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MASTER'S THESIS

Who are the New Fathers?

Determinants of Fathers' Parental Leave Use

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Abstract

The term “new fathers” describes fathers who are willing to give up their working hours temporarily to care for their children. The public debate on the phenomena of new fathers is booming, and political reforms in Germany aim to promote gender equality by encouraging the participation of women in the labour market and, at the same time, supporting fathers’ participation in parental leave programs. This thesis focuses on determinants of paternal leave use. Therefore, Becker's new home economics, the bargaining theory, and the doing gender approach are used to explain paternal leave. Data from the German Family Panel and logistic regression methods are used to investigate the influencing determinants. In total, an analytical sample of 365 fathers is drawn. A great advantage of the study is the possibility to draw the influencing variables from the prewaves before childbirth, so that they are not already influenced by the birth of the child. The results show that egalitarian gender roles and a lower importance of career heightens the probability for fathers to use parental leave. Furthermore, the importance of career is also influencing the length of parental leave use. All in all, the doing gender approach is well explaining parental leave use of fathers.

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1. Introduction

"People will always get children." is the legendary phrase that the eminent German Chancellor Adenauer once uttered in the German Bundestag in 1956. The drastic decline in the birth rate in the 1960s has shown that this statement is not universally valid. Birth rates in industrialised countries fell sharply from the mid-1960s, quickly falling below the population maintenance level. These trends were mainly explained by the growth in women's education and their increasing labour market participation (Oppenheimer, 1994). Studies indicate the negative relationship between female education and childbirth: The higher the level of education of women, the more likely it is that they will delay family formation or not start one at all (Blossfeld & Jaenichen, 1990; Gordo, 2009). Women try to reduce opportunity costs by consolidating their careers before motherhood (Gordo, 2009), indicating women having a huge problem reconciling work and family life and revealing substantial inequalities between men and women.

Although birth rates in Germany have been rising again recently, the past research has shown fertility depends not only on internal fertility preferences. External factors, such as employment and child-care-arrangements, play a crucial role in family formation. If industrialized countries want to increase their birth rates persistently and create a family-friendly environment, it is necessary to focus on reconciling work and family.

To target the problem of competing employees' work and family obligations, two methods could be used by governments. The first one is government-guaranteed day-care places for children of employed parents. The second one, which will be the important one for this thesis, is the paid parental leave from employment. Mothers and fathers can thus spend time caring for their children without losing their entire income (Haas, 2003).

Focusing on the latter method, the basic parental leave allowance (BEEG) in 2007 and the parental allowance plus (ElterngeldPlus) in 2015 represent two main changes in Germany. They should promote gender equality by encouraging the participation of women in the labour market and, at the same time, supporting fathers' participation in parental leave programs (Brandt, 2017; Bujard, 2013; Wrohlich et al., 2012). These two programs function as an earning replacement benefit that allows both partners to maintain their economic independence while cutting back from work to care for a child (Wrohlich & Unterhofer, 2017).

When considering reducing gender inequalities, the importance of women's economic autonomy is emphasized in most research. Esping-Andersen (2009) claims, that research often starts and ends with focusing on educational attainment, paid employment and earnings (Esping-Andersen, 2009, p. 20). While he is stressing the importance of these approaches, he warns against taking solely a one-sided approach. Esping-Andersen criticises much feministic literature ignoring men completely, or to inherit "the status of stalwart patriarchy" (Esping-Andersen, 2009, pp. 19-20). In order to support a different approach, the present study focuses on men, more precisely fathers. As mentioned before, the possibility of taking parental leave is seen as an equality promoting policy instrument, which assigns the topic with a high social and political importance. Unlike most studies on parental leave, this thesis will not focus on the outcomes. Instead, the current work focuses on an earlier stage of parental leave use and is intended to illustrate what determinates the decision of fathers to take or not to take parental leave.

Therefore, the present thesis's research question is: What are the determinants of parental leave use of fathers?

The thesis's focus is mainly limited to Germany as the legal framework for parental leave – especially for fathers– varies considerably between countries. Even at the European

Union level, large differences are visible and a comparison of determinants of paternal leave use would go beyond the scope of this study. As mentioned before, in 2007, a new parental leave benefit scheme (BEEG) was introduced in Germany. Therefore, Germany is a compelling case when it comes to parental leave use of fathers. It is particularly important for policy makers to determine what influences fathers in their decision regarding parental leave use.

Furthermore, the public debate on the phenomena of new fatherhood is booming. The term "new fathers" (Bünning, 2015, p. 257) describes fathers who are willing to temporarily give up their working hours to provide care work for their children. Indeed, the research literature shows a general developing trend away from the image of father-as-breadwinner toward that of the father who shares family- and gainful employment-work with his partner (e.g. Bünning, 2015; Lück, 2018; Possinger, 2013).

To illustrate the different understandings of fatherhood, the traditional male breadwinner model and that of the new father will be discussed first. Afterward, various parental leave policies will be dealt with shortly, with much of the data based on the European context. Adding on, a more detailed section about the parental leave policies in Germany explains the possibilities for fathers regarding parental leave take. Furthermore, general research results about parental leave of fathers are presented. Thus, the current state of research is described and elaborates on the determinants of parental leave. To theoretically justify fathers' use of parental leave, this study deals with different concepts and, based on this, builds up Hypotheses. These Hypotheses are then tested empirically using data from the German Family Pane. Bivariate and multivariate methods are applied to test the Hypotheses. Discussing the main findings, limitations and strength of the study, the thesis will leave the reader with a broad overview.

2. Changing Fatherhood Models

The transition to parenthood confronts individuals and families with redistributing and renegotiating responsibilities and preoccupations (Feldman et al., 2004). With a rising number of women participating in the labour market, the transition to parenthood challenges couples to balance work and family. Couples may have to decide who, at least temporarily, drops out of the labour market to secure the needed care to the child in the first months or even years after birth. The male-breadwinner model seems to have become obsolete in most Western countries - replaced by a dual-earner model (Feldman et al., 2001). The following section should shed light on this discussion explain the competing models.

2.1. The Male Breadwinner Model

According to the historian Trepp it was not until the middle of the 19th century that the differentiation of the gender worlds and the associated primary concentration of men on working life begun. Trepp describes the father as the primary contact person for questions concerning children's upbringing at the time of Enlightenment and emphasizes how conscious men with children defined themselves as fathers (Trepp, 1996, pp. 31–33). In the middle of the 19th-century men's given leeway narrowed, other patterns of behaviour became urgent, and social self-definition takes place via the profession. Their role in the family changed, and they assumed an authoritarian position within the family (Trepp, 1996, p. 42). Pierre Bourdieu describes the men, quite dramatically, as prisoners and, in a hidden way, victims of the domain ideas, which nevertheless so perfectly suits their interests (Bourdieu, 1997, p. 187).

As the present study will use German data, it is important to briefly examine Germany's male breadwinner model. Regarding the German family policy, it was strongly influenced by the philosopher Johann Gottlieb Fichte, who lived from 1762 to 1814. Fichte (1797) idealized the concept of marriage as a moral and legal institution, which is the only true way to live in unity with nature and with reason. Fichte defines the man as the master of the house while the woman inherits a more subjugate role. Fichte's writings were influential for the Prussian law in the 19th century and the BGB of 1990. The latter still constitutes the foundation of German civil law nowadays and defines family still as a married couple (Nill & Shultz, 2010). In the German marriage law of 1957, the husband's permission was still required for a woman to participate in the paid labour market, seeing the man as the main earner and decision-maker for the whole family (Franzius, 2005). In 1977 the reform of marriage law finally recognized equal rights for men and women. Until then, the breadwinner model – a man engaged in the labour market and a female homemaker - was not only a cultural ideal within the German society but enshrined in law. After Germany's separation into the Federal Republic of Germany, West Germany followed a liberal course, which affected both - the economic market and family life. The responsibility for upbringing and education of children was largely in private hands and the family should be free of governmental interference. This resulted in a comparatively low provision of governmental services like childcare facilities (Rosenbaum & Timm, 2008). On the one hand, the idea was to protect the family and youth from too much governmental interventions. On the other hand, the family was based on traditional, monogamous ideologies which supported the male-bread-

winner model. The state's supported model was the married couple, with the husband engaged in gainful employment and a female caretaker for child caring. Women were expected to stay at home or work part-time. (Klammer & Letablier, 2007; Nill & Shultz, 2010).

The situation was utterly different in East Germany, where a communist society was to be built. Politically, the family was seen as a social institution, and the aim was to increase reproduction. The task of education was much more in the state's hand, trying to indoctrinate socialist values to the youth. The state supported marriage and it was expected that both spouses would work fulltime as employment was guaranteed for almost everyone. About 90% of East German women were involved in the paid labour market (Nill & Shultz, 2010; Wendt, 1993). After the reunification on October 10, 1990, the West German laws were taken over for East Germany, and the male-breadwinner model was still the main paradigm for policy regulations (Nill & Shultz, 2010). The German tax system still benefits the male breadwinner model by discouraging couples who are equally engaged in the paid labour market. Due to a joint income tax system, free co-insurance of spouses, and the cap on social security contributions, the taxes are higher for dual-income couples if their income exceeds the tax-free mini-job [1]limit of 450 EUR per month (Adema et al., 2017).

2.2. The New Fathers

The discovery of men in family and gender research, and policy is a consequence as well as a promotor of change and pluralization of family forms that has been ongoing since the 1970s. Family no longer automatically means father who goes to work and mother who looks after the children. Emerging family forms do not correspond to the traditional picture. This change was triggered by women's higher participation in the labour market since the 1970s (Edwards, 2001). For a long time, the father's involvement in early childhood education was considered relatively insignificant. Fathers played a marginal role in the educational and caregiving process, while the mother took the central position. As described in the section about the male-breadwinner model, the father was responsible for the family's economic provision, while the mother provided emotional and physical care to the children (Fthenakis, 1985).

These prevailing views have changed: Fathers get more and more in the spotlight of family policy discourse and social science research. This becomes clear from the increasing number of publications targeting paternity (e.g. Aunkofer et al., 2019; Coltrane, 2005; Haas & Hwang, 2008; Lux & Walper, 2019; Possinger, 2013; Tölke, 2007; Tölke & Hank, 2005; Volz & Zulehner, 2009). Meuser (2012) emphasises that paternity is in a state of flux. As a result a new discourse on fatherhood has developed, which emphasises the father's involvement in the family and devalues the figure of the family breadwinner. In terms of time, the eighties represented the turning point in thinking, and fathers began to criticize their sole function as breadwinners. Pleck (1998) speaks about the "new fathers" (p. 358) and defines them as the following:

> "This new father differs from older images of involved fatherhood in several key respects: he is present at the birth; he is involved with his children as infants, not just when they are older; he participates

[1] Mini-jobs are a form of marginal employment in Germany where employees can earn up to 450 Euros a month without contributing taxes (Bundesministerium für Arbeit und Soziales, 2020).

in the actual day-to-day work of child care, and not just play; he is involved with his daughters as much as his sons." (Pleck, 1998, p. 358).

Compared to the father in the fifties and seventies, the new father is more emotionally involved, more educative, and more committed to spending time with his children. LaRossa (1988) was one of the first researchers to take up this changing role model of fatherhood. He used the term "culture of fatherhood" (p. 451), indicating shared norms, values, and beliefs surrounding fatherhood. This new culture of fatherhood is represented, for instance, in film, television, magazine, and guidebook literature (Wall & Arnold, 2007). In the eighties, the so-called "father books" appeared on the market, focusing on fathering and early childhood development (M. Meuser, 2007). Fathers are presented as equally capable as mothers regarding child rearing. Furthermore, the new advice literature addresses parents rather than just mothers. Fatherhood is not only changing socially but also discoursally. Craig (2006) sees in the change of fatherhood a movement towards a social ideal of fathers as "coparent[s]" (p. 261).

The German representative survey "Männer im Aufbruch" (men on departure) by Zulehner and Volz (1998), confirmed at the end of the nineties a modernisation of the normative gender role of masculinity and fatherliness towards a desire for more parental participation in the upbringing of children. This is true for at teals the attitude level as the study could show that fathers tend to want more than being just financial providers for their children. Furthermore, both authors could find considerable variations in the subjective concepts of paternity and grouped the respondents into four categories. 19% of the interviewed fathers could be assigned to the group of "traditional fathers" (Zulehner & Volz, 1998, p. 50), who feel primarily responsible for their job and securing the family income. These fathers see the responsibility for direct childcare within the sphere of the mother. In contrast, 20% of the fathers belong to the type "new" man (Zulehner & Volz, 1998, p. 50) , who advocates symmetrical distribution of childcare and household tasks to both parents. With 37%, most fathers are insecure, regarding the intra-family division of labour, since the traditional family model with the father as breadwinner is rejected as outdated, while a modern model of paternity, that could be implemented in everyday life, is still missing. 25% of the fathers were pragmatic, expanding traditional beliefs by including modern concepts of paternity (Zulehner & Volz, 1998). The new edition of the study from Zulehner and Volz, published ten year later in 2009, illustrates a progressive modernisation in gender relations. Although the proportion of "new" or "modern" men remains relatively constant at 19%, the author's conclusion is more interesting than the quantitative comparison, according to which attitudes within the types have in some cases changed noticeably. Whereas in the first study in 1999 only 19% of the "traditional fathers" supported a family model in which both parents work part-time and care for the household and children in an egalitarian manner, 36% of this group now consider this a sensible solution (Volz & Zulehner, 2009, p. 33). Possinger (2013) concludes out of this results that the "traditional" fathers became more "modern" (p. 23).

Researchers refer to new fathers as fathers who take parental leave (e.g. Ehnis, 2009; Possinger, 2013), as this possibility can enable fathers to actively participate in the education and care of their young children. Therefore, this term is integrated in the title of the present thesis and new fathers are here revered to as fathers who use paternal leave.

While investigating paternal leave, it is important to take the legal boundaries of paternal leave use into account. It has not yet been clarified, up to this point of the present study, how fathers' possibilities of parental leave differ. Therefore, the next section will briefly discuss parental leave policies, mainly focusing on Europe. Furthermore, the German policies are described in more detail.

3. Parental Leave Policies

Different studies could show national parental leave policies affect mothers' employment significantly (e.g. Abendroth et al., 2012). Fewer studies focus on the impact of parental leave us on fathers' employment (Bünning & Pollmann-Schult, 2015). If fathers make use of parental leave, this should show reduced working hours. Country-specific studies have found that in liberal welfare states, such as the USA, fathers work longer hours than childless men (Glauber, 2008; Knoester & Eggebeen, 2016). It is the other way round in more social welfare states like Sweden and Norway: Here, fathers work less than childless men (Dommermuth & Kitterød, 2009; Dribe & Stanfors, 2009). The effect of fatherhood in many continental European countries shows only a small effect on fathers' working hours (Koslowski, 2011).

When looking at studies about fathers and child-related work reduction, it is highly important to distinguish between parental leave and paternity leave as they are not equal. Paternity leave is usually taken immediately after a child's birth and is short-term absence for employed fathers. The duration of paternity leave differs between countries, and the EU-average length is 12.5 days and is parallel taken to maternity leave. Paternity leave is well paid and in all cases within the European Union, where the duration of leave is seven days or less, 100% of the previous income is offered (van Belle, 2016, p. 7). Unlike women, fathers in Germany are not entitled to paternity leave (Bundesministerium für Familie, Senioren, Frauen und Jugend, 2019). However, they can take parental leave, which is explained in more detail in section 4. In the present thesis, paternal leave is referred to as fathers who use parental leave.

Parental leave can be a family entitlement or an individual right. In the first case, the duration of leave can be shared between partners, while in the latter, this is not possible. As women mainly use family entitled leave, some countries try to increase fathers' use of parental leave by dividing the parental leave into a shared and no-shared part or by bonuses that give families more leave if both parents take some parental leave (Moss & Deven, 2015; van Belle, 2016). All EU-member countries provide parental leave to their citizen and, except six countries, offer monetary compensation parental leave. The compensational amount varies between 25% and 100% of earnings, with an average compensation rate of 50%. Parental leave is family entitled in 14 EU countries, and the total duration depend on each parent's uptake. In France, each parent is entitled to take four months of parental leave, resulting in a total maximum duration of eight months. If just one parent takes parental leave, the maximum duration is reduced to only six months. In 12 EU-countries, parental leave is not family entitled and an individual right. The amount of parental leave cannot be shared between partners (van Belle, 2016). Castro-García and Pazos-Moran (2016) analyzed parental leave policies in 21 European countries. The duration of parental leave in the countries varied between three months and two and a half years and was usually transferable from one parent to another. The transferable leave seems to be a family-friendly solution. It allows for individual family choices and does not formally denote women as the main responsible person for childcare. A closer look reveals that this regulation leads to the fact that almost exclusively women still take parental leave. Therefore, Norway, Sweden, and Iceland implemented fathers' quotas into their transferable system to raise the uptake of parental leave among fathers. In most countries the nontransferable paid leave for women is longer than for men. Furthermore, the number of women who reject to take their nontransferable and paid leave is insignificant, while men tend to be strongly influenced by the level of payment. The highest numbers of fathers take paternal leave in countries, where the highest payment

is offered (e.g. Iceland: 91 percent-take up; 100 percent pay) (Castro-García & Pazos-Moran, 2016). Father's use of parental leave is rising in Sweden, Norway, and Iceland through reforms, awarding fathers with nontransferable, highly paid leaves (Castro-García & Pazos-Moran, 2016; Duvander & Johansson, 2012; Moss & Deven, 2015).

