Offer, Schneider, 2011). Even among equal working parents, multitasking is more common amongst mothers than fathers (Bianchi, Wight, 2010). This results in mothers experiencing more often the work-family conflict, in comparison to their male counterparts (Blair-Loy, 2009). All these factors are strongly related to the persistence of the enlarged gender pay gap after parenthood.

The effect of working parents on children

Existing literature shows how mothers are often penalised by working part-time and bearing more responsibility over managing children and the household. Parents do not undertake a lot of action to improve this situation. Take for instance Sweden, where couples are free to part 12 months of parenthood leave without any gender restrictions. Fathers tend to take up fewer parenting months than mothers, even though there is no legislation encouraging this behaviour. In my personal experience, people are often afraid that a full-time working mother can be harmful for the child's development. Goldberg *et al.* (2008) researched whether motherly employment had negative effects on various factors that indicate children's development, such as official grades, teacher's ratings and mental tests. The meta-analysis was conducted by analysing 67 other studies on this subject. They did not find any evidence pointing towards a negative effect of working mothers on children's development (Goldberg *et al.*, 2008). Children are significantly and positively affected by the views of mothers towards gender roles within the household. Davis and Wills (2010) found that when mothers work and share the household tasks equally with their partners, it affects the views that the children have of gender roles. This is especially true in the case of daughters, being significantly affected by their own mothers when facing the family-career conflict. Castro, Lingo and McGinn (2019) found that daughters who were raised by employed mothers compared to unemployed mothers, were themselves more likely to be employed and to end up in leadership positions. Besides, they experienced less difficulties when combining motherhood with their careers, emulating their mothers. Another research in Denmark (Landais, Kleven, Sjøgaard 2019) also found evidence of daughters stepping into their mother's footsteps when it comes to choices between career and motherhood, confirming the findings of Castro, Lingo and McGinn. When the mother did not choose her career over childcaring, daughters were also more likely not to. Sons who were raised by working mothers, spend more time engaging in housework activities, such as cleaning and doing groceries, in comparison to sons who were raised by unemployed mothers.

The importance of debiasing

The past two paragraphs have shown that prejudices about gender and parental status influence behaviour, which enforces stereotypes. Getting a better understanding whether employment preferences differ between genders and change due to parenthood, can set light on why inequalities on the labour market are so persistent. Therefore, I will introduce the projection bias to explain how misvaluations of future preferences can be applied to various matters and help us getting a better understanding on the matter of gender inequality.

The projection bias

The projection bias describes the issue of having incorrect future preferences. It is a cognitive bias that represents the way people often overestimate the degree to which their *future* preferences will resemble

their *current* tastes (Loewenstein, O'Donoghue & Rabin, 2003). People are mostly found to correctly predict the direction of change, but not to be able estimating the magnitude of it (Loewenstein, O'Donoghue & Rabin, 2003). Loewenstein et al. (2003) associate the projection bias with unsuccessful maximization of intertemporal utility and dynamic inconsistency. Various other studies find that people tend to overestimate the way that major life changes affect their long-term happiness. For instance, Jepson et al. (2001) found that people with a certain illness have a higher quality of life perception than what healthy people would expect them to have. Jepson et al. (2003) also found that it is possible to 'debias' people, by letting them realise their misevaluation.

The projection bias in the context of this paper

The same train of thought can be applied to analyse men and women becoming parents. It is possible that they are not fully aware of the consequences having children bring, in terms of career and gender roles. A recent study in the Netherlands researched the effect of parenthood on peoples' view on gender roles (Endedijk, Derk & Mesman, 2018). The study revealed that implicit gender stereotypes were more traditional in the group of parents compared to the group of non-parents. In addition, mothers spent more time on childcaring and contributed less to the households' income. Over time, a fraction of the parents, consisting especially of mothers, moved back towards a more egalitarian gender role approach. Others instead, had a stable perception of gender roles or to just slightly changed it over time. For example, fathers with formerly traditional views on gender roles before having children, did not become more egalitarian over the years. The observed change in perception of one part of the parents supports what Endedijk et al. (2018) call the stereotype-as-states hypothesis. This hypothesis states that perceptions of stereotypes change over time, depending on the information that individuals are exposed to. This implies that stereotypes can be broken over time.

Creating more awareness on existing gender role stereotypes among future parents and young parents is therefore key for breaking the vicious circle of gender and parent-based discrimination. To do so, it is essential to analyse how employment preferences change due to parenthood and whether future parents misevaluate their future preferences. If parents' employment expectations do not coincide with reality, like Jepson et al. (2001) showed with misevaluation of happiness, parents might fall back into traditional gender role patterns after having children (Endedijk et al., 2018). Understanding and consciously recognizing how changed preferences and employment choices influence the persistence of gender inequality in the labour market, can help us realize the magnitude of the effect traditional gender roles have on parents. Also, realizing how society's pressure changes once you become a parent gives future parents the time to figure out employment related questions before the child is born.

Relevance of this research

In conclusion, researching how misevaluations of future employment preferences can contribute to gender inequality is relevant to study for the following reasons. First, studying the change in employment preferences can set light on the real consequences traditional gender roles have on the labour market. This information can be used to ‘debias’ future parents, as Endedijk et al (2018) mentioned in their paper. Making people aware that tastes are likely to (unconsciously) change over time, can give (future) parents a reason to be more careful and conscious about decisions they make that affect the gender roles within their own family cycles (Gawronski & Bodenhausen, 2006). Secondly, this research does not only look at the changed employment preferences caused by parenthood, but also at the effect various external factors have on the matter. Specifically, I will examine whether the traditionality of views on gender roles and the traditionality of the environment subjects grew up in affect employment preferences. Lastly, I will be able to control whether the results of Endedijk et al. (2018) and Landais et al. (2019) are in line with the results of this paper, in terms of respectively changed perception of gender roles and the effect of the traditionality of own parents on participants’ views on gender roles.

Conclusion theoretic framework

In the previous paragraphs, I presented various prejudices and beliefs that fuel the persistence of traditional gender roles. These beliefs stimulate gender conform behaviour of mothers and fathers, which is consistent with the role society pushes them into. As a result, mothers and fathers get stuck in a vicious circle of gender and parent-based prejudices and biased behaviour. Parenthood lets women be perceived as less productive and valuable employees, making them less likely to be hired for high-level jobs. Fathers on the opposite, are perceived as better, more devoted employees. This results in significant wage differences, commonly known as the gender pay gap. Parenthood induces the majority of mothers to start working part-time, gaining an irreversible lag on professional level. Principally, this is caused by the deeply rooted gender roles within the household. Mothers tend to spend more time on housework and childcaring, leaving them with less time and energy to spend on work. Men start working more hours when they start having children to fulfil their role as provider of the family. As this responsibility is taken seriously, fathers are more likely to overcome difficulties at work and not ‘chicken out’ when things get tough. This makes them even more attractive employees. Moreover, since childcaring and housework is mostly taken care of by the mother, men tend to have more energy and time left to spend on working.