As the data used for this study is German, the following section will elaborate on how the parental leave entitlement is specifically in Germany. This is highly important to understand the possibilities and burdens families and individual face when deciding to take up parental leave or not.

4. Parental Leave in Germany

The forms of parental leave in Germany differ and parents can choose between different parental allowance types: The basic parental allowance and the parental allowance plus. Both forms should compensate for a loss of income if parents work loss or not after the child's birth. In this way, parental allowance should help secure families' lives (Bundesministerium für Familie, Senioren, Frauen und Jugend, 2019).

4.1. Basic Parental Allowance

Under political excitement and media sensationalism, the Federal Parental Benefit and Parental Time Act (Bundeselterngeld- und Elternzeitgesetzt, BEEG) came into force in Germany on the 1st January 2007. It can certainly be described as a cultural shift defined by two new characteristics of parental benefits. The first is the construction of an income-based life-course policy that compensates for the drop in income in the phase after children's birth. Therefore, income compensation does not correspond to the classic principles of family policy, such as universality, but instead to individualized circumstances. This individualized approach leads to strongly differing benefit levels across socioeconomic strata. Secondly, partnership- or father-months are used to intervene in the couple-specific division of work and childcare, motivating fathers to take a temporary career break and take over child-related care work (Bujard, 2013). Therefore, the traditional male-breadwinner model can be progressively eroded as the BEEG is intended to influence gender equality in such a way that men in this phase orient their life towards women's life courses and careers (Bujard, 2013). This form of parental leave benefit is described as the basic form. The basic parental allowance is only paid within the first 14 months after childbirth (Presse- und Informationsamt der Bundesregierung, 2018).

Parents can choose to allocate the basic parental leave allowance between each other. Partners who take advantage of this possibility receive two so-called "partner-months" (Bundesministerium für Familie, Senioren, Frauen und Jugend, 2019). If both partners are involved in care-taking and therefore have a loss in income, basic parental allowance is paid for a maximum of 14 months. The partners are free to split the months between each other, except that one partner can draw a maximum of 12 months of parental benefit (Bundesministerium für Familie, Senioren, Frauen und Jugend 2019). For instance, if the mother takes parental leave for 12 months, the two additional months can only be taken by the father.

4.2. Parental Allowance Plus

The parental allowance plus (ElterngeldPlus) allows mothers and fathers to take advantage of parental benefits for longer than before. This benefit will be paid twice as long as the basic form. The amount of parental benefits will be halved compared to the BEEG. One month of basic parental allowance correspondents with two months of ElterngeldPlus. Meaning, for each month of basic parental allowance, you can also get two months of ElterngeldPlus instead, in which the benefits are halved (Bundesministerium für Familie, Senioren, Frauen und Jugend, 2019) . The introduction of the ElterngeldPlus on the 1st of July 2015

(Presse- und Informationsamt der Bundesregierung, 2018) should further strengthen work and family life's comparability. Furthermore, it should primarily support parents who want to work part-time again while still receiving parental benefits.

In the case of ElterngeldPlus, partners can receive four extra months of parental benefits if they choose a partnership based arrangement where both partners work part-time between 25 and 30 hours per week (Bundesministerium für Familie, Senioren, Frauen und Jugend 2019).

4.3. Amount of Parental Benefits

The amount of parental benefit depends on how much income the caring parent earned before the child was born. Parents with a higher salary get 65% of their lost income, and parents with a very low incomes can get up to 100% of their previous income. The resulting benefit ranges between a minimum of 300 and a maximum of 1800 euros per month for the basic allowance, and between 150 and 900 euros per month for the ElterngeldPlus. The minimum parental allowance is paid to all those who look after their new-born child and worked a maximum of 30 hours per week before childbirth. Multi-child families with small children benefit from the sibling bonus as they can receive an additional 10% of their parental allowance entitlement (Bundesministerium für Familie, Senioren, Frauen und Jugend 2019).

In principle, parents can choose between basic parental allowance, ElterngeldPlus, or a combination of both since the 1st of July 2015 (Bundesministerium für Familie, Senioren, Frauen und Jugend 2019; Presse- und Informationsamt der Bundesregierung 2018).

5. Parental Leave Use

The highest share of studies on fathers' use of parental leave focuses on Scandinavian countries, as they were the pioneer parental leave for both parents. Furthermore, most of the studies research the use of parental leave in connection to family policies. These studies have in part produced different results. On the one hand, because they differ considerably in terms of methodology and, on the other hand, the conditions for parental leave use are very different between countries, especially for fathers. Even the Nordic countries do not reflect gender equality, as the mothers' uptake of parental leave is larger than that of fathers (Duvander et al., 2010). The take-up rate of parental leave by fathers varies drastically: While in Sweden, nearly all fathers take parental leave, Finnish fathers' parental leave take-up remains low (Mussino et al., 2018).

Mussiono et al. (2018) conducted a quasi-experimental study, investigating how immigrants to and from Finland and Sweden adapted to parental leave use in their new host country. Their main findings imply a strong role of policies but also highlight the importance of gender norms. Fathers, who moved to a new country before adolescence - the mainly formative years for gender socialization were spend in the country of origin - showed lower adaption rates to the parental leave use of fathers in the destination country.

Sundström and Duvander (2002) used Swedish register data to explore the determinants of parental leave use of mothers and fathers. They could show that half of the fathers took parental leave at least for some days and that the fathers' earnings had a positive impact on fathers' parental leave use: Fathers with a higher earning took more parental leave. Interestingly, the effect of fathers' income was stronger than that of mothers' income. Furthermore, the income effect was not linear, as fathers with an income at or above the ceiling, took less parental leave. A study about the parental leave use of German fathers revealed a strong influence of the partner's income: Fathers whose partner had higher earnings were more likely to take parental leave (Reich, 2011).

Duvander et al. (2010) showed furthermore that parental leave uptake of fathers in Sweden and Norway is positively associated with a second birth in Norway and Sweden. If fathers took paternal leave for their first child, this may positively influence their decision to have a second one or at least speed up the decision. The highest amount of parental leave was taken for the first child in the study of Sundström and Duvander (2002). This could be due to work share becoming more gender-based with the transition from a first to a second child as the amount of housework grows. Other studies point in a different direction and suggest that the father's use of parental leave is higher in families with more children (Geisler & Kreyenfeld, 2009; Naz, 2010).

The marital status of fathers had a significant influence on parental leave use of Norwegian fathers. Married fathers took more parental leave than unmarried fathers (Naz, 2010).

Another study in the Swedish context (Lappegård, 2008) could show a positive relationship between parental leave use of fathers and education. Both, fathers' and mothers' education, showed enhancing effects on parental leave use of fathers. Sundström and Duvander (2002) found a converging effect of fathers' education: Fathers' years of schooling had a negative effect on their leave use. Their findings for mothers' years of schooling were in line with Sundström and Duvander: More mother's years of schooling are related to higher probability of fathers taking up parental leave. Geisler and Kreyenfeld (2009), who observed the parental leave take of German fathers, could not find significant results that show an

interaction between father's education and paternal leave take. Nevertheless, relative education was significant: Less educated fathers, compared to their partners, will more likely use parental leave.

Duvander and Sundström (2002) also investigated the age of fathers and their parental leave use. Younger fathers were more likely to take parental leave than older fathers. The authors concluded that changing gender-attitudes were responsible for this trend.

All in all, research has so far focused very much on the Scandinavian context. Moreover, very different research results are available. Therefore, the current study can contribute to the research subject and conduct research that is focused on German fathers. To examine the importance of researching paternal leave use, it is urgent to answer the question whether parental leave promotes equality between men and women. Therefore, the state of research on time invested and parental leave use will be discussed below, as women seem to spend more time in household and childcare related work than men.

6. Parental Leave and Time Investment

A central question of parental leave studies asks if parental leave leads to a change in gender-based workshare and could reduce the inequality between sexes regarding household and child related tasks (Aunkofer et al., 2019; Haas & Hwang, 2008).

To answer this question, it is useful to look at the parents', and especially fathers', time investment. An analysis of time-use survey data from 16 industrializes countries (Gauthier et al., 2004) could reveal that parents, regarding less of their sex, invest more time in their children than 40 years ago. Surprisingly, this is true for both sexes as mothers nowadays are engaged to a higher extent in the labour market than in the last decades. While mothers increased their paid labour work, Gautier et al. (2004) suggest that fathers reduce paid work and time devoted to personal activities to gain extra childcare-time. Whereas in 1960, fathers spent 0.4 hours a day with their children, this increased in 2000 up to 1.2 hours per day (Gauthier et al., 2004). Mothers are still the dominant caretaker in families, but the gap between mothers' and fathers' time spent on physical childcare decreases (Sayer, 2016). In 2012 mothers spend more than double as much time providing physical care for children as fathers, which is still a much higher number, but in 1985 mothers devoted about four times as much time as fathers.

Haas and Hwang (2008) state that the extent of father's participation in childcare positively correlates with the number of days taken parental leave. They analyzed survey data from 356 Swedish fathers working in private companies. The ones who took more days of parental leave took over more sole responsibility for their children when mothers were at work, spend more time with their children, and were more engaged in childcare tasks. These findings get supported by Bünning (2015), who used German SOEP data from 2006 to 2017 and more recent FiD data from 2010 to 2012 to show that already a short paternal leave results in a higher extend of fathers' time devoted to childcare. Fathers who took paternal leave reduced their weekly working hours and increased their childcare-time. Interestingly, the time devoted to housework did not significantly increase if the fathers took only two months parental leave or less. Increased household work could only be proven if the fathers took sole parental leave or if it lasted more than two months. These results support the finding from Coltrane (1997): Involved fathers start to increase their time in childcare and, only over time, become involved in household related tasks.

Furthermore, Suwada (2016) could show with Polish and Swedish data that paternal leave take does not question prioritizing career over family related work. Polish and Swedish men prioritize their paid work and career over domestic duties. The Polish men especially see household related work as a women's responsibility and see themselves as responsible for securing economically for their families. Their main role is to engage in the labour market, while the women's engagement in paid work is rather seen as an assistance. Conversely, men see their own functioning in the household as an assistant-role since women are the main ones responsible. These results point in the direction that paternal leave take does not automatically result in more egalitarian gender-related workshare of partners (Aunkofer et al., 2019).

Nevertheless, the mentioned studies have shown that parental leave, even if only concerning childcare, can lead to a fairer division of labour between men and women. Although the simple taking of parental leave does not seem to be sufficient to change the role distribution between men and women, Haas and Hwang (2008) demonstrated that a longer period of parental leave can have an effect in this direction. Accordingly, Thomas and

Hildingsson (2009) assume paternal leave take is meaningful but not sufficient for an egalitarian workshare. This underlines the importance of research on parental leave: In order to develop political incentives, the determinants of parental leave must be investigated. To explain the determinants of parental leave use, theories are needed to conduct testable Hypotheses. The following section will elaborate three different concepts concerning parental leave use.

7. Theoretical Background and Hypotheses

7.1. New Home Economics

To explain the division of labour in partnerships, including those associated with family formation, family sociologists often draw on economic explanations (e.g. partners' distribution of income). These explanations are also used to examine parental leave distribution in partnerships (Brandt, 2017; Trappe, 2013a, 2013b). Economic theories explain why specialization processes between partners emerge through rational justifications (Brandt, 2017). Following this logic, Becker's new home economics (1965, 1993) takes an employment-centred perspective on the division of labour in partnerships. Becker does not consider the interests of the single individuals, which may compete with another. Instead, he conceives decisions concerning the division of labour in the areas of care services and gainful employment within a household as couple-decisions, based on economic considerations concerning the family as a whole. Following Becker, partners strive for economic utility maximization for the whole family The question which parent should interrupt his or her gainful employment to care for a child is thus decided by the amount of income he or she earns (Reimer, 2013). A wage replacement for high-earning partners would affect the family because a reduction of gainful employment is accompanied by opportunity costs. These opportunity costs result from the loss of income, reduced career opportunities, and a possible devaluation of acquired qualifications (Bauer and Jacob, 2010; Trappe, 2013a). Therefore, the fathers' income should influence their parental leave take, and the following Hypothesis is stated:

Hypothesis 1: Fathers' income is associated with their parental leave use.

Due to a labour market in Germany that is still characterised by a high degree of gender segregation and a gender pay gap (e.g. Minkus & Busch-Heizmann, 2020), leaving women with a lower income than men, it is usually not worthwhile for a family if the father takes over the childcare services (Reimer, 2013). Walter and Künzler (2002) see the primary influence of fathers' participation in childcare rooted in the extremely unequal distribution of paid work between males and females. Therefore, it should be that the father's income should affect decisions, regarding parental leave use, to a higher degree than mothers' income. In 2019, women in Germany earned 20% less than men. Even if three-quarters of the gender-pay gap is due to structural nature – factors like a higher share in part-time jobs and labour force interruptions because of motherhood – the remaining quarter of earning differences, assuming comparable work and equivalent occupations, prevails (Statistisches Bundesamt, 2020b). If men earn more than women, the monetary opportunity costs of parental leave should be higher for men as for women. If the opportunity costs are high, like for high income fathers, a longer duration of parental leave would even maximize them. Therefore, the following extensions to Hypothesis 1 are made:

Hypothesis 1(a): The higher the fathers' income, the less likely are fathers to take paternal leave.
Hypothesis 1(b): The higher the fathers' income, the shorter the duration of paternal leave.

7.2. Resource Theory

Apart from economic reasons, an important contribution, explaining the division of labour, is the resource theory (Blood & Wolfe, 1965; Ott, 1992). According to this theory, both partners strive to maximize their benefit and use their respective resources, such as education, and occupation, in their intra-partner negotiations. In contrast to classical family economy theory, the theory states that an intra-family consensus does not prevail in maximizing a joint household production function. Partners are not considered as a fixed unit but represent different individuals with their own interests, which they try to integrate into the decision-making process. The participation of partners in household and child-related work results from negotiations in which the partner who has more individual resources can impose his or her ideas on the organisation of these work-spheres. The theory further assumes housework, which is strongly related to the tasks that come up with child care, is not a very desirable activity and that both partners prefer to spend their time on other activities (Huinink & Reichart, 2008). Not only simple cost-benefit rationality is taken into account, but rather social factors are integrated into this theory like the human capital of partners (Auspurg & Abraham, 2007; Bauer & Jacob, 2010). This theory also states that the chances of exploiting labour market resources are higher for those with favourable negotiation positions which are better suited to avoid unpaid labour and transfer it to the partner or outsource to a third party (Lundberg & Pollak, 1996; Naz, 2010; Trappe, 2013b). Partners' individual negotiation power is used to explain traditional division of labour (Brandt, 2017) and paternal leave take. The following study therefore hypothesizes:

Hypothesis 2: Fathers' human capital is associated with their paternal leave.

To test more specific statements, human capital is equated with education and professional prestige. Here too, subsequent hypotheses on the connections of parental leave and the length of parental leave are stated. The first set focuses on education, occupational prestige, and parental leave take of fathers:

Hypothesis 2(a): The higher the fathers' educational level, the less likely are fathers to take paternal leave.
Hypothesis 2(b): The higher the fathers' occupational prestige, the less likely are fathers to take paternal leave.

The second set of Hypotheses explores the relationship between education, occupational prestige, and the length of parental leave:

Hypothesis 2(c): Fathers with a higher educational level will take a shorter duration of paternal leave.
Hypothesis 2(d): Fathers with higher occupational prestige will take a shorter duration of paternal leave.

7.3. Doing Gender Approach

West and Zimmermann's (1987) "doing gender" approach emphasizes the social construction of gender. The identities of the spouses are reproduced in everyday life and can be seen as a changeable construct. Therefore, fathers' participation in childcare is a matter of rational

considerations and identity-defining tasks that follow internalized convictions of femininity and masculinity (Coltrane, 1989). This approach provides a framework for understanding why women or men either approve or rather reject the interruption of their economic careers for the care of their children: They follow their internalized understanding of appropriate roles (Trappe, 2013b).

The exact definition of what is to be understood by female or male behaviour that creates identity depends on the concrete content of the respective gender roles (Huinink & Reichart, 2008). Gender roles vary between different context: What appears to be masculine in a West European context could be understood differently in other countries. People base their values on these concepts and the individual values result in so called commitments for certain areas of life (Bielby & Bielby, 1989). If masculinity is for instance related with being successful in a job, fathers will highly value their career and therefore commit to their profession.

According to Brandt (2017), most women see themselves as being mainly responsible for the children and the associated family work, while men see themselves as being primarily responsible for financial security. This should be reflected in the internal concepts of gender roles and the self-evaluated importance of individual areas of life and in turn influence the take of parental leave. If fathers really see themselves as mainly responsible for financial security, this will lead to a higher importance of career and influence their parental leave use, following the bargaining theory.

Based on this theoretical perspective, the following, more general hypothesis is made, summarizing the internal concepts of gender roles and importance of career as attitudes:

Hypothesis 3: Fathers' attitudes are associated with their parental leave.

To concretise this general hypothesis, the following hypotheses focus on fathers' ideas about gender roles and their importance of career. The first set of hypotheses focuses are related to paternal leave take:

H3(a): The more traditional the sex-role conceptions of fathers, the less likely are fathers to take paternal leave.
H3(b): The more career-oriented fathers are, the less likely are fathers to take parental leave.

The next set of Hypotheses focuses on the length of fathers' parental leave use:

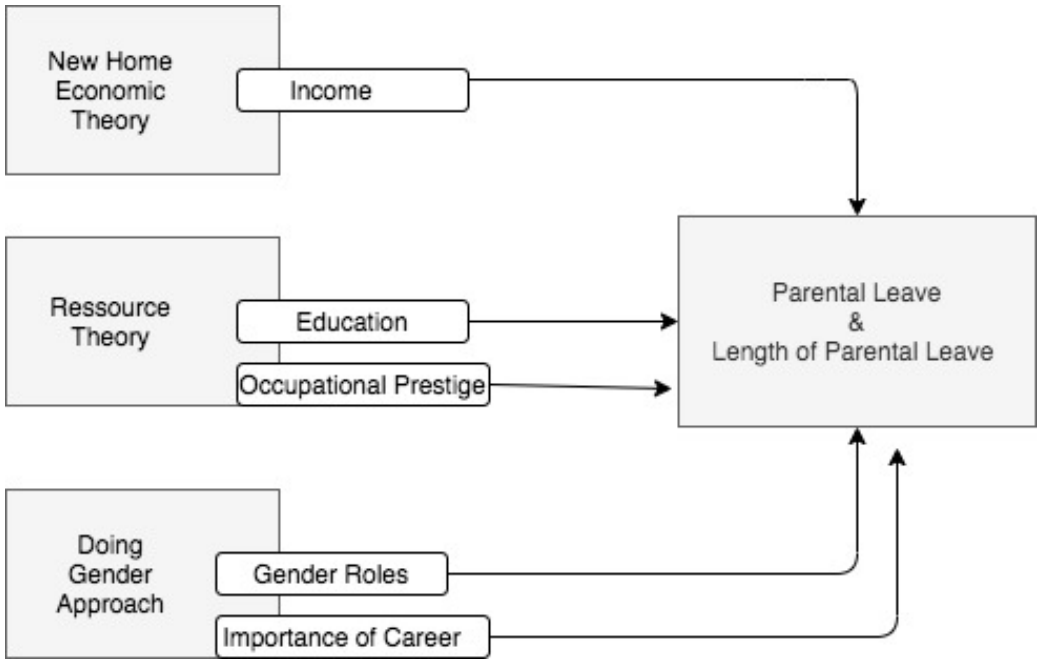
H3(c): Fathers with more traditional sex-role conceptions will take a shorter duration of paternal leave.
H3(d): Fathers who are more career-oriented will take a shorter duration of paternal leave.

7.4. Conceptual Model

To present the theories described above and the hypotheses derived from them, a conceptual model (**Figure 1**) was developed for the present thesis.

This concept illustrates the theories which aim to explain fathers' parental leave use. Furthermore, observable variables are integrated into the theories, as it is otherwise impossible to test them. The arrows show which variables could influence parental leave use. The Conceptual Model is intended to provide an overview of the used theories and testable constructs in the present analysis. In the end, this only shortens and illustrates what was previously explained about the theories.

Figure 1 Conceptual model



To test the Hypothesis, an empirical data analysis is required. The data and methods used for this purpose are presented in the section below.

8. Data and Methods

For the following analysis, a quantitative secondary analysis was conducted to answer the question about determinants of parental leave. A panel dataset, the German Family Panel, was used for the analysis. The panel structure will be explained in more detail, and a description of the analytical sample for the present study is given. Furthermore, the procedure of generating new variables and the variables themselves are described. To present an overview on the sample characteristics, frequency distribution of the variables are discussed and graphed.

Using different statistical methods, the hypotheses from section 7 are tested. First by performing Chi-square tests between independent and dependent variables to statistically confirm possible correlations and to display the frequency distributions between groups. Based on this, a binary logistic regression is performed to determine the relationship between parental leave and the influencing variables. Various models are calculated and tested for their suitability. Furthermore, a multinomial logistic regression is performed to check the influence of the explanatory variables on the length of parental leave. STATA, a statistical software for data analysis, was used for the whole statistical analysis.

8.1. The German Family Panel

The German Family Panel (pairfam) is a multidisciplinary, longitudinal study covering the central topics of partnership and family dynamics in Germany. Pairfam is funded as a long-term project by the German Research Foundation (DFG) for 14 years until 2022. Principal investigators of the German Family Panel are Josef Brüderl and Sabine Walper (LMU Munich), Sonja Drobnič (University of Bremen), Karsten Hank (University of Cologne), and Franz J. Neyer (Friedrich Schiller University Jena) (Brüderl et al., 2019; Huinink et al., 2011). The survey was launched in 2008, drawing a nationwide sample from the population register for 1971-73, 1981-83, and 1991-93 cohorts. A total of 12,402 CAPI-supported interviews were carried out, distributed roughly equally among the three cohorts (about 4,000 interviews per cohort). The approximately one-hour CAPI[2]-supported surveys were then conducted annually, resulting in 10 waves up the present study's beginning. Pairfam is of particular interest for the present study, since the data set can capture the most essential family formation phases between the age of 15 up to age 50. All respondents of a wave were contacted again unless they had explicitly declined to do so. If respondents did not participate twice in a row, they were excluded from the panel. The Pairfam respondents are named "anchorperson" (Brüderl et al., 2019) as partners, children, and parents of the "anchor respondents" are also interviewed to access a broader range of information. Nevertheless, the present study will only take the anchor persons into account as they are the only ones that were asked the important questions about parental leave.

The study DemoDiff , which was initiated in 2009 by the Max Planck Institute and follows the design of pairfam, was fully integrated into pairfam since wave 5. As this study was conducted only for respondents residing in eastern Germany of the birth cohorts 1971-73 and 1981-83, the integration into pairfam has led to an overrepresentation of this group.

[2] CAPi is a computer assisted personal interview in which the interviewer reads out questions from the Computer and enters the answers directly (Wübbenhorst, 2020).

Since the present work will also refer to the earlier waves than wave 5, the DemoDiff-sample will be omitted in the following study. The present study will only refer to persons who initially participated in the original pairfam study in wave 1. This counteract a possible distortion of the results as the monotonic design of pairfam would be destroyed if DemoDiff would get included. By excluding DemoDiff, all respondents of pairfam enter the panel at wave 1 and some will attrite from the panel.

Until early 2020, 10 waves were available of Pairfam (Brüderl et al., 2019). **Table 1** shows the individual waves and their corresponding survey years.

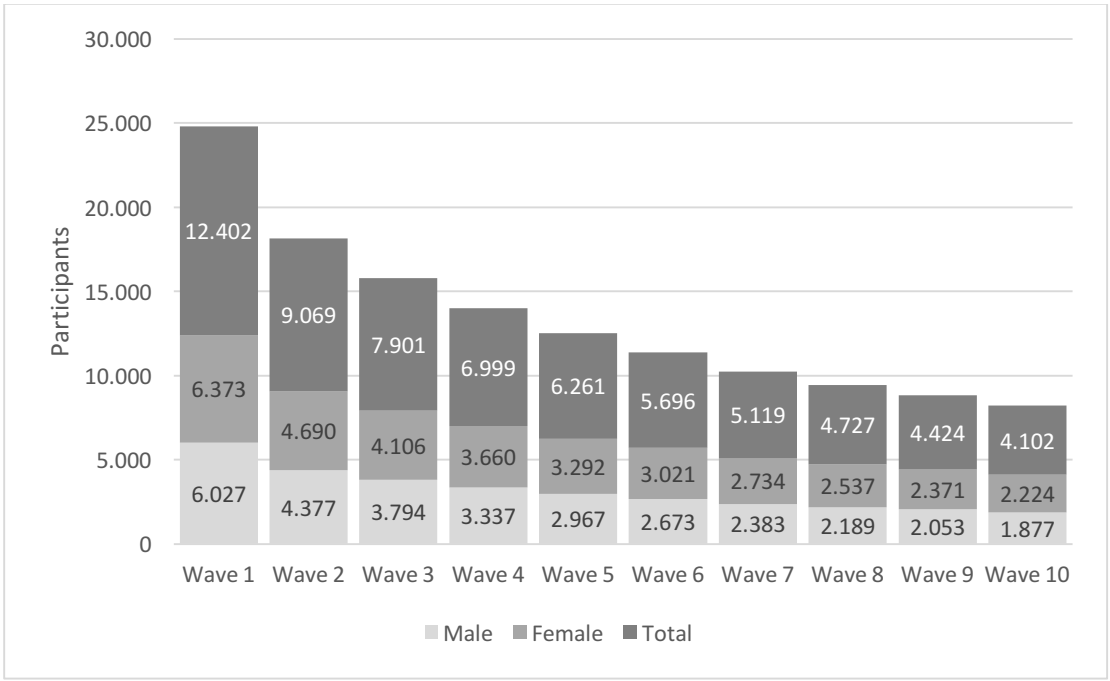
Table 1 Waves and corresponding survey years of pairfam

Wave	1	2	3	4	5	6	7	8	9	10
Survey years	2008/ 2009	2009/ 2010	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018

Source. Own presentation, based on pairfam, release 10.0 (Brüderl et al. 2019).

Figure 2 shows the number of interviews with anchorpersons per wave and cohort. A relatively large attrition per wave gets visible and will affect the following analysis by reducing the analytical sample. The number of participants for men is lower than for women, which further limits the analytical sample. Besides, there are further exclusion criteria, which are explained in the following section.

Figure 2 Number of participants per wave of the German Family Panel



Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

8.2. Analytical Sample

For the current study wave 1 to 9 of the panel is used. Wave 10 had to be excluded from the analysis because the study's dependent variables are based on questions from waves 7 and 9. Only fathers, who answered these questions in wave 7 or 9 get included in the analysis. Furthermore, these fathers must have had their first, second, or third child between waves 2 and 8. The final sample consist of 365 fathers.

The limiting sample design can be explained by trying to answer the research question about the determinants of fathers' parental leave use: Fathers who decide to take parental leave usually do so as part of a preliminary planning process and depending on current circumstances (e.g. employer must be contacted beforehand, economic planning processes, etc.) . Therefore, it is necessary to survey the independent variables in the wave *before childbirth*, which makes cross sectional analysis worthless for detecting determinants of parental leave.

If a father has had a child within the first wave of the pairfam panel, it is impossible to determine the influencing variables as the questions of this survey are not focusing on retrospective events. It is impossible to know what conditions existed before childbirth. To survey the influencing variables beforehand gets possible from wave 2 on. When a child is born in 2010, one can look at the influencing variables of interest from wave 1. At that time the father was not yet influenced by the birth of the child.

If the child is born in wave 9, it is also impossible to capture the determinants of parental leave use, as the questions about paternal leave and childbirth took place in the same wave. Nevertheless, the important question about parental leave are also asked in wave 7 and fathers whose children are born in this wave are not excluded from the analysis. If the child is born in wave 7, fathers can still answer the important questions in wave 9. Therefore, the analytical sample only includes fathers whose children are born within or between waves 2 to wave 8. The following example should help to understand the sample construction: If a father gets a child in 2014 and answers the questions on parental leave for this child in either wave 7 or 9, wave 5 is now used for almost all independent variables. In this wave, the independent variables were not yet influenced by the imminent birth of the child.

In a similarly designed study about parental leave by Duvander (2014), she included only participants who had their first child within the observation period (not their second or third, etc.). This ensures that the presence of a previous child does not already influence the independent variables. Since this exclusion would pose major problems for the current analysis, concerning a very small sample number, the procedure is different in this study. To increase the number of cases, fathers who had their first, second or third child within waves 2 to wave 8 were included in the analysis. Only the first birth in this period is taken into account. For example, if a father had his first child in 2012 and another in 2014, only the information concerning the first child are taken into account. This minimizes distortions, as individual preferences are minimized, who could strongly influence the study if fathers were presented more than once in the sample. This analysis provides the possibility to control the number (first, second or third child) of the children.

The next section contains the generated variables that were needed for the analysis and explains further which waves were needed to create them.

8.3. Generated Variables

The study's dependent and independent are explained in this section. Therefore, **Table 2** provides an overview of the original variables used in the pairfam dataset, the newly generated variables, the waves used, and the values of the categories.

Table 2 Generated variables and the corresponding pairfam data

Original pairfam variables	Generated variable	Label	Values	Used waves
crn53kxi1 ehc7kxn,	parben_rec	Parental leave recorded	0 = No 1 = Yes	waves 7 & 9
crn55k1i1mz ehc7kxn,	length_par	Length of parental leave in month	0 = 0 months 1 = 1 – 2 months 2 = > 2 months	waves 7 & 9
incnet, ehc7kxn	income	Monthly net income in Euros	0 = -999 1 = 1000 – 1499 2 = 1500 – 1999 3 = 2000 – 2499 4 = ≥ 3000	waves 1 - 8
school, ehc7kxn	education	Educational level	0 = Lower 1 = Medium 2 = Higher	waves 1 – 8
siops, ehc7kxn	occup_pres	Occupational prestige	0 = -29 1 = 30 – 39 2 = 40 – 49 3 = 50 – 59 4 = ≥ 60	waves 1 - 8
val1i3, ehc7kxn	gender_roles	Gender roles	0 = Egalitarian 1 = Medium 2 = Traditional	wave 1
pschool, ehc7kxn	education_p	Education of the partner	0 = Lower 1 = Medium 2 = Higher	waves 1 – 8
school, pschool, ehc7kxn	releduc	Relative education	0 = Same level 1 = Lower than partner 2 = Higher than partner	waves 1 – 8
age, ehc7kxn, doby_gen	cat_age	Age	0 = - 25 1 = 26 – 35 2 = > 35	waves 1 – 8
page, ehc7kxn	cat_page	Age of the partner	0 = - 25 1 = 26 – 35 2 = > 35	waves 1 – 8

*** Table 2 continued**

Original pairfam variables	Generated variable	Label	Values	Used waves
page, age, ehc7kxn	relage	Relative age	0 = Younger 1 = About the same age 2 = Older	wave s1 - 8
doby_gen	cohort	Birth-cohort	0 = 1971 – 1973 1 = 1981 – 1983 2 = 1991 – 1993	wave 1
marstat, ehc7kxn	married	Married	0 = No 1 = Yes	waves 1- 8
ehc7kxn	ch_num	Number of child	0 = First 1 = Second 3 = Third	waves 1 - 8
crn54kxi	el_plus	ElterngeldPlus received	0 = No 1 =Yes	waves 7 & 9

Note. ehc7kxn, crn53kxi1, crn54kxi always for child 1 – 3 and crn55k1i1mz for month 1 – 14.Source. Own generated variables based on data from pairfam, release 10.0 (Brüderl et al. 2019).

8.3.1 Dependent Variables

To test the hypotheses (see section 7), two dependent variables are needed. The first must contain the information if fathers took paternal leave for their first child born between and within waves 2 and 8. The original pairfam questionnaire asked parents in wave 7 and 9 about paternal leave.