Parenthood penalties and premiums are two existing phenomena that reflect the degree of persisting gender inequality on the labour market. Therefore, understanding how changes and misvaluations of employment preferences can contribute to the persistent traditionality of gender roles, and therefore gender inequality, is important to understand the existence of gender inequality on the labour market. Previous research already showed that attitudes towards traditional gender roles change by having children. In this research I focus on whether the expectations about employed hours of future parents are affected by the projection bias and whether parenthood changes the perception of socially acceptable working hours. Besides, to control for the findings of Endedijk *et al.* (2018) and Landais *et al.* (2019), I will look whether significant changes in views on gender roles arise and whether the traditionality of the environment subjects grew up in affects their own views on gender roles.

Therefore, I set up the following sub-questions:

1. How does motherhood affect women’s expected employment preferences and views on gender roles?
 - *Hypothesis 1a:* Childless women expect to work more hours after they have children than what mothers in reality do.
 - *Hypothesis 1b:* Childless women’s perceived socially acceptable work hours are more than the ones mothers perceive.
 - *Hypothesis 1c:* Childless women have a less traditional view on gender roles than mothers.

2. How does fatherhood affect men's employment preferences and views on gender roles?

- *Hypothesis 2a:* Childless men expect to work fewer hours once they have children than what fathers in reality do.
- *Hypothesis 2b:* Childless men's perceived socially acceptable work hours are less than the ones fathers perceive.
- *Hypothesis 2c:* Childless men have a less traditional view on gender roles than fathers.

3. How does the traditionality of the environment participants grew up in influence their views on gender roles?

- *Hypothesis 3a:* Childless women who grew up in traditional households have a more traditional view on gender roles than childless women who did not grow up in a traditional household.
- *Hypothesis 3b:* Mothers who grew up in traditional households have a more traditional view on gender roles than mothers who did not grow up in a traditional household.
- *Hypothesis 3c:* Childless men who grew up in traditional households have a more traditional view on gender roles than childless men who did not grow up in a traditional household.
- *Hypothesis 3d:* Fathers who grew up in traditional households have a more traditional view on gender roles than fathers who did not grow up in a traditional household.

4. How does the degree of traditionality of gender roles affect what participants perceive as socially acceptable employed hours?

- *Hypothesis 4a:* Childless women with more traditional gender role views perceive lower socially acceptable employment hours.
- *Hypothesis 4b:* Mothers with more traditional gender role views perceive lower socially acceptable employment hours.
- *Hypothesis 4c:* Childless men with more traditional gender role views perceive lower socially acceptable employment hours.
- *Hypothesis 4d:* Childless women with more traditional gender role views perceive lower socially acceptable employment hours.

5. To what extent are people aware of their own traditionality of views on gender roles?

- *Hypothesis 5a:* Childless women have more traditional views on gender roles than what they think they have.
- *Hypothesis 5b:* Mothers have more traditional views on gender roles than what they think they have.
- *Hypothesis 5c:* Childless men have more traditional views on gender roles than what they think they have.
- *Hypothesis 5d:* Fathers have more traditional views on gender roles than what they think they have.

3. Data and methodology

In this section, I will give an overview of the sample and the statistical methods used to analyse the data. I will first show the main characteristics and summary statistics of the data, to get a better comprehension of its external validity. Finally, I will present the statistical tests that I used to generate the results.

Data

Collection and description of data

I created and distributed an online survey on the survey platform Qualtrics. I collected data from a convenience sample consisting of my family, friends and connections through social media platforms such as LinkedIn and Facebook. The data consists of four different target groups: fathers, mothers, childless men and childless women. The age of the subjects in the target groups ranges between 21-45. Focusing on a relatively small age range reduces the impact of confounds, such as the generation gap, on people’s view on gender roles. The geographic distribution of the total sample shows that the majority of participants is Dutch or resident in the Netherlands (figure 1 and 2).

The sample of childless participants consists of 119 childless woman and 67 childless men, respectively aged on average 24 and 25 (table 1). These averages suggest that both target groups are good representations of young people that can soon become parents. The geographic distribution shows that the majority of childless participants is Dutch and resident in The Netherlands. Remarkably, 8% of the childless women is resident in Italy, versus 9% of the childless men. Also, 14% of the childless women has an Italian nationality, against 19% of the childless men. This indicates a relatively high participation of Italians to the survey.

The sample of parents consists of 39 fathers and 39 mothers. Table 1 shows that the average age of the mothers in the sample is 37, whilst the one of fathers is 39. Yet again, the majority of the target groups is resident in The Netherlands and has a Dutch nationality as well. Another similarity with the target group of childless participants is that a relatively large share is resident in Italy or has an Italian nationality.

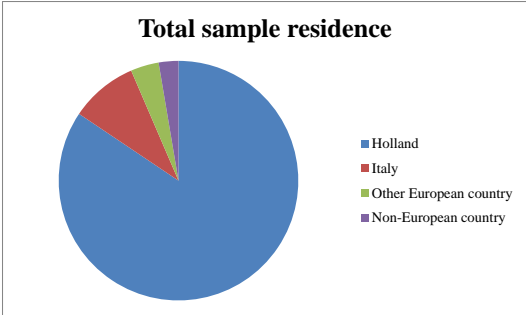


Figure 1: Total sample residence distribution

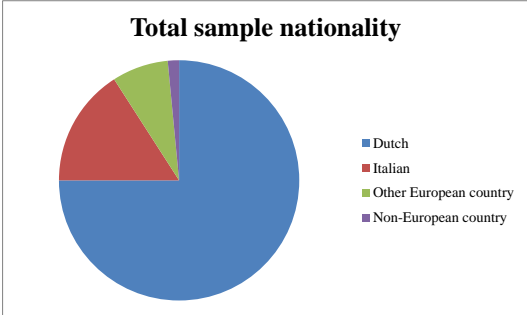


Figure 2: Total sample nationality distribution

Table 1: average age per target group

	Average age
Childless women	24
Childless men	25
Mothers	37
Fathers	39

Methodology

The survey

Participants were directed to two different versions of the survey, depending on whether they were parents. For both groups, the survey consisted of three parts. In the first part, participants were asked to answer several questions about the number of actual and preferred worked hours per week and their own estimate of socially acceptable working hours for someone of their gender. In the second part, they were asked to state how much they (dis)agreed with statements, which described different scenarios of gender roles within households. See [figure 3](#) for a few examples. In the last part, participants were asked to fill in some personal information, like nationality and gender.

It is normal for a woman to stop working a few years when she starts having children.

completely disagree.

0 1 2 3 4 5 6 7 8 9 10

completely agree.

When a child gets ill, the father should stay home to take care of him/her, whilst the mother goes to work.

completely disagree.

0 1 2 3 4 5 6 7 8 9 10

completely agree.

Men should start working part-time once they have children.

completely disagree.

0 1 2 3 4 5 6 7 8 9 10

completely agree.

In a household, the main responsibility of the mother is working, whilst the one of the father is child caring.

completely disagree.

0 1 2 3 4 5 6 7 8 9 10

completely agree.

Figure 3: example of statements

Dependent variables

To test the hypotheses formulated in the conclusion of the theoretic framework, the following variables will be treated as dependent variables ([table 2](#)). Participants filled in two similar but different versions

of the survey, depending on their parental status. [Table 2](#) describes the interpretation of the variables per group.

Table 2: dependent variables		
Parents		
Variable	Variable description	Measurement
<i>Actual work hours</i>	The number of hours worked per week	Open question
<i>Socially acceptable work hours</i>	The amount of socially acceptable work hours per week for one's gender	Open question
Non-parents		
Variable	Variable description	Measurement
<i>Preferred future work hours</i>	The desired number of working hours per week after having children	Open question
<i>Socially acceptable work hours</i>	The amount of socially acceptable work hours per week for one's gender	Open question

Actual work hours and preferred future work hours

This variable describes the difference between the amount of actual working hours of parents and the amount non-parents expect to prefer working once they have children. Testing whether these two answers significantly differ, can point to a possible misvaluation of childless persons about employment.

Socially acceptable work hours

This variable describes the difference between what parents and future parents perceive as socially acceptable working hours for someone of their gender. A significant difference between those two groups can indicate a change in what is perceived as socially acceptable for one's gender.

Independent variables

Next to researching whether parenthood affects the dependent variables, I will include some other variables to control for other possible influencing factors ([table 3](#)).

Table 3: independent variables		
Variable	Variable description	Measurement
<i>Parental status</i>	Whether the participant is a parent or not	Yes/No
<i>Gender roles own parents</i>	The degree the participant's parents had a traditional division of gender roles	Scale of 0-10
<i>Traditionality score</i>	The degree the respondent's answers are in line with traditional gender roles	Scale of 0-10

Traditional gender roles of own parents

This variable describes the division of gender roles of the participants' parents. On a scale of 0 to 10 participants rated how traditional his/her own parents were regarding housekeeping, working and child-caring. The higher the participant's score, the more traditional the gender roles of his/her own parents.

Traditionality of gender views

This variable, from now on mentioned as traditionality score, describes the degree of which the participant has a traditional view on gender roles. The variable's outcome is a cumulative number that is calculated using the answers of the participants on part two of the survey, where gender related statements were presented in a randomized order. Participants filled in how much they agreed with each statement on a scale of 0 to 10, where 0 meant 'not agree at all' and 10 'completely agree'. To prevent the acquiescence bias¹ to affect the responses of the survey, some statements described traditional gender roles and others untraditional gender roles. Filling in a high score for traditional statements means you have a very traditional view on gender roles, whereas for untraditional statements the opposite is true (because you agree with untraditional statements). Therefore, to create a score that represents the degree of which the participants have traditional gender role views, the following formula is used:

$$\text{traditionality score} = \frac{(\sum \text{traditional statements} + \sum (10 - \text{non traditional statements}))}{10} \quad (\text{formula 1})$$

The higher the score of the participant, the more his or her view on gender roles is traditional. I will use this variable to see whether the view on gender roles affects both the employment preferences as what is perceived as socially acceptable for one's gender. Also, this variable is used to evaluate whether views on gender roles change due to parenthood, to control the previously mentioned results of Endedijk et al. (2018).

Other variables

Next to researching employment preferences, I also gathered some data about explicit gender roles and parent's preferences. I use this data to generate some additional results, that contribute to giving a broader perspective on inequality issues in the labour market (table 4).

¹ The acquiescence bias describes the tendency of survey participants to agree with or to select a positive outcome (Costello & Roodenburg, 2015).

Table 4: dependent variables non-parents		
Variable	Variable description	Measurement
<i>Explicit gender roles</i>	The degree respondents state to be in favour of gender equality when asked them directly	Scale of 0-10
<i>Desire-reality discrepancy of parents</i>	Desired work hours compared to actual working hours (Actual working hours are... (less, equal,	Multiple choice

Explicit gender roles

This variable describes to what extent respondents are in favour of gender equality when asked them directly. This is measured by asking them explicitly if men and women should spend the same amount of time on housework, childcaring and working. The higher this score, the more traditional the views on gender roles. Comparing this variable to the traditionality scores, I hope to get an idea of whether there are discrepancies between what people say to think about gender roles and what they in reality do. The variable traditionality scores should be a good reflection of people's *true* opinion about gender roles, since it is appositely constructed to avoid biased results.

Desire-reality discrepancy

This variable is used to get an insight of parents' employment preferences. It is constructed by asking parents whether their desire working more, equally or less than what they currently do. Mothers' and fathers' answers will be used to assess the percentage relative to each target group of the answers more, equally, or less.

Descriptive statistics

To get a clearer idea of participants' responses, figures 4 and 5 provide some descriptive statistics per target group. For more detailed descriptions, see table X in the appendix.



Figure 4 and 5: Descriptive statistics of men and women

Analysis

The analysis of the data is performed using both parametric as non-parametric methods through the statistical programme Stata. Non-parametric tests are often easier but less reliable and specific alternatives compared to parametric tests. Parametric tests are more suited than non-parametric tests to make complex analyses, where multiple variables play a role. However, using those tests correctly often requires more assumptions to be met than non-parametric tests. Performing parametric tests when certain data assumptions are not met can put the reliability of the outcomes in jeopardy. Therefore, since the collected data does not meet all requirements to use parametric tests, for the sake of robustness of the analysis I will run both types of tests. This allows me to get more reliable results, taking both advantages and disadvantages of the two methods into consideration. I will run separate tests for female and male participants, to include the effect of gender in the results.