> Wave 7, Question 241:
>
> "The next questions concern the parental benefit. Just to jog your memory: : In early 2007, parental leave and associated benefits (Erziehungsurlaub and Erziehungsgeld) was replaced with a new legal framework for parental leave and parental benefit (Elternzeit and Elterngeld). Since then, an increasing number of fathers, too, receive parental leave and/or the parental benefit. We would like to know how it was for you. How was it with your child [name child x (ehc7kxn)]? Did you receive the parental benefit during the first 14 months of [name child x (ehc7kxn)]'s life?" (pairfam Group, 2020b, p. 182)
>
> Wave 9, Question 266:
>
> "The next questions cover the topic of parental benefits (Erziehungsurlaub and Erziehungsgeld). We would like to know how it was for you. How was it with your child [name child x (ehc7kxn)]? Did you receive parental benefits during the first 14 months of [name child x (ehc7kxn)]'s life? (pairfam Group, 2020c, p. 185).

These two questions form the basis of the variable *crn53kxi1* in the pairfam data sets of waves 7 and 9. The questions could be answered with "yes"," no", "don't know" and "no answer" (pairfam Group, 2020b, 2020c). The questions asks for the basic parental allowance and the parental allowance plus, as all of these forms are described as parental benefit. The "x" in the variable is replaced by an individual number for each child, depending on birth order (1 for the first child, 2 for the second, etc.). To identify the first born child within waves 2 to 8, the pairfam variable *ehc8kxy* was used, which contains the year of birth for every child (x gets replaced by the individual number of the child). It was analysed which child was born first after the year 2009 – after wave 1.

Furthermore, it was checked – for the first child born after 2009 – if the questions about paternal leave in wave 7 or 9 were answered. The resulting information was stored in the newly generated variable *"parben_rec"*, which reports if the fathers, who got a child between waves 2 and 8, got parental leave benefits for their first child born in this period. This variable is the first dependent variable of the current study.

The second dependent variable is called "*cat_lengpar*" and indicates for how many month paternal leave was taken within the first 14 months after childbirth. Therefore, the original pairfam variable *crn55kxi1mz* was used. The letter "x" indicates the child's number (e.g., first, second, ...) and z the months parental leave was taken for, ranging from 1 to 14.

The variable *crn55kxi1mz* is based on the question: "For which of the first 14 months of [name child x (ehc7kxn)]'s life did you receive the parental benefit?" (pairfam Group, 2020b, p. 184, 2020c, p. 187) and was only asked to fathers who indicated to have received parental leave. The fathers could answer for each month whether they took parental leave or not.

Combining the information of *crn55kxi1mz* and *ehc8kxy*, the newly generated variable *"length_par"* identifies the total duration of parental leave within the first 14 months of life after childbirth. The variable *crn55kxi1mz* is only accessible in the pairfam data for fathers that took paternal leave. Fathers who indicated beforehand to not have taken parental leave were excluded. As this leads to a reduction of observations, fathers who indicated to not have taken paternal leave (*parben_rec* = 0) were included in the variable "*length_par*". Their amount of parental leave length was set to "0 months".

The variable "*length_par*" categorizes the duration of parental leave the following: Value 0 indicates that the fathers have taken "0 months" of paternal leave, 1 indicating "1 – 2 months", and 2 indicating "more than 2 months".

8.3.2. Independent Variables

To test the new home economics theory, the income of the fathers is used. The original pairfam variable "*incnet*" combines the information of an open question about monthly net income and a question where people, who did not answer before, were asked to estimate their income, presenting them different income categories. The "*incnet*" variable was available for all waves. The information from variable "*ehc8kxy*" (year of birth of child x) was used again to define the wave from which the information on income was taken. If the child was born in 2010, the first wave served as a source of income. For children born in 2011 the first wave was used to draw the information about the income from. **Table 3** shows exactly which birth-year is linked to which wave. This pattern applies to all independent variables, except gender roles and birth-cohort. The "*incnet*" variable was categorized for the present study in a new variable "*income*" with following categories: "Up to 999 Euros", "1000 – 1499 Euros", "1500 – 1999 Euros"," 2000 – 2499 Euros", "2500 – 2999 Euros" and "3000 Euros or more".

Table 3 Waves used for independent variables, depending on childbirth

Childbirth	2010	2011	2012	2013	2014	2015	2016
Wave used for independent variables	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6	Wave 7

Source. For all independent variables, except *gender_role* and *cohort*.

The human capital is highly important in the resource theory as explained in section 7. To test this theory, the educational level, and the occupational status of the participants were taken into account. The original pairfam variable *"school"* contains the highest school degree attained at the time of the interview. For the current analyses a new variable *"education"* was generated, categorizing the values of the old pairfam-variable *"school"* into three groups: "Lower", indicating respondents were currently enrolled, left school without a degree, or had a Hauptschulabschluss/lower GDR. People, indicating a degree that is not valid in Germany, were also included in this group. Respondents, indicating to have a Realschulabschluss/intermediate GDR belong to the category "Medium" and respondents with a Fachhochschulreife or Hochschulreife are in the group "Higher".

The occupational prestige of fathers was also integrated into a new variable. This variable is called *"occup_status"* and contains information of the pairfam-variable *"siops"*. The latter variable contains the classification of the anchor person's occupation according to the SIOPS scale. The SIOPS was developed in the 1970s to provide a standardised occupational prestige scale for international comparison. The scale is based on surveys from 55 countries, in which respondents evaluated job titles in terms of their social standing and formed a corresponding order. The results were then summarised in the SIOPS, assigning an empirically determined prestige value to occupations. The index ranges from 12 (e.g. shoe shiners) to 78 (e.g. doctors) (Ganzeboom & Treiman, 1996; Hoffmeyer-Zlotnik & Geis, 2003). The generated variable *"occup_status"* categorizes the father according to their SIOPS value. A total of five categories are distinguished: "-29", "30 - 39", "40 - 49", "50 - 59", and "≥60" points.

The variables used to test the new home economic theory and the resource theory were presented above. In the following, the variables that are used to test the doing gender approach get introduced. Two variables were generated to test the assumption regarding fathers' parental leave use. The first generated variable is *"gender_roles"* and measures the agreement to the statement "Women should be more concerned about their family than about their career." (pairfam Group, 2020b, p. 6). The original pairfam variable *"val1i3"* uses a five-point Likert scale, ranging from one "disagree completely" to five "agree completely" (pairfam Group, 2020b, p. 6). To obtain bigger categories, due to the relatively small sample size, the information was categorized in the new variable *"gender_role"*. Subjects who states a one or two on the Likert scale, were placed in the category "Egalitarian", the value three generated the category "Medium" and the values four and five were categorised as "Traditional". An index-variable, with the agreement/disagreement to other statements ("Men should participate in housework to the same extent as women", "A child aged under 6 will suffer from having a working mother"), could unfortunately not been built as the Chronbach's Alpha (0.473) was too low. Therefore, the present study bases the variable *"gender_roles"* on the single question about working mothers, which is also done in a study by Wrohlich and Unterhof (2017). The authors investigated the link between parental leave and

gender norms by using the same question for gender roles as this thesis. In contrast to the previous independent variables, the question about gender roles was only asked in waves 1, 3, 5,7,9 and 10. In order to avoid excessive failures, the gender roles from wave 1 are used. As gender roles are not changing rapidly (Wrohlich and Unterhof, 2017), this approach is an acceptable solution to balance between sample size and loss of information.

The second variable used to test the doing gender theory is displaying the importance of career. Therefore, the pairfam original variable *"srs1i1"* was used. The participants were asked:

> "Please look at these five life goals and domains. How important are these to you personally at the moment? You have 15 importance points to distribute among the five goals and domains. The more important a goal or domain is to you at the moment, the more importance points you should assign to it. If something is absolutely unimportant to you at the moment, don't assign it any points." (pairfam Group, 2020a, p. 3).

One of the five life goals was "Pursuing my education and career interest" (pairfam Group, 2020a, p. 3). The possible 15 points of importance were categorized in a new variable called *"imp_career"*. People were placed in the category "Lower" if they assigned zero to two importance points to the life goal, in the category "Medium" if they assigned three to four importance points, and in the category "Higher" if they assigned more than five points. As the people were asked to assign a total of 15 points to five different life goals, a value of five points or more signals a high importance, even if five out of 15 points intuitively seems to be not that much.

The age of the subject, age of the partner, relative age, birth cohort, marital status, education of the partner, relative education, number of child, and the information if fathers used ElterngeldPlus are also used for the present study. These control variables refer to the wave before child birth, except birth cohort, as this variable is taken from wave 1 as the cohort will not change over time. Furthermore, information on number of child, as well as the information about ElterngeldPlus, are taken either from wave 7 or wave 9. These two variable relate directly to the questions about paternal leave.

The generated variable *"cat_age"* refers to the original pairfam variable *"age"*, but divides it into the categories "- 25 years", "26 - 35 years", and "> 35 years". The same was done for the age of the partner; The variable is named *"cat_page"* and is based on the pairfam-variable *"page"*. The relative age *"relage"* measures if the partner of the anchor is "Younger", "About the same age", or "older". The category "About the same age" includes persons that do not have a age difference greater than three years. This variable was conducted by subtracting the age of the partner from the age of the anchor.

The variable *"cohort"* was derived from the original pairfam variable *"doby_gen"*, which contains the respondents' date of birth. Based on this, the three categories "1971 – 1973", "1981 – 1983", and "1991 – 1993" were formed.

The newly generated dummy variable *"married"* is based on the pairfam variable *"marstat"* and contains the two categories "No" and "Yes".

For the educational level of the partner, the original pairfam variable *"pschool"* was used, containing statements of the anchor person about the highest school leaving certificate of the current partner. The information was integrated into the newly generated variable *"education_p"*. The categories of the variable are the same as for the *"education"* variable: "Lower", "Medium", and "Higher".

To gain information about the relative education of the partners, a new variable was created from the pairfam variables *"school"* and "*pschool"*. The educational levels of the anchor and the partner were compared and categorized in the new generated variable *"releduˮ*. If the partners had the same school-leaving qualifications, or were both still in

education, they were classified in the category "Same level". If the partner had a higher level of education, the category "Lower than partner" was chosen and the category "Higher than partner" applied to the anchor persons who had a higher level of education.

The generated variable *"ch_num"* contains the number of the child and is based on the pairfam variables *"ehc7k1n"*, *"ehc7k2n", "ehc7k3n"*. The three pairfam variables contain the birth years of the first three children of fathers. It was checked which of the children was born first after 2009. The information was used to determine which child was included in the current study and categorized: "First", "Second", and "Third".

The generated variable *"el_plus"* contains the information if fathers used ElterngeldPlus, which enables them to receive parental benefits beyond the child's 14th month of life. This variable is based on the original pairfam-variable *"crn54kxi1"*. The variable *"el_plus"* is dummy-coded with "No" and "Yes".

A descriptive analysis is carried out in the following section, providing the reader with a more accurate picture of the analytical sample.

9. Description of the Sample

To get a more comprehensive picture of the sample's conditions, the frequency distributions of the variables are described below. The first conclusions can be drawn from this, which will later be examined in more detail using inferential statistical methods.

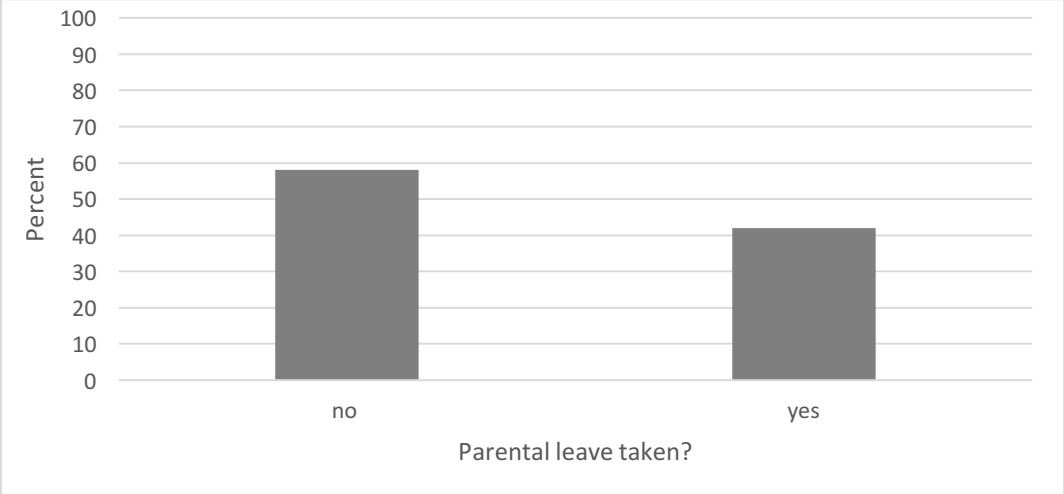
The total sample consists of 365 fathers who got their child between waves 2 and 8, and answered questions of paternal leave. As some of the variables are affected by missing values, it should be noted, that the following part refers only to relative and absolute frequencies of valid answers. **Table A1** in Appendix 1 shows the relative frequencies in relation to the total sample

9.1. Dependent Variables

Most of the fathers of the current study did not take paternal leave (58%, n = 212, **Figure 3**), but nevertheless, the paternal leave quota is nearly reaching 42% (n = 153). These numbers correspond to the research results of the Federal Statistical Office in Germany. Here, the fathers' participation in terminated benefit payments of the parental allowance for children born between 2008 and 2017 was measured. Fathers' participation refers to the percentage of children for whom (at least) one male recipient of parental benefit has received parental benefit out of all children born in the period under consideration. In 2008, the participation rate was 21% while it rose sharply to 40% in 2017 (Statistisches Bundesamt, 2020a). The comparability with the present results, increases the representativeness of the overall analysis results.

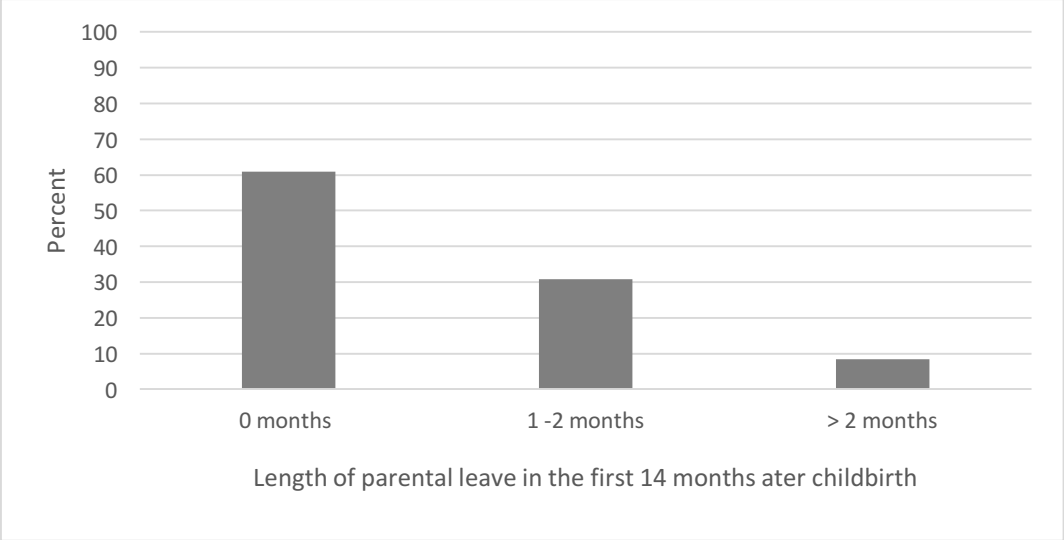
From the 365 fathers who gave information about their parental leave use (yes/no), 348 indicated the length of paternal leave (**Figure 4**). Of these, almost 61% (n = 212) did not take parental leave, 31% (n = 107) took 1 – 2 months and only just 8% (n = 29) took more than two months. These results display recent findings of paternal leave studies, indicating, that most fathers take two months of paternal leave. These so-called "daddy months" (Bünning, 2015) seem to be well accepted in German society and the recent study replicates the findings about parental leave length of German fathers (Brandt, 2017; Pull & Vogt, 2010; Reich, 2011; Reimer, 2013).

Figure 3 Fathers' parental leave use



Source. Own presentation based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Figure 4 Fathers' length of parental leave use



Source. Own presentation based on data from pairfam, release 10.0 (Brüderl et al. 2019).

9.2. Independent Variables

The proportions of independent variables are based on the number of valid answers and the a more detailed overview of the valid answers is given in **Table 4**.