Parametric tests

Multivariate regression

As I stated before, using parametric tests requires the data to meet certain requirements. Since the dependent variables are continuous and all independent variables are either a dummy or a continuous variable, I will run a multivariate linear regression. I control for the other requirements of a multivariate linear regression: the assumptions of linearity, normality of distribution of residuals, absence of multicollinearity and lastly homoskedasticity (see table 7). The multivariate regressions can be illustrated with the following formulas:

$$\text{(preferred) work hours} = \alpha + \beta \text{Parental status} + \beta \text{Traditionality scores} + \beta \text{Traditionality parents}$$

(formula 2)

Socially acceptable work hours = $\alpha + \beta_{\text{Parental status}} + \beta_{\text{Traditionality scores}} + \beta_{\text{Traditionality parents}}$
(formula 3)

Childless women and mothers

Dependent variable: preferred and actual work hours

To test the linearity assumption, figures FA1 and FA2 (appendix) show scatterplots of preferred and actual work hours, traditionality scores and own parents' views on gender roles. The linearity assumption is automatically met for the variable parental status since it is a dummy variable. However, there is no clear linear relationship between the variable work hours and traditionality score or gender views of own parents. To control the normality of distribution of the residuals, I use a Kernel's density estimation plot. Figure FA5 (appendix) shows that residuals are normally distributed. Pearson's correlation matrix (table A3, appendix) shows there is no high and significant correlation between the variables, which means that this assumption is met. Lastly, to test the assumption of homoskedasticity I run White's test ($p=0.03^{**}$), which shows that the data is heteroskedastic.

Dependent variable: socially acceptable work hours

The same can be done for the dependent variable socially acceptable work hours. No clear linear relationship can be observed between socially acceptable work hours and traditionality score or parents' division of gender roles (figure FA3 and FA4, appendix). The residuals are normally distributed (Figure FA6, appendix) and the assumption of no multicollinearity is met, since variables are not highly and/or significantly correlated with one another (table A4, appendix). Also, the assumption of homoskedasticity is met, since the p-value of the homoskedasticity test is 0.25.

Childless men and fathers

Dependent variable: preferred and actual work hours

As the figures FA7 and FA8 show (appendix), there is no clear evidence of a linear relationship between traditionality scores or traditionality of own parents' division of gender roles with preferred or actual work hours. The residuals are normally distributed, and there is no sign of multicollinearity (figure FA11 and table A5). Lastly, the data is not homoscedastic, according to the p-value of 0.04** of White's test.

Dependent variable: socially acceptable work hours

The assumption of linearity is again not met for the variable socially acceptable work hours (figure FA9 and FA10, appendix). The data does not show a normal distribution of the residuals (figure FA12, appendix). Furthermore, the assumption of absence of multicollinearity is met (table A6, appendix). Lastly, the data is homoscedastic (0.98).

Table 7: assumptions multivariate regression

	Men		Women	
	(preferred) work hours	socially acceptable work hours	(preferred) work hours	socially acceptable work hours
Linearity	No	No	No	No
Normal distribution of residuals	Yes	No	Yes	Yes
Absence of multicollinearity	Yes	Yes	Yes	Yes
Homoskedasticity	No	Yes	No	Yes

Other

Next to a multivariate regression, I will use the parametric Pearson's correlation test and simple linear regressions to assess relationships between variables.

Non-parametric tests

I use the Shapiro-Wilk test of normality, which consents me to acknowledge whether the data is distributed normally. The results of this test show that the variables working hours and socially acceptable working hours are significant for both women and men (Shapiro-Wilk for both, $P=0.00***$). This implies no normal distribution of data. Therefore, I will use the one-sided Wilcoxon rank-sum test to compare future parents to parents. This method suits the data because the target groups are all independent from one another and furthermore, it indicates whether parents give significantly higher or lower responses than non-parents.

Next, I will test whether participants' views on gender roles are affected by the examples their parents set for them, by running Spearman's correlation test between gender roles of parents and traditionality scores. Furthermore, I will test whether participants' traditionality scores affect their reported socially acceptable work hours, again using Spearman's correlation test. Lastly, I will investigate whether there is a significant difference between what participants state to think about gender roles (explicit gender roles) and their traditionality scores, using a sign test of matched pairs.

4. Results

1. How does motherhood affect women's expected employment preferences and views on gender roles?

Hypothesis 1a: Childless women expect to work more hours after they have children than what mothers really do.

Hypothesis 1b: Childless women's perceived socially acceptable work hours are more than the ones mothers perceive.

Hypothesis 1c: Childless women have a less traditional view on gender roles than mothers.

Expected preferred working hours of childless women do not significantly differ from actual work hours of mothers (multivariate regression, $P=0.54$; one-sided Wilcoxon test, $P=0.24$). Therefore, there is no supporting evidence for hypothesis 1a. Also, women with a more traditional view on gender roles expect or actually work less (multivariate regression, $P=0.026^{**}$). Nevertheless, the traditionality of gender roles division of women's parents, does not impact their expected or actual work hours (multivariate regression, $P=0.80$). For hypothesis 1b, I found that being a mother diminishes the number of hours women perceive as socially acceptable with 3.30 hours (multivariate regression, $P=0.05^{**}$; one-sided Wilcoxon test, $p\text{-value}=0.03^{**}$). That implies that there is supportive evidence for hypothesis 1b. Lastly, hypothesis 1c is supported at a 0.10 significance level. Becoming a mother raises traditionality scores with 0.16 points (multivariate regression, $P=0.08^*$; Pearson's correlation, $P=0.08^*$).

2. How does fatherhood affect men's expected employment preferences and views on gender roles?

Hypothesis 2a: Childless men expect to work fewer hours once they have children than what fathers really do.

Hypothesis 2b: Childless men's perceived socially acceptable work hours are lower than the ones fathers perceive.

Hypothesis 2c: Childless men have a less traditional view on gender roles than fathers.

Childless men expect fathers to work 3.90 hours more than what father really do, at a 0.10 significance level (multivariate regression, $P=0.06^*$; one-sided Wilcoxon, $P=0.02^{**}$). This gives supportive evidence for hypothesis 2a. The traditionality scores and own parents' gender roles division do not affect preferred or actual work hours (multivariate regression, $P=0.20$ and $P=0.49$). For hypothesis 2b, I found no evidence of fathers and childless men having different perceptions of socially acceptable employment

(multivariate regression, $P=0.32$; one-sided Wilcoxon, $P=0.14$). Lastly, for hypothesis 2c, I also did not find any supportive evidence (linear regression, $P=0.50$; one-sided Wilcoxon, $P=0.35$). This implies that there are no significant differences between the views on gender roles of fathers and childless men.

3. How does the traditionality of the environment participants grew up in influence their views on gender roles?

Hypothesis 3a: Childless women who grew up in traditional households have a more traditional view on gender roles than childless women who did not grow up in a traditional household.

Hypothesis 3b: Mothers who grew up in traditional households have a more traditional view on gender roles than mothers who did not grow up in a traditional household.

Hypothesis 3c: Childless men who grew up in traditional households have a more traditional view on gender roles than childless men who did not grow up in a traditional household.

Hypothesis 3d: Fathers who grew up in traditional households have a more traditional view on gender roles than fathers who did not grow up in a traditional household.

I found no supportive evidence of childless women, mothers or childless men being influenced by their own parents in terms of views on gender roles (Pearson's correlation, $P_a=0.85$, $P_b=0.53$, $P_c=0.71$; Spearman's correlation, $P_a=0.82$, $P_b=0.61$, $P_c=0.53$). Therefore, there is no supportive evidence for hypotheses 3a, b or c. For hypothesis 3d however, supportive evidence is found. Fathers' traditionality scores are significantly influenced by their own parents' division of gender roles (Pearson's correlation, $P_d=0.04^{**}$; Spearman's correlation, $P_d=0.04^{**}$). In fact, fathers traditionality scores increase with 0.33 points by every increase of own parents' division of gender roles scores with 1.

4. How does the degree of traditionality of gender roles affect what participants perceive as socially acceptable employed hours?

Hypothesis 4a: Childless women with more traditional gender role views perceive lower socially acceptable employment hours.

Hypothesis 4b: Mothers with more traditional gender role views perceive lower socially acceptable employment hours.

Hypothesis 4c: Childless men with more traditional gender role views perceive lower socially acceptable employment hours.

Hypothesis 4d: Childless women with more traditional gender role views perceive lower socially acceptable employment hours.

I found no evidence of a negative relationship between perceived socially acceptable work hours of women and their traditionality scores (Pearson's correlation, $P_a=0.42$, $P_b=0.35$; Spearman's correlation, $P_a=0.97$, $P_b=0.18$). Also, men do not report any significant positive relationship between the two variables (Pearson's correlation, $P_c=0.33$, $P_d=0.15$; Spearman's correlation, $P_c=0.03^{**}$, $P_d=0.74$). Concluding, there is no supportive evidence for hypotheses 4a, b, c and d.

5. To what extent are people aware of the traditionality of their views on gender roles?

Hypothesis 5a: Childless women have more traditional views on gender roles than what they think they have.

Hypothesis 5b: Mothers have more traditional views on gender roles than what they think they have.

Hypothesis 5c: Childless men have more traditional views on gender roles than what they think they have.

Hypothesis 5d: Fathers have more traditional views on gender roles than what they think they have.

To test these hypotheses, I compare the explicit gender roles with traditionality scores. Comparing those variables, I hope to get an idea of whether there are discrepancies between what people say to think about gender roles and what they really do. I found supportive evidence for hypotheses 5a, b, c or d, which could suggest most persons are unaware of how traditional their real views on gender roles are (two-sample t-test, $P_a=0.00^{***}$, $P_b=0.00^{***}$, $P_c=0.00^{***}$, $P_d=0.00^{***}$; sign test of matched pairs, $P_a=0.00^{***}$, $P_b=0.00^{***}$, $P_c=0.01^{***}$, $P_d=0.00^{***}$).

Summary of the results

In this chapter I have tested all hypotheses using both parametric as non-parametric methods. [Table 8](#) provides an overview of hypotheses per different method. Almost all the hypotheses, except 1c and 4c, resulted being indifferent for parametric or non-parametric methods regarding their outcomes.

Table 8: Overview of hypotheses

	Parametric		Non-parametric tests	
	Accepted	Rejected	Accepted	Rejected
<i>Hypothesis 1a</i> : Childless women expect to work more hours after they have children than what mothers really do.		X		X
<i>Hypothesis 1b</i> : Childless women's perceived socially acceptable work hours are more than the ones mothers perceive.	X		X*	
<i>Hypothesis 1c</i> : Childless women have a less traditional view on gender roles than mothers.	X*			X
<i>Hypothesis 2a</i> : Childless men expect to work fewer hours once they have children than what fathers in reality do.	X*		X	
<i>Hypothesis 2b</i> : Childless men's perceived socially acceptable work hours are lower than the ones fathers perceive.		X		X
<i>Hypothesis 2c</i> : Childless men have a less traditional view on gender roles than fathers.		X		X
<i>Hypothesis 3a</i> : Childless women who grew up in traditional households have a more traditional view on gender roles than childless women who did not grow up in a traditional household.		X		X
<i>Hypothesis 3b</i> : Mothers who grew up in traditional households have a more traditional view on gender roles than mothers who did not grow up in a traditional household.		X		X
<i>Hypothesis 3c</i> : Childless men who grew up in traditional households have a more traditional view on gender roles than childless men who did not grow up in a traditional household.		X		X
<i>Hypothesis 3d</i> : Fathers who grew up in traditional households have a more traditional view on gender roles than fathers who did not grow up in a traditional household.	X		X	
<i>Hypothesis 4a</i> : Childless women with more traditional gender role views perceive lower socially acceptable employment hours.		X		X
<i>Hypothesis 4b</i> : Mothers with more traditional gender role views perceive lower socially acceptable employment hours.		X		X
<i>Hypothesis 4c</i> : Childless men with more traditional gender role views perceive lower socially acceptable employment hours.		X	X	
<i>Hypothesis 4d</i> : Childless women with more traditional gender role views perceive lower socially acceptable employment hours.		X		X
<i>Hypothesis 5a</i> : Childless women have more traditional views on gender roles than what they think they have.	X		X	
<i>Hypothesis 5b</i> : Mothers have more traditional views on gender roles than what they think they have.	X		X	
<i>Hypothesis 5c</i> : Childless men have more traditional views on gender roles than what they think they have.	X		X	
<i>Hypothesis 5d</i> : Fathers have more traditional views on gender roles than what they think they have.	X		X	

*accepted at a 0,10 significance level instead of 0,05

same result between parametric and non-parametric method
different result between parametric and non-parametric method

5. Discussion

Summary

In the theoretic framework, I illustrated different biases and prejudices that cause the persistence of traditional gender roles in our society. These gender roles are partly the cause of gender and parent-based inequality on the labour market. Mothers face an inevitable wage penalty whilst fathers receive a wage premium once they start to work. The different treatment is mainly caused by their respective genders. I emphasize that to fight gender inequality on the labour market, making people aware of their prejudices, caused by underlying biases, is the first step to take. Understanding whether future parents misevaluate their future employment preferences is therefore crucial to determine peoples' awareness about how their position on the labour market is likely to change due to motherhood and fatherhood. To identify how parenthood and traditional gender roles change employment preferences over time and whether future parents correctly forecast these changes, I looked for discrepancies between employment preferences and the perceptions of socially acceptable employment between childless women and mothers, and childless men and fathers. Connecting this with the existing literature and the views on traditional gender roles of participants, can help me getting a better understanding of whether future parents misevaluate their future positions on the labour market and how traditional gender roles possibly play a role in this. This enables me to investigate how misevaluations of future preferences can contribute to gender inequality on the labour market.