The highest proportion of fathers refers to the cohort 1981 - 83 (54%, n = 197) followed by fathers born between 1971 - 73 (41% , n = 149). The youngest cohort, 1991 - 93, is represented only marginal (5%, n = 19). These results make sense as the oldest cohort may have completed their desire to have a first child before the observation period and only fathers are included, who become more than one child. Conversely, the youngest cohort may not have such a strong desire to have children as they are quite young. The middle cohort, on the other hand, may consist of men who are most likely to start a family. In order to obtain more precise information here, the number of the child (first, second, or third child) was

controlled for. The middle cohort was indeed represented most often with their first child: 70% of the fathers in the middle cohort had their first child during the survey period (n = 139). Among the fathers from the oldest cohort, only 37% (n = 55) were represented with their first child, while 44% (n = 65) of them were included in the sample with their second child and 19% (n = 29) with their third child. In the youngest cohort almost 90% (n = 17) were included in the sample with their first child and only two fathers (10%) with their second child.

335 usable answers about the monthly net income were analysed in this sample. Nevertheless, it must be pointed out that income should be interpreted with caution, as the analysis showed a rather unequal distribution of income for the overall sample. In our analysis, 20% of the fathers who gave information about their income (n = 68) reported a rather low monthly net income of up to 999 euros, while 10% (n = 35) reported a monthly net income of over 3000 euros. The most frequent income class was in the range of 1000 to 1499 Euros with 22% (n = 73) of the fathers.

353 fathers made announcements on the highest school degree obtained. Most of the fathers had an higher educational level (46%, n = 162) or a medium educational level (35%, n = 122). Nearly 20% of the respondents had an lower educational level (n = 69).

The value on the international occupational prestige scale (SIOPS) is known for 321 fathers in the analytical sample. Most of the fathers (36%, n = 115) are in the category 40 – 49 points, followed by the category 50 – 59 points (23%, n = 73) and 30 – 39 points (21%, n = 67).

A total of 353 fathers made valid statements about the importance of career. Most of these fathers rate the importance as "Medium" (53%, n = 186). Fewer fathers (29%, n = 101) rate their education/occupation as less important and even fewer men (19%, n = 66) report a "Higher" importance.

Almost all fathers (n = 364) answered the question regarding gender roles in wave 1. 50% (n = 182) of the fathers have egalitarian attitudes, just under 27% (n = 98) have intermediate attitudes in this respect and can neither be assigned to the egalitarian nor the traditional spectrum, while 23% (n = 84) have traditional attitudes.

The age of the fathers before childbirth was mainly between 26 and 35 years (56%, n = 203) or over 35 years (36%, n = 130). Only about 9% of the fathers were 25 years or younger (n = 32). For the partners only 324 valid answers were made. The partners' age was mainly between 26 and 35 years (65%, n = 210). Interestingly, about 23% (n = 76) were younger than 26 years. This is a higher number, compared to the fathers in this age category. This could be explained by the shorter fertile period of women, as all partners of anchor persons were female. The relative age of the partners (n = 324) thus shows that less fathers were in a relationship with an older partner before childbirth (3.7%, n = 12). Most fathers had a partner about the same age, indicating a maximum age difference of three years (62%, n = 199). Nearly 35% were older than the partner (n = 113).

350 valid answers about the marital status were given. The proportion of married and unmarried fathers before childbirth is nearly equal (n = 176 and n = 174).

Most of the fathers (58%, n = 211) enter the study with their first child, followed by fathers with their second child (31%, n = 111). Only 12% of fathers (n = 43) entered the study with their third child.

As describes in the section about the different forms of parental leave (section 4), parents can receive parental benefits for a longer period than within the first 14 months after childbirth, if they use ElterngeldPlus. In this study, only 3.56% did so (n = 13), why the main conclusions of the study will relate to the basic parental allowance. The BEEG is only paid during the first 14 months after childbirth.

Table 4 Absolute and relative frecquencies of the independent variables

Independent variables	Absolute frequencies	Relative frequencies	Cum
Monthly net income (€)			
0 - 999	68	20.3	20.3
1000 - 1499	73	21.79	42.09
1500- 1999	69	20.6	62.69
2000 - 2499	52	15.52	78.21
2500 - 2999	38	11.34	89.55
≥ 3000	35	10.45	100
Total	335	100	
Education			
Lower	69	19.55	19.55
Medium	122	34.56	54.11
Higher	162	45.89	100
Total	353	100	
Education of partner			
Lower	41	12.69	12.69
Medium	103	31.89	44.58
Higher	179	55.42	100
Total	323	100	
Relative education			
Same level	159	49.23	49.23
Lower than partner	96	29.72	78.95
Higher than partner	68	21.05	100
Total	323	100	
Occupational prestige (SIOPS)			
- 29	27	8.41	8.41
30 - 39	67	20.87	29.28
40 - 49	115	35.83	65.11
50 - 59	73	22.74	87.85
≥ 60	39	12.15	100
Total	321	100	
Importance of career			
Lower	101	28.61	28.61
Medium	186	52.69	81.3
Higher	66	18.7	100
Total	353	100	
Gender roles			
Egalitarian	182	50	50
Medium	98	26.92	76.92
Traditional	84	23.08	100
Total	364	100	
Age			
Up to 25 years	32	8.77	8.77
26 - 35 years	203	55.62	64.38
≥ 36 years	130	35.62	100
Total	365	100	
Age of the partner			
Up to 25 years	76	23.46	23.46
26 - 35 years	210	64.81	88.27
≥ 36 years	38	11.73	100
Total	324	100	
Relative age			
Younger than partner	12	3.7	3.7
About the same age	199	61.42	65.12
Older than partner	113	34.88	100
Total	324	100	

***Table 4 continued**

Independent variables	Absolute frequencies	Relative frequencies	Cum
Birth cohort			
1971-73	149	40.82	40.82
1981-83	197	53.97	94.79
1991-93	19	5.21	100
Total	365	100	
Married			
No	174	49.71	49.71
Yes	176	50.29	100
Total	350	100	
Number of child			
First	211	57.81	57.81
Second	111	30.41	88.22
Third	43	11.78	100
Total	365	100	
EltengeldPlus received			
No	352	96.44	96.44
Yes	13	3.56	100
Total	365	100	

Source. Own calculation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

10. Bivariate Analysis

In the following, a Chi-square-test is conducted for the relationship between the dependent and independent variables. The variables that are particularly important for testing the new home economic theory, resource theory, and doing-gender approach are described in more detail. The Pearson Chi-square independence test is a non-parametric statistical procedure with Chi-square distributed test-statistics and is used to check whether two characteristics are independent of another. The Chi-square independence test is an extension of the "classical" four-field test, which examines two characteristics with two values each. Using crosstabs, different coefficients can be calculated that reflect the strength and direction of the relationships (Kirch, 2008). The Chi-square test checks the extent to which the observed values deviate from the statistical independence. The Chi-square test statistics are calculated as follows:

$$\sum \chi^2_{i-j} = \frac{(O-E)^2}{E} \qquad (1.)$$

O = Observed (the actual count of cases in each cell of the table)
E = Expected value (calculated below)
$\chi 2$ = The cell Chi-square value
Source. Formel cited after McHugh (2013).

The Chi-square value always has a positive sign and depends on the number of units of investigation. The Chi-square test can only be used to find out whether or not a correlation between the variables exist. There are various normalized correlation measures based on the Chi-square test statistics. These coefficients can be used to determine the strength and direction of the correlation.

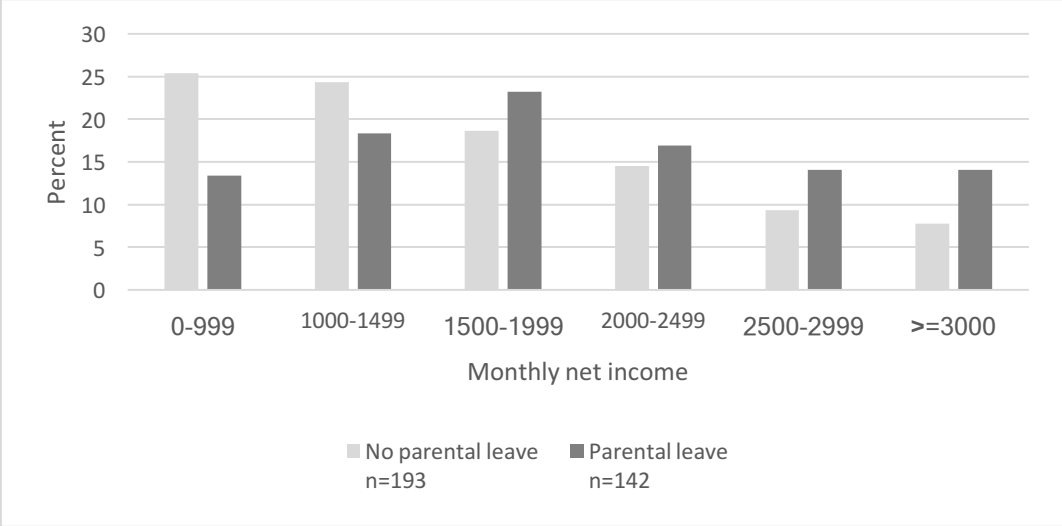
The scaling variant used in the following analysis is the Cramer's V coefficient, which is calculated following:

$$Cramer's\ V = \sqrt{\frac{\chi^2}{n * \min{(r-1, c-1)}}} \qquad (2.)$$

n= number of examination units
r= number of rows
c= number of columns
Source. Formel cited after Acock & Stavig (1979).

The relationship between the variables of interest and parental leave is first examined in more detail before the influence on the length of parental leave is then examined. The detailed cross tables with observed and expected values are shown in Appendix 2 (**Table A3**).

Figure 5 Parental leave and monthly net income

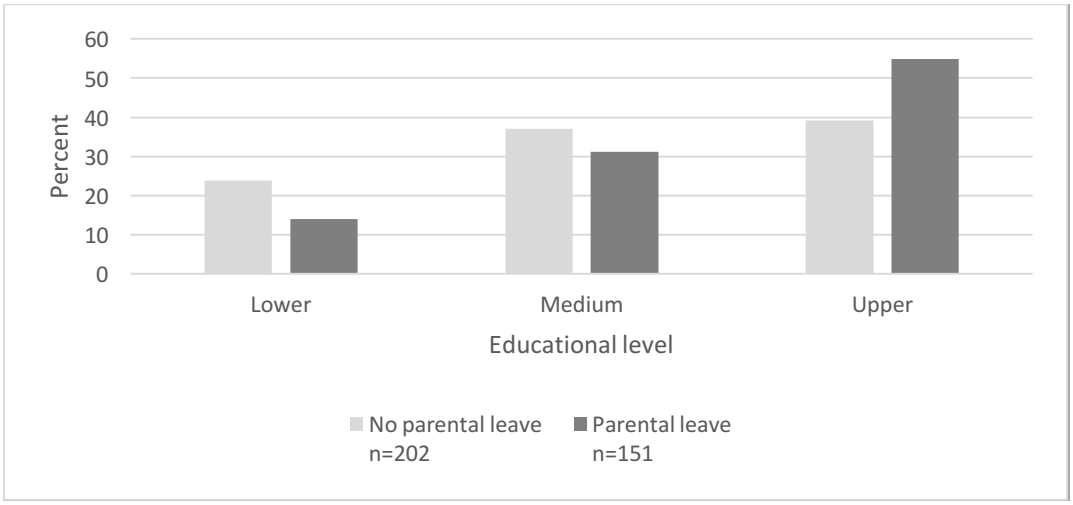


Source. Own presentation based on data from pairfam, release 10.0 (Brüderl et al. 2019).

The relationship between income and parental leave was tested and no excepted cell frequencies were below five. Results show a significant relationship between income and parental leave use, $\chi^2(5) = 13.07$, $p = .023$, $\varphi = 0.20$. Hypothesis 1 can therefore get accepted: An association between income and parental leave is statistically significant. **Figure 5** displays the relative frequencies of the different income categories by paternal leave take. While 28% of fathers who take parental leave are in the two highest income categories, this is only the case for 17% of fathers who do not take parental leave. Fathers who take parental leave are also more strongly represented in the two middle income categories than fathers who do not take paternal leave (40% vs. 33%). This pattern is different when the two lower income categories are considered: 32% of fathers who take parental leave and 50% of fathers who do not take parental leave are in this two categories. This picture reveals that men, who do not take parental leave, are represented more frequently in the lower income categories, while men who do take parental leave tend to be in the higher income categories. The direction of the relationship cannot be clarified by the Chi-square test and it must be pointed out that the strength of the correlation just indicates a weak effect.

The Chi-square test for the relationship between educational level and parental leave is significant and the Cramer's V test shows a weak effect between the two variables, $\chi^2(2) = 9.93$, $p = .007$, $\varphi = 0.17$. More than 80% of the expected cell values were greater than five and fulfil the requirements of the Chi-square test. The comparison of the relative distribution of fathers that take paternal leave and fathers who do not, with respect to the different educational levels, reveal differences (**Figure 6**). While more than half of the fathers that take paternal leave attained an higher education level before childbirth (55%). Less fathers who do not take paternal leave attained the highest category (39%). This pattern is similar if one focuses on the middle education category: Here, more fathers reach an intermediate level of education before the child is born than fathers who do not take parental leave (37% vs. 31%). Just under 24% of fathers who do not take parental leave had a low level of education before the birth of their child, while this was the case for just under 14% of fathers who take parental leave. Since the Chi-square test confirms the correlation between educational level and parental leave, Hypothesis 2 can already be partially accepted. Nevertheless, the relationship between occupational prestige and paternal leave is also examined in order to fully accept the hypothesis.

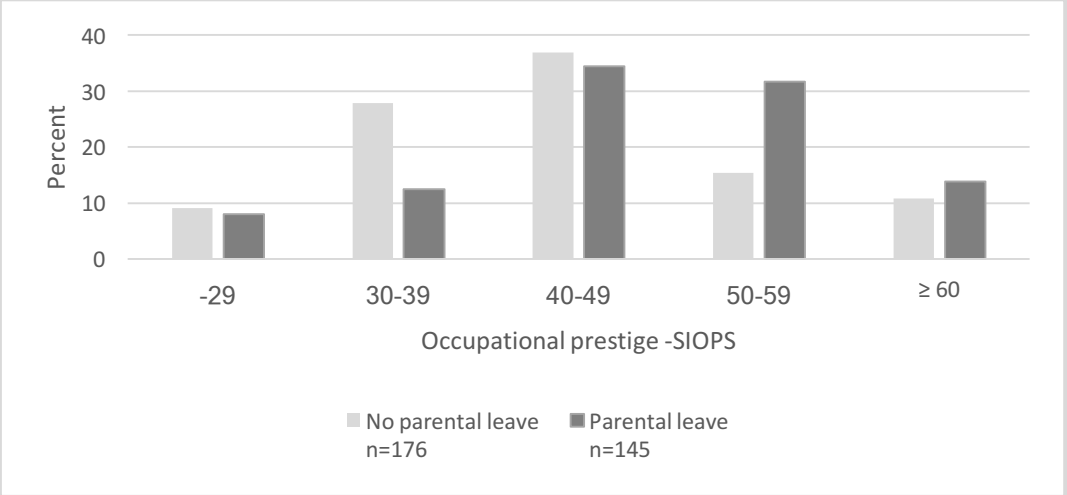
Figure 6 Parental leave and educational level



Source. Own calculation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

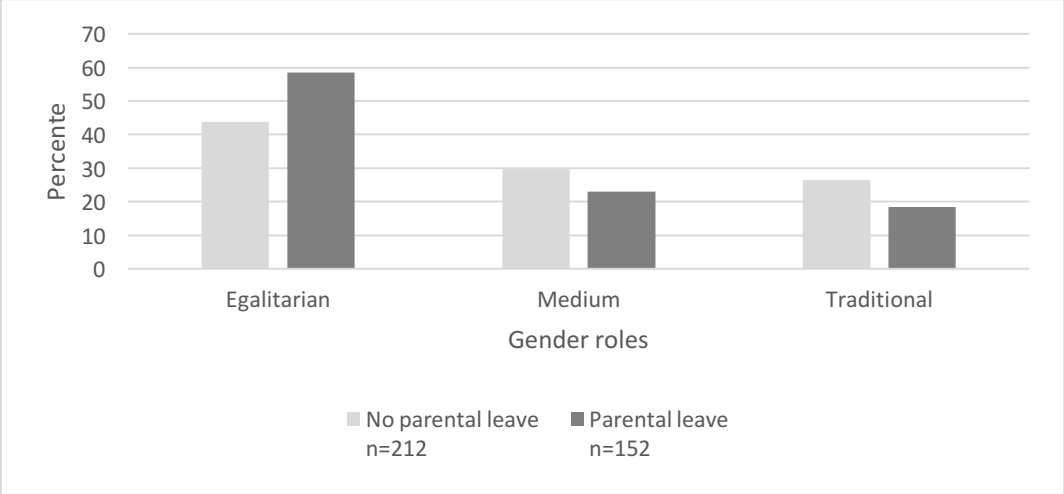
The Chi-square test reveals a significant relationship between occupational status and parental leave and no excepted cell frequencies were below five, $\chi^2(4) = 19.38$, $p = .001$, $\varphi = 0.25$. The Cramer's V indicates a weak effect between the variables. **Figure 7** reveals that the greatest differences between fathers who take paternal leave and fathers who do not, are visible in the categories "30 – 39" and "≥ 60" points on the SIOPS-scale. Nearly 28% of fathers who do not take parental leave have an occupation which ranges between 30 and 39 points on the SIOPS-scale, while only 12% of the fathers that take paternal leave belong in this category. It is the other way round in the highest category: Here the share of fathers taking parental leave is more than 16 percentage points higher than the share of fathers not taking parental leave (32% vs. 15%). The other categories show only minor differences of up to three percentage points. Since both, educational attainment and occupational prestige, have a significant relationship with parental leave, Hypothesis 2 gets assumed: There is an association of fathers' parental leave use and human capital.

Figure 7 Parental leave and occupational prestige



Source. Own calculation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

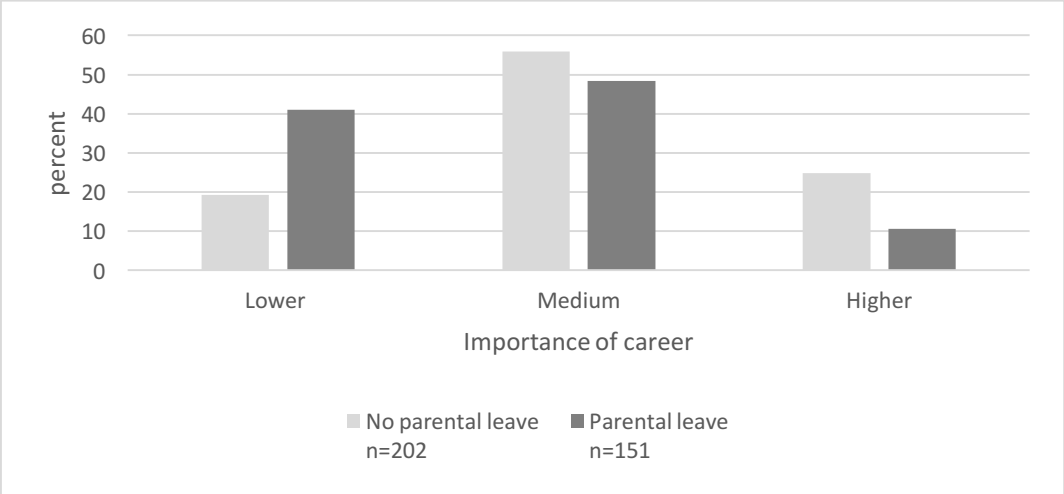
Figure 8 Parental leave and gender roles



Source. Own calculation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

In order to test Hypothesis 3, the relationship between parental leave and gender roles and the importance of fathers' careers must be examined (**Figure 8**). A significant relationship can be observed between parental leave use and gender roles, even if the strength of the effect is weak, $\chi^2(2) = 7.74$, $p = .021$, $\varphi = 0.15$. No excepted cell frequencies were below five. The majority of fathers who take paternal leave report egalitarian gender roles (59%) while the majority of fathers wo do not take paternal leave are represented in the category "Medium" and "Traditional" gender roles (56%). Looking at the relationship between the importance of career and parental leave (**Figure 9**), a highly significant correlation was found, $\chi^2(2) = 24.50$, $p < .001$, $\varphi = 0.26$. The requirements of the Chi-square test were met as no expected cell frequency was below five. Among both, fathers who take parental leave and fathers who do not, most fathers are represented in the group that reports a medium importance of career (56% and 48%). However, there are differences among the marginalised groups: While only 19% of the fathers who take parental leave show a high importance of their career, more than double (41%) of the fathers who do not take parental leave fall in this category.

Figure 9 Parental leave and importance of career



Source. Own representation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

The same, but in reverse order, is observed among fathers who show a high importance of their career. Here, a higher percentage of fathers who take parental leave are represented than fathers who do not take parental leave (25% vs. 11%). Thus, Hypothesis 3 can also get accepted: There is an association between fathers' parental leave use and attitudes.

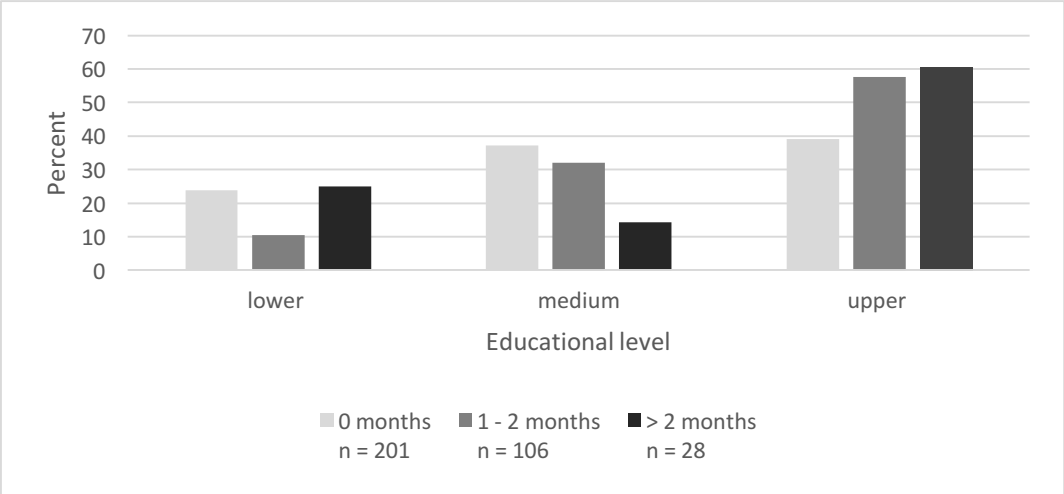
For the control variables, Chi-square tests were performed to check the relationship between them and parental leave. The education of the partner is significant ($p < .01$) as well as the age of the anchor ($p = .021$), the age ($p = .021$) of the partner ($p = .006$), the birth cohort ($p = .012$), and the marital status ($p = .002$). The relative age, relative education and number of the child are not significant. The variable "el_plus" was not taken into account as the minimum cell frequencies for a Chi-square test were not met. The exact test statistics and cross tables are reported in Appendix 2, **Table A2** and **Table A3**.

Subsequently, for the relationship between length of parental leave and the independent variables further Chi-square test were conducted. The cross tables with observed and expected values are displayed in the Appendix 3 (**Table A5**). As mentioned before, the tests do not report on the direction of relationships between variables. Nevertheless, the significant results of the main variables of interest are discussed in the following. The results of the control variables can be seen in the Appendix 3 (**Table A4**).

The requirements of the Chi-square test are fulfilled to test the relationship between length of paternal leave and income as less than 80% of the expected values in the Chi-square table are below five. The test can not reveal a significant relationship between income and length of parental leave ($\chi^2(10) = 15.52$, $p = .114$, $\varphi = 0.16$).

The situation is different for the educational level, which is significantly related to the length of parental leave, $\chi^2(4) = 17.05$, $p = .002$, $\varphi = 0.16$. Here too, all the requirements of the Pearson Chi-square test are met. Most of the fathers wo take more than 2 month of parental leave have an higher educational level (61%). This is also true for fathers wo take up to two months of parental leave (58%). Fathers who use zero months of parental leave are equally distributed between the highest (39%) and the intermediate category (37%) (**Figure 10**).

Figure 10 Length of parental leave and educational level



Source. Own representation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

A highly significant relationship between the length of parental leave and occupational prestige is observable, $\chi^2(8) = 34.09$, $p < .001$, $\varphi = 0.24$. Even if two of expected values were below five, more than 80% of the expected values were above five. Therefore, the

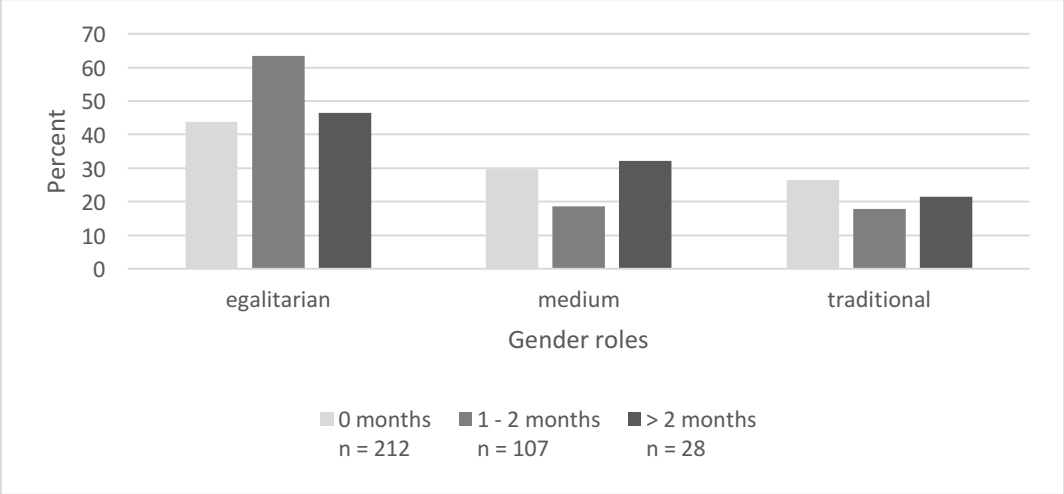
criteria of the Pearson Chi-square test are met. Looking at the distribution of fathers who take zero months, one to two, or more than two months parental leave, it is noticeable that they are divided into very different categories of professional prestige. The highest share of fathers, who use zero or up to two month paternal leave, report 40 to 49 points on the SIOPS-scale (37% and 37%). The highest share of fathers who take more than two months parental leave are placed in the category "50 – 59" points (30%). Fathers who use more than two months of paternal leave are represented percentage-wise more often in the highest prestige-category (15%) than the share of fathers who use less parental leave (**Figure 11**). Nevertheless, the difference is quite small, as 14% of fathers who take one to two months parental leave are represented in this group and 11% of the fathers who use zero months. Furthermore, it should be noted that 26% of the fathers who take more than two months parental leave are represented in the lowest prestige category. This is a much higher share compared to the percentage of fathers out of the other two groups (0 months = 9%, 1 – 2 months = 3%).

Figure 11 Length of parental leave and occupational prestige

Source. Own calculation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

In the Chi-square test between parental leave length and gender roles, all the requirements of the Chi-square test were met and the test shows a significant relationship, even if the strength of this relationship is quite weak, $\chi^2(4) = 11.53$, $p = .021$, $\varphi = 0.13$. Most fathers, regardless of their parental leave, tend to have more egalitarian gender roles (**Figure 12**). Particularly fathers, who took one or two months' parental leave, show egalitarian gender roles (64%). Furthermore, only 18% of these fathers show traditional gender roles, while 26% of fathers who took no parental leave at all are in this category. Surprisingly, 21% of the fathers who use more than two months parental leave are also represented in the traditional group. Furthermore, the percentage of fathers from the group that use no parental leave and show egalitarian gender roles, is quite similar to the percentage of fathers that take more than two month parental leave and report egalitarian gender roles (44% vs. 46%). This could indicate that gender roles play an important role, particularly in the decision to take parental leave up to two months. When deciding not to take parental leave at all or to take parental leave for more than two months, no difference can be seen at first glance between men with egalitarian gender roles. Other factors could have a stronger influence on this decision and suppress the influence of gender roles on parental leave. The multivariate analysis in section 11 will further investigate the influence of the different variables on parental leave use.

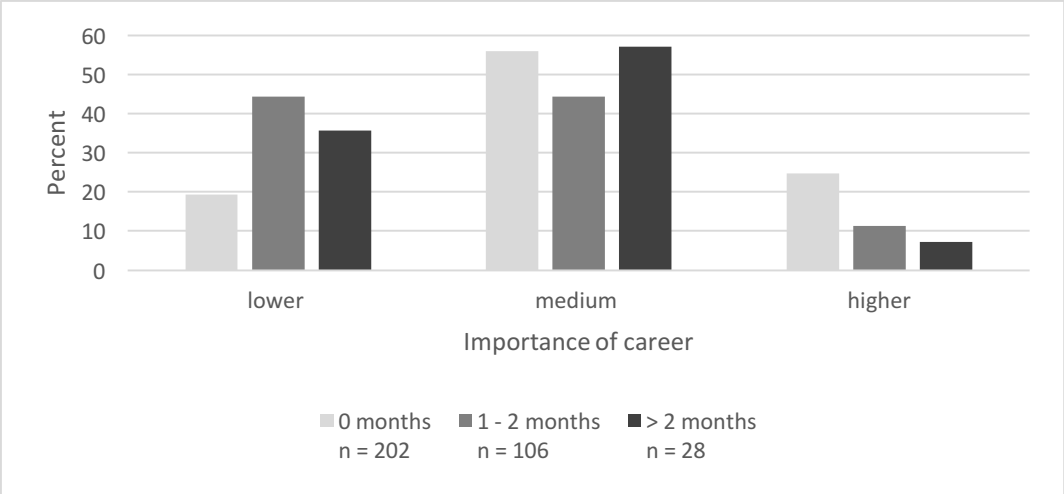
Figure 12 Length of parental leave use and gender roles



Source. Own presentationn, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

None of the expected frequencies of the Chi-square test between length of parental leave and importance of career were below five, fulfilling the requirement of the Chi-square test. A highly significant relationship is observable, even if only a weak effect of the correlation is detected by the Cramer's V test, $\chi^2(4) = 26.57$, $p < .001$, $\varphi = 0.20$. Only 19% of fathers, who do not take parental leave at all, are represented in the category indicating a rather low importance of a career. These fathers are most strongly represented in the category of medium career importance (56%) and 25% of them rate their career as particularly important. 44% of fathers who took one or two months parental leave, rated their career as less important and as many of these fathers rate their career as moderately important (44%). Only 11% of fathers who take one or two month parental leave report that their career is of high importance. Among the fathers, who took more than two months parental leave, only 7% rated their career as highly important. The majority of them report instead a mediocre importance of their career (57%), followed by fathers who consider it as less important (36%). Looking at fathers in the category "Higher" importance, it becomes immediately clear that fathers who take parental leave are less likely to report a high importance of their career and this is especially true for fathers who take more than two months of parental leave (**Figure 13**).

Figure 13 Length of parental leave and importance of career



Source. Own calculation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Among the control variables, the exact values of the Chi-square test and Cramer's V test are shown in the Appendix 3 (**Table A4**), the formation of the partner ($p < 0.01$), the age of the anchor person ($p = .043$) and the age of the partner ($p = .020$), the birth cohort ($p = .028$) and the marital status ($p = .011$) are significant. The relative education, relative age and the number of the child are not significant, which is particularly interesting, as former research about parental leave use (section 5) highlighted the importance of relative measurements. These results could not be validated in the present thesis.

11. Multivariate Analysis

To obtain a more comprehensive view of the possible determinants, it is important to test them in multivariate procedures.

11.1. Binary Logistic Regression

Regression analyses belong to the tools of every social scientist and are often used in data analysis. In many analyses, the dependent variable is discrete and can take two or more values. If this is the case, one can use the possibilities of binary logistic regression, which has become a standard instrument of data analysis. The logistic regression's goal is the same as with other model-building methods: They aim is to create a model explaining the relationship between an outcome and a set of independent variables (covariates). Researchers therefore try to identify the best model within a scientific context. To do so, they must develop a basic plan for selecting the independent variables and methods, assessing the adequacy of the model. The methodology of the logistic regression model is very similar to that of linear regression - the main difference is the dependent variable: It must have metric scale level, whereas in binary logistic regression the dependent variable is discrete (more precisely: binary). The logistic regression models can predict the probability that a unit under investigation belongs to a group (Hosmer et al., 2013). As one of the main interests of this thesis is to define the determinants of parental leave use, the logistic regression is used to model the probability of the dependent variable "parben_rec", which indicates if fathers have taken parental leave or not (0 "No", 1"Yes").