The results showed that expectations of childless women about work hours are not different from mothers' actual work hours, which could suggest that childless women correctly estimate their future preferences. However, 38% of the mothers reported to desire working more hours than they currently do. This could therefore suggest that the true preferences of mothers do not exactly coincide with their actual work hours, which could disprove that childless mothers correctly estimate their future employment preferences. Also, childless women perceive their socially acceptable work hours to be 3.30 hours more than mothers, regardless their own traditionality of views on gender roles. Childless women also have a slightly less* traditional view on gender roles compared to mothers, which is in line with Endedijk *et al.*'s research (2018). This indicates that even though childless women perceive what is socially acceptable for women to be higher than mothers, motherhood causes them to adjust to a lower number. In contrast with Landais *et al.* (2019), women are not found to be affected by their own parents in terms of traditionality of gender roles.

Childless men misevaluate the number of hours they will work as parents, estimating 3.90 fewer employed hours per week than fathers report to actually work. However, only 15% of the fathers reported to desire working less than they currently do, which is a relatively low number. This would be in line with the findings of Wang-Cendejas and Bai's (2018) and Coltrane (2004), which said that men

are likely to work more and harder once they become fathers, to fulfil their role as financial provider of the family. It could also be a reflection of men being advantaged and given more opportunities on the labour market, like Benard and Correll (2010) said, who found employers associating necessary work skills with typically masculine characteristics. It could also be a combination of the previously mentioned theories. The perception of socially acceptable working hours did not differ between childless men and fathers. This is partly in line with Endedijk *et al.*'s research (2018), who found that fathers are less likely to change their views on gender roles over time, compared with women. Fathers, in contrast with childless men, are influenced by their own parents when it comes to views on gender roles. Nevertheless, childless men² and fathers are not affected by their traditionality scores when it comes to their own perception of socially acceptable employed hours.

Lastly, both men and women report higher explicit scores than traditionality scores. Since the variable explicit score is supposed to reflect what people think their opinion about traditional gender roles is, and traditionality score people's *true* views on gender roles, this suggests that people are not fully aware of how traditional their views on gender roles really are.

Validity

External validity

The sample consists mostly of Dutch residents with a Dutch nationality. Nevertheless, a relatively high share of the sample is Italian or resident in Italy. The influence of southern European countries as Italy can have affected the results, since southern European countries are known for having a considerably more traditional view on gender roles. However, since the used sample consists of 264 participants, of which approximately 225 are Dutch, the results can still be seen as representable for the Dutch population. Furthermore, the age of the participants is a good representation of the four target groups: childless women, mothers, childless men and fathers. The generational gap is relatively small, reducing the impact of generational confounds. Overall, this suggests that the external validity has been safeguarded.

Internal validity

This research has some internal validity remarks. First, the survey did not leave much space to participants to provide nuanced answers. Questions about gender roles were asked quite straightforward. This led to many comments, especially from parents, about how parenthood decisions are never completely right or wrong and how every personal situation of parents must be considered. It may have led to answers that do not completely reflect participants' opinions about traditional gender roles. Therefore, this could have caused the contrasting results about the changing views on traditional gender roles of this paper and Endedijk *et al.* (2018)'s one.

² Using the parametric analysis

Secondly, since the data is non-normally distributed, as explained in chapter 3, my first approach was to use non-parametric tests to perform the analysis. Unfortunately, because of the complexity of the analysis and the fact that I am interested in the effect different variables have on each other, non-parametric tests do not suffice for all hypotheses testing. Therefore, next to the non-parametric analysis, I decided to perform a parametric analysis to get more insight of these effects. Not all assumptions are met for using those parametric tests, which could endanger the reliability of the outcomes. That is why I decided to use the outcomes of both parametric as non-parametric tests to assess the reliability. Most outcomes resulted to be indifferent to the used method, since they resulted in the same outcome for both. This enabled me to either accept or reject those hypotheses at a sufficient level of certainty. Two hypotheses had a different outcome, depending on the used method. For these two I decided to use the parametric outcome, since parametric tests are able to take into account more multivariate influences than non-parametric methods. Nevertheless, the outcomes of those two hypotheses are less reliable.

Thirdly, when I put together the survey to distribute to the mother and fathers, I assumed that their actual work hours resembled their employment preferences. After analysing the data, I realized I could not make that assumption, since preferences are not always reflected in actual outcomes. In the survey, parents were given the possibility to report whether their actual work hours were more, less or equal than their preferred work hours, but they were not asked to fill in an exact number. This prevented me from making significant conclusions about the differences in preferences of childless persons and parents. Instead, I draw different scenarios, making assumptions based on the percentage of parents who stated to desire working more or less hours. Since unfortunately this gap in data was difficult to remedy due to time constraints, I would highly recommend some future research that includes this data (more on that in 'future research' section).

Lastly, ideally this research would have been performed longitudinally instead of cross-sectionally. Now, I compared non-parents with parents, to look for differences in employment preferences caused by parenthood. Ideally, I would perform a fixed effects analysis, which allows me to diminish all kind of external factors affecting participants' answers. The goal would be that the only thing changing is the subject becoming a parent, to determine the causality of parenthood on employment preferences. Even though this is obviously really hard to achieve in real life, it is still more probable for a within-subjects analysis than a between-subjects analysis.

Suggestions for future research

For future research I would suggest conducting a study on parents' employment preferences compared to their real work conditions. I believe that doing a qualitative research on this matter would have several advantages, since it would allow to understand the underlying reasons of parents to act in a certain way. Consequently, I believe that diving deeper into the differences between conscious and unconscious preferences is essential. Since the findings of this research suggest that there is a difference between

people's conscious and unconscious opinions about gender roles, understanding whether people are aware of the effect traditional gender roles have on their choices, can shed light on parents' *true* employment preferences. For instance, assuming that mothers desire to work less than men, what are the reasons for them to have this desire? Do they really want to work less? Are they not able to bear financial responsibility? Does their motherly instinct play a role? How 'real' are their preferences, or are they influenced by what they believe they *should* prefer? The same counts for men. Lastly, since men take up 72% of the full-time work force on the Dutch labour market (CBS, 2019), and therefore most leadership positions, it would be very interesting to perform a research to understand how men perceive problems of gender inequality on the labour market, and to what degree fighting it is a priority from their point of view.