The logistic regression function is stated as the following (Hosmer et al., 2013):

$$P\,(y = 1) = \frac{1}{1+e^{-z}}, \qquad (2.)$$

with
P(y=1) = probability of y = 1
e = base of the natural logarithm, Euler's number
z = logit (linear regression model of the independent variable).
A linear regression model is represented by z (logit):

$$z = \beta_0 + \beta_1 * x_1 + \beta_2 * x_2 + \cdots + \beta_k * x_k + \mathcal{E}, \quad (3.)$$

with
x_k = independent variable
β_k = regression coefficient
$\mathcal{E}$ = error term.

If the logit is now inserted into the logistic function, this results in the following equation:

$$P\,(y = 1) = \frac{1}{1+e^{-(\beta_0+\beta_1 * x_1+ \beta_2 * x_2+\cdots+ \beta_k * x_k+ \mathcal{E})}} \quad (4.)$$

The statistics programme STATA uses two command to estimate the logistic regression, with one presenting the odds ratios and the other one the β-coefficients. In the following we will concentrate on the second variant and use a logit model. It must be pointed out that both variants only differ in their presentation and the statistical models are identical. The fact that logits are used in this thesis is only because they may be better to interpret. The

strength of influence β reflects the linear effects of the considered independent characteristics on the latent variable y (Best & Wolf, 2012). In logistic regression, y corresponds to the logits (logarithmic odds) for y=1, so for logistic regression an increase of x by one unit leads to a change of the logits by β units. Nevertheless, this interpretation gives no idea of the size of the effect, because logits have a unit that is intuitively understandable for hardly anyone. Since the logits are in a monotonous relationship with the (predicted) probabilities for y =1, at least the sign of the coefficients can be interpreted as usual (Best & Wolf, 2012).

This means: The value the coefficients indicates the direction of the effect: Negative coefficients have a reducing effect on the probability of fathers taking parental leave. Positive coefficients, on the other hand, have an increasing effect on the probability of fathers taking parental leave.

Since variables which make or contain statements about the partner of the anchor are strongly affected by missing values, the inclusion of these variables would lead to a high reduction of the number of cases. For this reason, the decision was made to not include these variables in the model, especially since no variable (except the education of the partner) could show statistically significant influences.

Therefore, the following variables are includes in the Model 1: income (monthly net income before childbirth), education (educational level before childbirth), occup_pres (occupational prestige before childbirth), gender_roles (gender roles before childbirth), imp_career (importance of career before childbirth), cat_age (age before childbirth), married (married before childbirth) an ch_num (number of child). As all of the independent variables are categorical or dichotomous, they are includes as vectors in the model. The first value of each category builds the base line for estimation (category value 0).

The likelihood ratio Chi-square ($\chi^2(40) = 63.45$) with a p-value of less than .001 shows that the model as a whole fits significantly better than an empty model with no predictors. Even without the partner related variables, the number of observations (n = 304) is lower than the original sample. 83% of fathers from the original sample could get included in the model, due to missing values.

Since the estimation of effect sizes in the logit model is based on the so-called maximum likelihood estimation method, the quality of the results of depends on the number of observations being analysed. If the number is very large, the reliability of the method is theoretically and practically undisputed. Problems arise with rather small samples. It is recommended not to analyse samples of less than n = 50. From samples larger than n = 100, the method proves to be superior to other approaches. With 304 observations, these conditions are definitely fulfilled, which is why the logistic regression could be carried out (Hosmer et al., 2013).

For the variable income, the log odds of being in a higher income category compared to the lowest one (up to 1000 Euros per months) are shown. The base is an income of up to 999 Euros. A negative coefficient is only observable for the income category "1000 – 1499", while all the other categories show a probability enhancing effect to take parental leave. This is contrasting with Hypothesis 1(a), which presumed a negative effect of income on parental leave. However, the effects of income are not significant in Model 1. Nevertheless, this means that Hypothesis 1(a) cannot get accepted. It must be reminded, that the income variable is to be interpreted with caution as the distribution showed a very unequal distribution between respondents.

Table 5 Logistic regression Model 1

parben_rec	Coef.	St.Err.	z-value	p-value	[95% Conf	Interval]	Sig
Income							
- 999 (base)							
1000 - 1499	-0.04	0.49	-0.09	0.929	-1.00	0.91	
1500 - 1999	0.40	0.50	0.81	0.418	-0.57	1.37	
2000 - 2499	0.07	0.53	0.13	0.897	-0.98	1.12	
2500 - 2999	0.59	0.59	0.99	0.320	-0.57	1.75	
≥ 3000	0.84	0.64	1.31	0.191	-0.42	2.10	
Education							
Lower (base)							
Medium	-0.16	0.40	-0.39	0.697	-0.95	0.64	
Higher	-0.29	0.45	-0.65	0.518	-1.18	0.59	
Occupational prestige							
- 29 (base)							
30 - 39	-0.82	0.55	-1.49	0.136	-1.89	0.26	
40 -49	-0.33	0.52	-0.64	0.523	-1.34	0.68	
50 -59	0.55	0.58	0.96	0.337	-0.58	1.68	
≥ 60	0.21	0.64	0.32	0.748	-1.04	1.45	
Gender roles							
Egalitarian (base)							
Medium	-0.70	0.33	-2.15	0.032	-1.33	-0.06	*
Traditional	-0.88	0.34	-2.57	0.010	-1.56	-0.21	*
Importance of career	0.00	.	.	.	.	.	
Lower (base)							
Medium	-1.12	0.30	-3.74	0.000	-1.71	-0.54	***
Higher	-1.53	0.43	-3.60	0.000	-2.37	-0.70	***
Age							
- 25 (base)							
26 - 35	1.57	0.74	2.12	0.034	0.12	3.02	*
≥ 36	1.11	0.79	1.42	0.157	-0.43	2.65	
Married							
No (base)							
Yes	0.37	0.30	1.24	0.217	-0.22	0.96	
Number of child							
First (base)							
Second	-0.58	0.32	-1.82	0.069	-1.20	0.04	†
Third	-0.55	0.49	-1.12	0.264	-1.50	0.41	
Constant	-0.21	0.84	-0.25	0.802	-1.86	1.44	

Mean dependent var	0.45	SD dependent var	0.50
Pseudo r-squared	0.15	Number of obs	304
Chi-square	63.45	Prob > chi2	0.000
Akaike crit. (AIC)	396.61	Bayesian crit. (BIC)	474.67

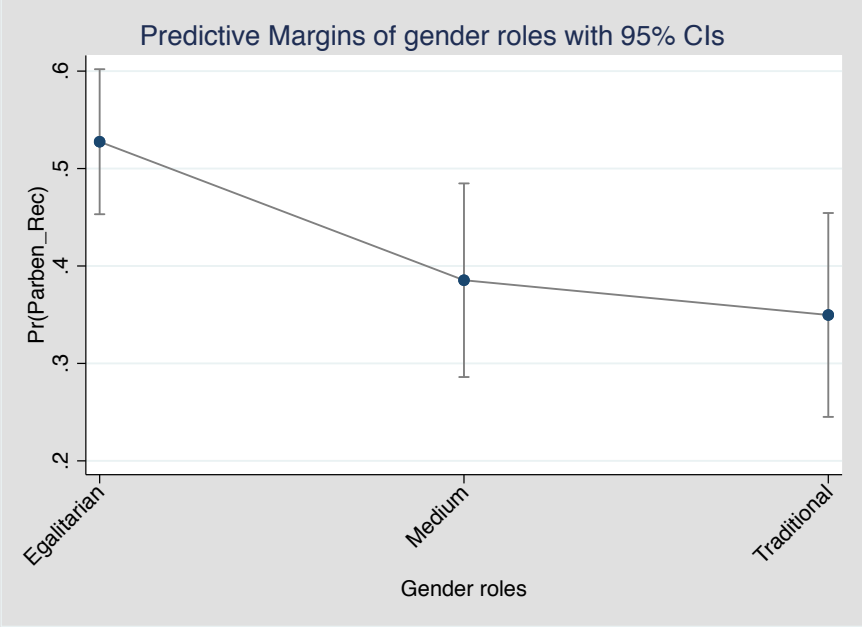
**** p<0.001,** p<0.01, * p<0.05, † p<0.1*

Looking at the educational level of fathers, the coefficients are negative, which indicates a negative relationship between a higher educational level and parental leave. Although this observation corresponds to Hypothesis 2(a), assuming less parental leave use if the fathers inherit an higher educational level, no statistically significant effects are found. Therefore Hypothesis 2(a) cannot get accepted.

There is also no significant effect of occupational prestige on parental leave take. Moreover, the coefficients do not indicate that higher occupational prestige decrease the log odds of taking parental leave, as assumed in Hypothesis 2(b). The two highest prestige categories show a positive influence on the probability of parental leave use. Overall, Hypothesis 2(b) cannot get accepted on the basis of Model 1.

A different picture emerges when looking at the coefficients of the variables used to test the doing gender hypothesis. Looking at gender roles, it becomes clear that more traditional gender roles have a negative influence on the log odds of taking parental leave compared to egalitarian gender roles. Medium and traditional gender roles have a significant negative influence on the probability of taking parental leave compared to egalitarian gender roles. To investigate the relationship between parental leave and gender roles, the predicted probabilities are discussed. The predicted probability of taking parental leave for the egalitarian gender role group is 53%, while it is only 39% for fathers who have intermediate gender roles (**Figure 14**). Along with our Hypothesis 3(a), fathers who belong to the traditional group have the lowest probability to take paternal leave (35%). The detailed results of the predicted probabilities are shown in the Appendix 5, **Table A8.**

Figure 14 Predicted probabilities of gender roles

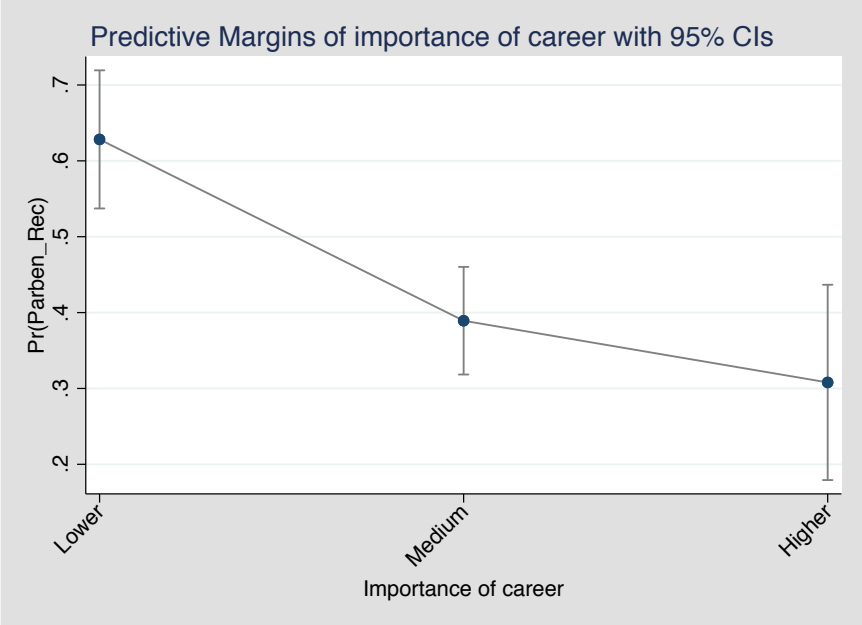


Source. Own representation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Not just gender roles have an influence on parental leave, the importance of career also shows significant effects. The log odds of taking parental leave are lower for fathers who report a medium importance of career compared to fathers who report a lower importance of career. For fathers who report a high importance of career the log odds of taking parental leave, compared to fathers with a low career importance, are again lower. Therefore, a negative effect of higher career importance gets observable: A higher importance of career of fathers reduces the probability of taking parental leave in comparison with fathers who report a lower importance of career.

The predicted probabilities are again discussed, as they are more intuitive and precise to interpret. A detailed table, showing the exact results of the predicted probabilities, is displayed in the Appendix 5, **Table A9**. Fathers who report a lower importance of career have a predicted probability of 63% to take parental leave. The predicted probability to take parental leave for fathers with a medium career importance is 24 percentage-points less (39%) and 31 percentage-points less (32%) for fathers with a high career importance. The conditional-effect-plot (**Figure 15**) shows this negative relationship between parental leave and career-importance: A higher career importance is related with a lower predicted probability of taking parental leave. Based on the data, Hypothesis 3(b) can be accepted.

Figure 15 Predictive probabilities of importance of career



Source. Own representation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Another significant relationship was found for the age category 26 – 35 years. The log odds of taking parental leave increase when fathers' age falls into this category, compared to fathers who are 25 years or younger. Fathers at this age may have been working long enough not to fear a career loss through parental leave. A positive effect on the probability of taking parental leave can also be observed for the highest age category, which would support this the assumption above. However, this effect is not significant, which is why no reliable conclusions can be drawn here.

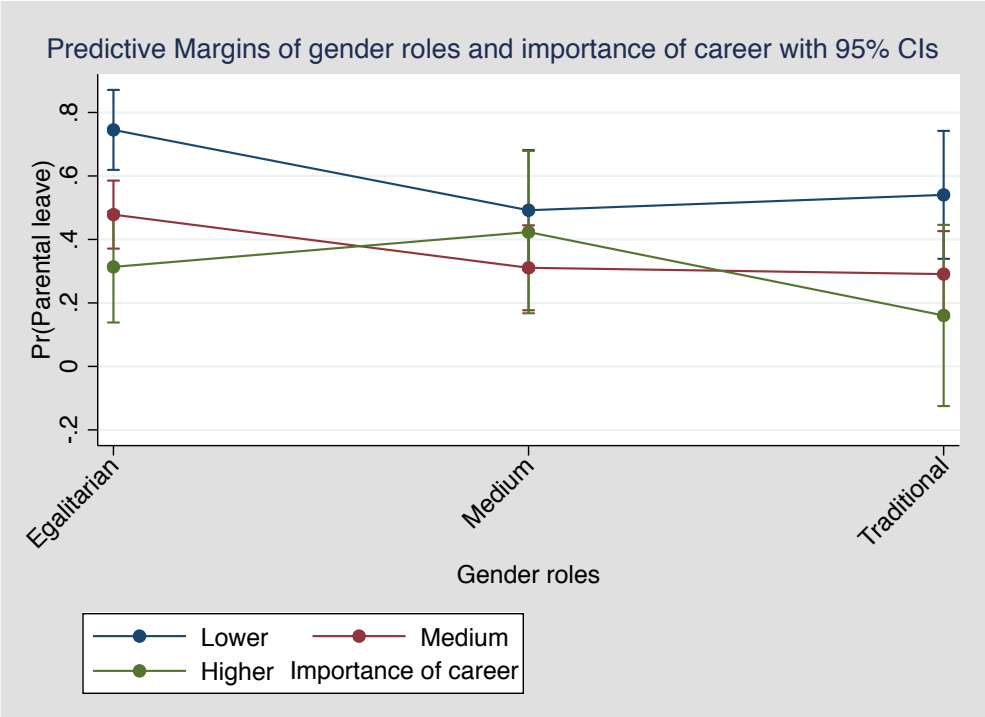
At the ten-percent-level, the number of the child the is also significant. As this is not the chosen significance level for this study, the coefficient is marked with a dagger in the model. Fathers seem to be less likely to take parental leave, when the child is the second one, compared to the first one. This could be due to prior taken paternal leave. Fathers may not be able to take parental leave again, as they may face greater career disadvantages as a result. Furthermore, a reduction in income could be a greater burden for families with two children than for families with just one child. Although no significant results can be observed for the third child, it is notable that the number of fathers with a third child in this sample is very small and therefore not representative.

To ensure that income, education and professional prestige do not have a significant effect on parental leave if gender roles and the importance of career are not included in the model, a further model was calculated (Model 2, Appendix 4, **Table A6**). Even in this newly calculated model, a significant relationship of parental leave use with income, occupational

prestige, and education could not get observed. In addition, Model 2 shows a lower pseudo R^2 than Model 1 (0.09 vs. 0.15), making model 1 the better adapted model.

Furthermore, a third model (Model 3, Appendix 4, **Table A7**) was calculated in which an interaction effect between gender roles and the importance of career was examined, as these two variables show the highest influence. However, the generated interaction coefficients do not show any significant effects. Nevertheless, a conditional effect plot was generated for these interactions, showing the predicted probabilities (**Figure 16**). To make reliable statements about the difference, the covariance between the differences must be considered. Therefore, the contrasts of effects are displayed in **Table 6**. It can get concluded that fathers, who have egalitarian gender roles and a medium ($p = .002$) or lower ($p < .001$) importance of career, are more likely to take parental leave than the other combinations. The difference between fathers with traditional gender roles and either a higher or lower importance of career becomes significant.