6. Conclusion

In this research, I investigated how parenthood potentially changes the perception of preferable and socially acceptable employed hours.

Through an online survey I found that childless women's expected employment preferences coincide with the real employed hours of mothers, but that a relatively large share of mothers reported to desire working more than what they currently do. This can point out to different things. Firstly, assuming mothers' actual employment hours coincide with their true preferences, the findings suggest childless women correctly predict their future preferences. But assuming mothers work less than they actually desire, could imply a misevaluation of childless women's future preferences. Whichever the real preferences of the mothers are, different scenarios can be sketched about the question of *why* they tend to work less. One could speculate various reasons, from motherly instinct which encourages them to take care of their family, unconscious submission to traditional gender roles or really the desire to work fewer hours. The results however, show a decline of what is perceived as socially acceptable employment due to motherhood. This suggests that women, once they become mothers, feel pressured to work less, because of what they perceive is socially acceptable. However, future research is needed to make more solid conclusions on this matter.

Fathers on the other hand, are found to work more than childless men expect them to and to generally not desire working fewer hours. This result could suggest that childless men misevaluate their future employment preferences. Also, the fact that the perception of what is socially acceptable to work is not significantly affected by fatherhood or men's traditionality of gender roles, could suggest that the role of provider is something deep rooted in the image men have of themselves. Another possible interpretation is that since mothers work fewer hours, men are pushed to work more hours to provide financially. Something which of course could also work the other way around. In other words, the findings could also be interpreted as fathers working more, because they are being advantaged by their employers. This would force mothers into working less, to take care of the children.

To conclude, how could these findings contribute to answering the big question of reducing gender inequality on the labour market? In a certain way, the results could be interpreted as women really *not wanting* and men *really wanting* to work more. Nevertheless, the findings of chapter 4.5 suggest that men and women are not fully aware of how much their preferences are influenced by traditional gender norms. This brings up an important question: do people's preferences reflect their *real* preferences, or are those preferences biased by traditional gender norms? I believe that researching this question is crucial to understand how to address the problem of gender inequality on the labour market. Understanding the degree people's preferences are influenced by traditional gender norms can support

campaigns to encourage people to rethink the gender roles within their family cycles, by looking at family members' true potentials instead of gender. I see this thesis as a necessary part of literature to bridge the question of *why* gender inequality exists to the future literature about *how* we can fight it.

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8. Appendix

Figures

Assumptions tests multivariate regression

Women:

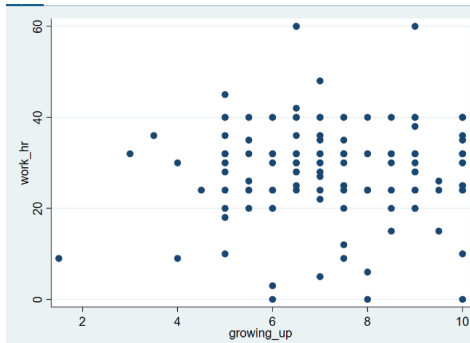


Figure FA1: scatterplot of preferred and actual work hours, and traditionality of division of gender roles own parents (women)

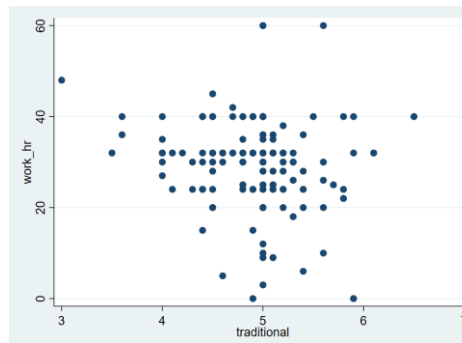


Figure FA2: scatterplot of preferred and actual work hours and traditionality scores (women)

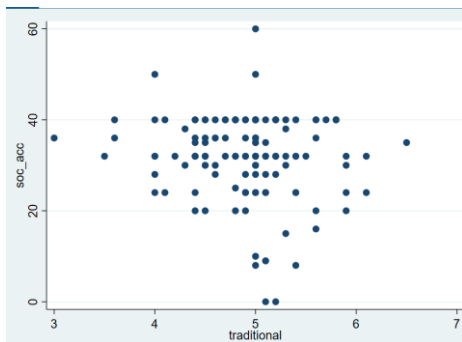


Figure FA3: Scatterplot of socially acceptable work hours and traditionality scores (women)

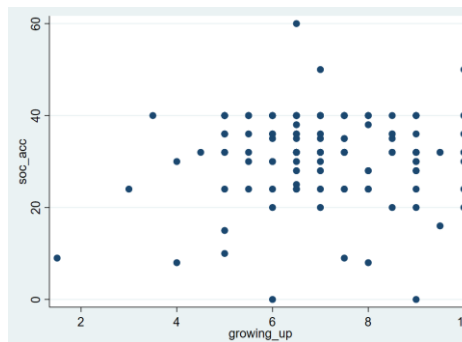


Figure FA4: scatterplot of socially acceptable work hours and traditionality of division gender roles of own parents (women)

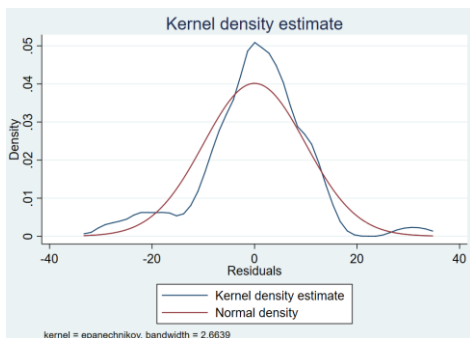


Figure FA5: Kernel normality of residuals of preferred and actual work hours (women)

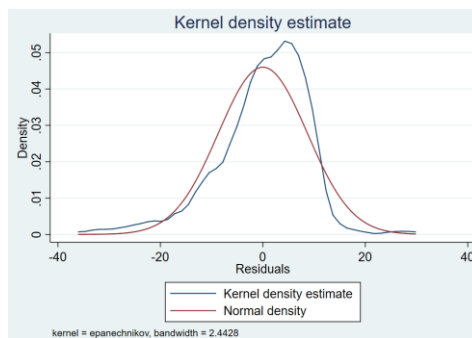


Figure FA6: Kernel normality of residuals of socially acceptable work hours (women)

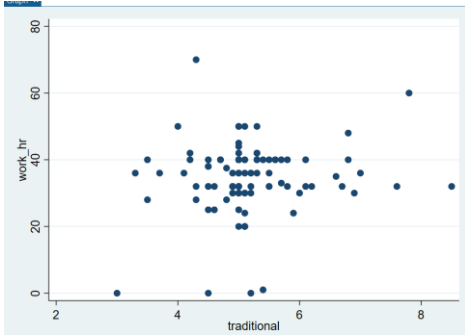


Figure FA7: scatterplot of preferred and actual work hours and traditionality scores (men)

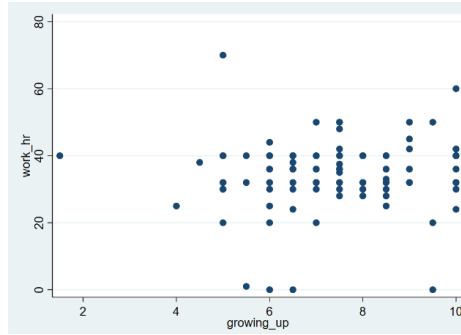


Figure FA8: scatterplot of preferred and actual work hours and traditionality of division of gender roles own parents (men)

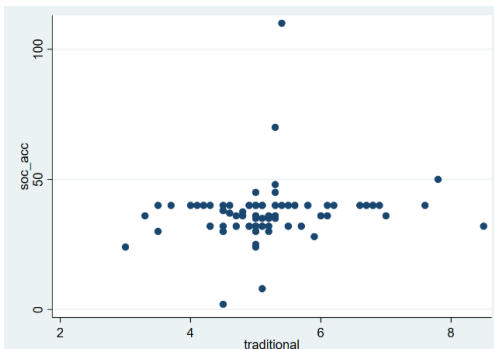


Figure FA9: Scatterplot of socially acceptable work hours and traditionality scores

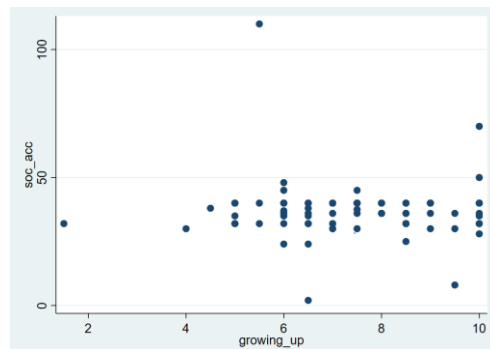


Figure FA10: scatterplot of socially acceptable work hours and traditionality of division gender roles of own parents

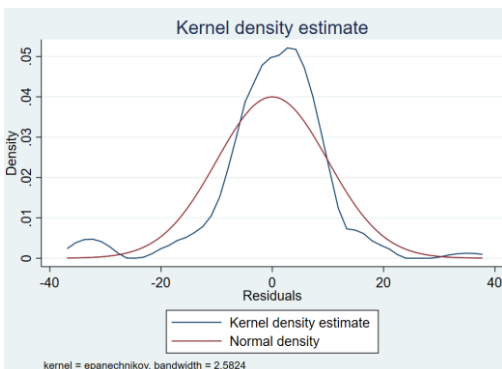


Figure FA11: Kernel normality of residuals of socially acceptable work hours

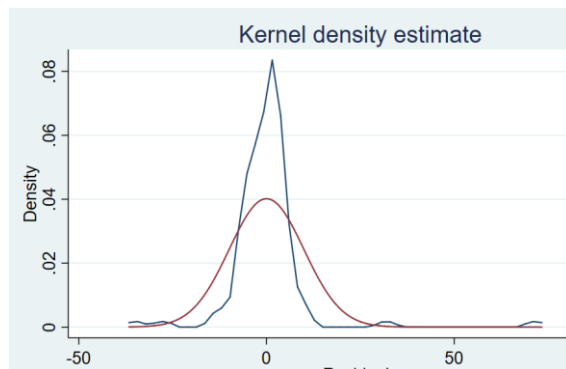


Figure FA12: Kernel normality of residuals of socially acceptable work hours

Tables

Table A1: descriptive statistics of preferred and actual work hours				
	Observations	Mean	Standard deviation	Median
Childless women	119	29,40	8,88	32,00
Mothers	39	30,10	13,30	32,00
Childless men	67	33,29	9,40	35,00
Fathers	39	37,28	11,32	40,00

Table A2: descriptive statistics of socially acceptable work hours				
	Observations	Mean	Standard deviation	Median
Childless women	119	33,16	8,59	35,00
Mothers	39	30,00	9,37	32,00
Childless men	67	38,02	11,53	40,00
Fathers	39	35,74	6,91	36,00

Table A3: Pearson's correlation matrix for preferred and actual work hours – female target groups				
	Work hours	Parental status	Traditionality score	Parents' division of gender roles
Work hours	1			
Parental status	0,0299	1		
<i>p-value</i>	0,71			
Traditionality score	-0,1730	0,1383	1	
<i>p-value</i>	0,03**	0,08*		
Parents' division of gender roles	0,0284	0,2037	0,0146	1
<i>p-value</i>	0,72	0,01**	0,86	
*** $P < 0.01$, ** $P < 0.05$, * $P < 0.10$				

Table A4: Pearson's correlation matrix for socially acceptable work hours – female target groups				
	Work hours	Parental status	Traditionality score	Parents' division of gender roles
Work hours	1			
Parental status	-0,1542	1		
<i>p-value</i>	0,05**			
Traditionality score	-0,1145	0,1383	1	
<i>p-value</i>	0,15	0,08*		
Parents' division of gender roles	0,0639	0,2037	0,0146	1
<i>p-value</i>	0,42	0,01*	0,85	
*** $P < 0.01$, ** $P < 0.05$, * $P < 0.10$				

Table A5: Pearson's correlation matrix for preferred and actual work hours – male target groups

	Work hours	Parental status	Traditionality score	Parents' division of gender roles
Work hours	1			
Parental status	0,1882	1		
<i>p-value</i>	0,05**			
Traditionality score	0,1190	-0,0660	1	
<i>p-value</i>	0,22	0,50		
Parents' division of gender roles	0,1110	0,1798	0,0769	1
<i>p-value</i>	0,25	0,07*	0,43	

*** $P < 0.01$, ** $P < 0.05$, * $P < 0.10$

Table A6: Pearson's correlation matrix for socially acceptable work hours – male target groups

	Work hours	Parental status	Traditionality score	Parents' division of gender roles
Work hours	1			
Parental status	-0,1093	1		
<i>p-value</i>	0,26			
Traditionality score	0,1511	-0,0660	1	
<i>p-value</i>	0,12	0,50		
Parents' division of gender roles	-0,0136	0,1798	0,0769	1
<i>p-value</i>	0,89	0,07*	0,43	

*** $P < 0.01$, ** $P < 0.05$, * $P < 0.10$