Figure 16 Predicted probabilities of gender roles and importance of career



Source. Own representation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Table 6 Contrasts of adjusted predictions

variables	df	chi2	P>chi2
imp_career@gender_roles			
(Medium vs Lower) egalitarian	1	10.080	0.002
(Medium vs Lower) medium	1	2.380	0.123
(Medium vs Lower) traditional	1	4.060	0.044
(Higher vs Lower) egalitarian	1	15.420	0.000
(Higher vs Lower) medium	1	0.180	0.672
(Higher vs Lower) traditional	1	4.510	0.034
Joint	6	27.030	0.000

Source. Own representation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

11.2. Multinomial Regression Analysis

The multinomial model (**Table 7**) is using the same explaining variables as Model 1: Income, education, occupational prestige, gender roles, importance of career, age, marital status and number of child. The likelihood ratio Chi-square ($\chi^2(40) = 86.10$) with a p-value of less than 0.01 shows that the model as a whole fits significantly better than an empty model with no predictors. From 365 fathers, information of 290 could get used, which is a utilisation rate of 79%.

Table 7 Multinomial regression Model 4

Parental leave	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
0 months (base)							
1 – 2 months							
Income							
- 999 (base)							
1000 - 1499	0.28	0.58	0.48	0.631	-0.85	1.41	
1500 - 1999	0.72	0.57	1.26	0.209	-0.40	1.84	
2000 - 2499	0.34	0.61	0.55	0.581	-0.81	1.54	
2500 – 2999	0.92	0.68	1.35	0.177	-0.41	2.25	
≥ 3000	1.28	0.74	1.74	0.082	-0.16	2.73	†
Education							
Lower (base)							
Medium	0.07	0.49	0.14	0.892	-0.89	1.02	
Higher	-0.03	0.53	-0.05	0.960	-1.07	1.01	
Occupational prestige							
- 29 (base)							
30 - 39	0.21	0.76	0.28	0.779	-1.27	1.69	
40 -49	0.49	0.74	0.66	0.509	-0.96	1.94	
50 -59	1.28	0.79	1.61	0.106	-0.28	2.83	
≥ 60	1.00	0.85	1.18	0.239	-0.66	2.66	
Gender roles							
Egalitarian (base)							
Medium	-0.96	0.38	-2.56	0.011	-1.70	-0.22	*
Traditional	-1.03	0.39	-2.65	0.008	-1.80	-0.27	**
Importance of career							
Lower (base)							
Medium	-1.30	0.34	-3.86	0.000	-1.96	-0.64	*
Higher	-1.42	0.47	-3.06	0.002	-2.33	-0.51	**
Age							
- 25 (base)							
26 - 35	1.47	0.87	1.69	0.091	-0.23	3.18	†
≥ 36	1.01	0.93	1.09	0.276	-0.81	2.82	
Married							
No (base)							
Yes	0.45	0.33	1.36	0.174	-0.20	1.10	
Number of child							
First (base)	-0.67	0.35	-1.91	0.057	-1.36	0.02	†
Second	-0.97	0.60	-1.62	0.106	-2.15	0.21	
Third	-1.58	1.12	-1.41	0.158	-3.78	0.62	
Constant							
> 2months							
Income							
- 999 (base)							
1000 - 1499	-0.24	0.85	-0.28	0.778	-1.91	1.43	
1500 - 1999	0.45	0.85	0.52	0.601	-1.23	2.12	
2000 - 2499	0.18	0.92	0.19	0.849	-1.63	1.98	

*** Table 7 continued**

Parental leave	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
2500 – 2999	0.45	1.03	0.44	0.659	-1.56	2.47	
≥ 3000	0.31	1.12	0.27	0.785	-1.88	2.49	
Education							
Lower (base)							
Medium	-1.54	0.76	-2.05	0.041	-3.02	-0.07	*
Higher	-0.25	0.73	-0.34	0.731	-1.69	1.18	
Occupational prestige							
- 29 (base)							
30 - 39	-2.47	0.94	-2.63	0.009	-4.30	-0.63	*
40 -49	-2.03	0.79	-2.56	0.010	-3.58	-0.48	*
50 -59	-0.97	0.88	-1.11	0.266	-2.69	0.74	
≥ 60	-1.62	0.99	-1.65	0.100	-3.55	0.31	
Gender roles							
Egalitarian (base)							
Medium	-0.20	0.57	-0.35	0.728	-1.32	0.92	
Traditional	-0.74	0.63	-1.16	0.246	-1.98	0.51	
Importance of career							
Lower (base)							
Medium	-1.00	0.51	-1.98	0.048	-1.99	-0.01	*
Higher	-2.14	0.92	-2.31	0.021	-3.95	-0.33	*
Age							
- 25 (base)							
26 - 35	1.40	1.29	1.09	0.278	-1.13	3.93	
≥ 36	1.67	1.37	1.22	0.223	-1.02	4.35	
Married							
No (base)							
Yes	-0.39	0.56	-0.71	0.479	-1.49	0.70	
Number of child							
First (base)							
Second	-0.35	0.59	-0.59	0.552	-1.50	0.80	
Third	0.29	0.77	0.38	0.703	-1.21	1.80	
Constant	-0.13	1.26	-0.1	0.916	-2.60	2.34	

Mean dependent var	0.51	SD dependent var	0.66
Pseudo r-squared	0.17	Number of obs	290
Chi-square	86.10	Prob > chi2	0.000
Akaike crit. (AIC)	519.00	Bayesian crit. (BIC)	673.13

**** p<0.001,** p<0.01, * p<0.05, † p<0.1*

Source. Own representation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

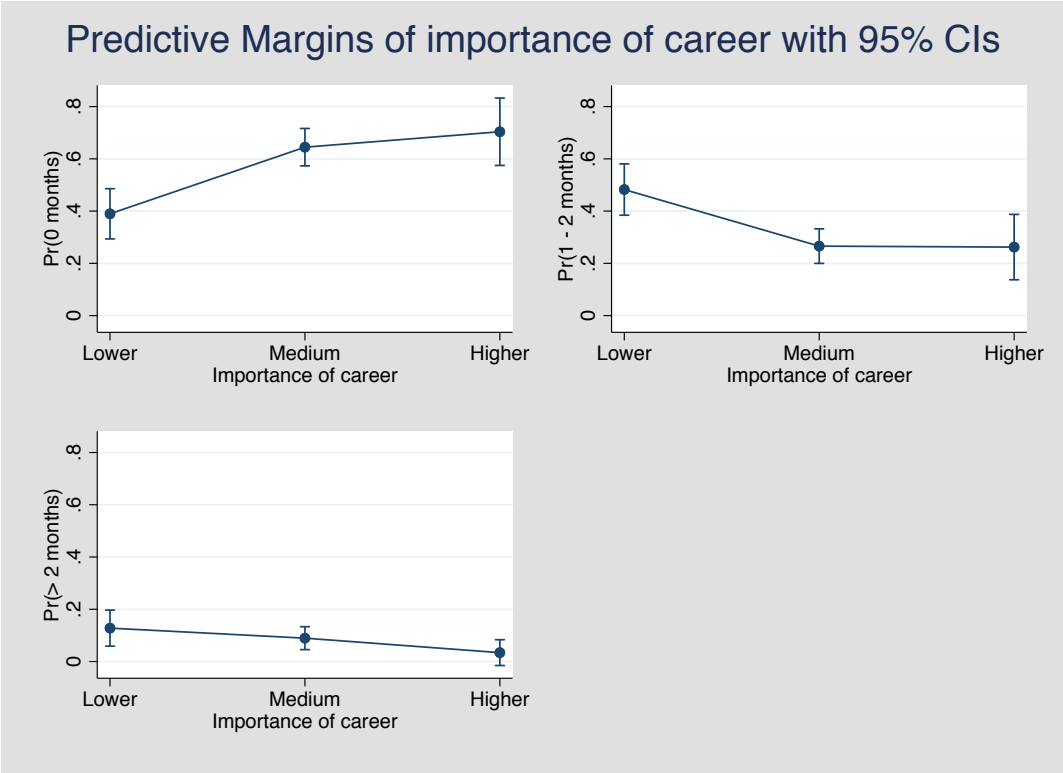
The relative odds of taking one up to two months of parental leave vs. taking zero months are significantly influenced by the gender roles of the fathers: They decrease if the fathers have medium gender roles (between egalitarian and traditional, p = .011) and decrease even more if the fathers report traditional gender roles (p = .008).

The career importance is also a significantly influential factor: Fathers who rate their career as medium important will decrease the relative odds of taking one or two month parental leave (p < .001) and a higher importance has a decreasing effect too (p = .002). All the other variables do not show any significant correlations.

Looking at the relative log odds of taking more than two months vs. zero months parental leave, shows again significant influences of the importance of career. The probability to take more than two months paternal leave decrease when fathers attribute a medium importance to their career (p = .048) and also when they attribute a high importance to their career (p = .021), rather than a low importance.

Gender roles do not show significant results in this case, while education partly becomes significant. The relative probability of fathers to take more than two months parental leave decreases (p = .041) if the fathers have a medium educational level, compared to a lower educational level. A higher educational level does not influence the length of parental leave significantly. Unlike the comparison between zero months parental leave and one or two months parental leave, there is a significant influence of occupational prestige: Fathers who score 30 - 39 points on the SIOPS-scale have a lower probability than fathers in the lowest category of taking more than two months parental leave (p = .009). This is again observable for fathers who score between 40 - 49 points on the SIOPS scale (p = .010), but not for fathers with higher scores. All other variables show no significant influence on the probability of taking more than two months of parental leave vs. zero months.

Figure 17 Predictive probabilities of importance of career



Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

As the importance of career shows the most significant results, the predictive probabilities are investigated in more detail. **Figure 17** shows the predicted probabilities for taking zero months, one to two months, or more than two months parental leave, related to the importance of career. The probability to take between one and two months of parental leave is with 48% the highest for fathers who have a lower career importance. The same pattern is observable for the probability of fathers to take more than two months: Again, fathers who have a low career importance have the highest probability to take more than two months of parental leave, compared to fathers with a medium or higher importance of career. Nevertheless, the probability to take more than two months is also quite low for fathers with a lower career importance (13%). The probability for fathers with a high career-importance is the highest to take zero months of parental leave (70%), which is also the case for father with a medium career-importance (64%). Fathers with a lower career importance have the highest probability to take between one and two months of parental leave (48%).

The results show, that fathers, who are more career oriented, will take a shorter duration of parental leave and therefore Hypothesis 3(d) can get fully accepted.

Hypothesis 3(c) can get partly accepted, as a significant negative effect of traditional gender roles gets observed, comparing the log odds of taking zero or one up to two months of parental leave. No significant effect was found for gender roles, regarding the probability of taking zero months of parental leave vs. more than two months of parental leave. Hypothesis 2(c) cannot get accepted, as a higher educational level decreased the relative probability of taking a longer duration of parental leave vs. zero months parental leave just significantly for medium educated fathers. In all other cases, the educational level did not show any significant results. Hypothesis 2(d) cannot get accepted, as the occupational level did not show significant results, comparing the relative log odds of taking up to two months of parental leave vs. zero months. Some significant result were found in comparison of the relative log odds of taking more than two months of parental leave vs. zero months, but only for two occupational prestige categories. This is not enough to accept the assumption that a higher occupational leave will decrease the length of parental leave use. As the income did not show any significant result, Hypothesis 1(b) is not accepted as well.

12. Discussion

The previous remarks have shown that there are still more fathers not taking parental leave. Nevertheless, 41% of fathers in this sample took parental leave. If fathers are to be encouraged to take parental leave, it is of utmost urgency to understand what drives and possibly inhibits these fathers. Based on this question, a secondary empirical analysis was carried out. Descriptive, as well as inferential statistical methods, were selected. These methods were used to formulate various hypotheses. The new home economics theory, the resource theory, and the doing gender approach provided the underlying theoretical concept to develop concrete, testable hypotheses.

The Chi-square tests showed a significant correlation between parental leave, income, human capital, and attitudes. Nevertheless, more detailed research was needed to investigate the nature of these relationships. Although the sole proof of a correlation is already informative, many questions remain unanswered.

Various logistic regression models were able to show a significant connection between gender roles, the importance of the job, and parental leave. Men with egalitarian gender roles are more likely to take parental leave than men who express a traditional understanding of roles. Moreover, men are more likely to take parental leave if they consider their careers less important. The importance of a career also influences how long fathers take parental leave. Lower importance of career is also associated with an increased likelihood that fathers take one or two or longer parental leave periods. Gender roles only partially influence the length of parental leave. Nevertheless, these results clearly support the doing gender approach. Men seem to act according to their internalised understanding of masculinity and fatherhood.

Since income, education, and professional prestige did not show significant effects in the multivariate analyses, the new home economic theory and the resource approach cannot be used to explain parental leave take and parental leave length. Concerning the question dealt with in the current study, the explanatory power of economic theories is therefore limited. This may be because these theories' argumentation refers mainly to the general distribution of domestic work and gainful employment. Parental leave use cannot be fully equated with solely doing the unpleasant housework. Domestic tasks are related to childcare, but active childcare can fulfil parents' emotional needs. Further studies should focus on taking parental leave's emotional component, as this component was not covered in the current thesis.

In parental leave research, it is repeatedly emphasised that both partners should be considered in the analysis. This seems to make sense, since parental leave is usually discussed in the context of couples. Nevertheless, this study could not find any relevant results here. Possibly this is also due to the limited sample size. Furthermore, information regarding the partner were given by the anchor person. This information may be inaccurate. Furthermore, the income of the partner was unknown in the presents study, which is a limiting factor as other studies reported a high influence of the partners' income on parental leave.

Further studies should not rely on the reports of the interviewee and include both partners in the study. The pairfam dataset offers the possibility to do so, but this would have reduced the analytical sample.

One advantage and disadvantage of the current study is the complicated composition of the analytical sample. On the one hand, a relatively large number of observations are excluded from the sample because not all the necessary information was available. On the other hand, it was actually possible to generate variables that contained information before

the child's birth. This ensures that the variables are not yet influenced by the child's birth. With larger data sets, additional analyses could be carried out separately for each child, since other initial situations may already be influencing the analysis: Fathers who already have a child have different starting points than fathers who do not yet have a child. To control for this, a more extensive panel study is needed.

Concluding, it can be said that pairfam provides a sound basis for the analysis. A high number of variables, covering different parts of life, are contained in this dataset, and there are only a few panel studies in Germany that ask about parental leave. Nevertheless, a larger number of cases would have been desirable for the analyses.

Since fathers' parental leave use can lead to an egalitarian distribution of work, especially with regard to caring for their children, the topic is of great urgency. If women's role in society is to be strengthened, they must not be affected by work and childcare solely. Fathers taking parental leave could, at least partially, compensate for this inequality. However, the available results show that the image of men and fathers in society must change first. This prompts a great challenge to strengthen alternative role models in society. Only when men develop egalitarian role models, possibilities, such as parental leave, get widely accepted and used. Politics should support campaigns that erode the traditional image of the father as breadwinner and present alternative role models. This must be done at an early stage and, for example, be incorporated into education policy.

To return to the title of the thesis and end this thesis with the most important finding, the question about the new fathers can be answered as follows: New fathers are characterized by an egalitarian understanding of gender roles and do not put their career first.

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Appendix

Appendix 1: Descriptive Statistics

Table A1 Absolute frequencies and relative frequencies of the variables – total sample

Independent variables	absolute frequencies	relative frequencies	Cum
Parental benefits received			
No	212	58.08	58.08
Yes	153	41.92	100
Total	365	100	
Length of parental leave			
0 months	212	58.08	58.08
1 -2 months	107	29.32	87.4
> 2 months	29	7.95	95.34
Missing	17	4.66	100
Total	365	100	
Monthly net income (€)			
0 - 999	68	18.63	18.63
1000 - 1499	73	20	38.63
1500- 1999	69	18.9	57.53
2000 - 2499	52	14.25	71.78
2500 - 2999	38	10.41	82.19
≥ 3000	35	9.59	91.78
Missing	30	8.22	100
Total	365	100	
Education			
Lower	69	18.9	18.9
Medium	122	33.42	52.33
Higher	162	44.38	96.71
Missing	12	3.29	100
Total	365	100	
Education of partner			
Lower	41	11.23	11.23
Medium	103	28.22	39.45
Higher	179	49.04	88.49
Missing	42	11.51	100
Total	365	100	
Relative education			
Same level	159	43.56	43.56
Lower than partner	96	26.3	69.86
Higher than partner	68	18.63	88.49
Missing	42	11.51	100

*Table A1 continued Independent variables	absolute frequencies	relative frequencies	Cum
Total	365	100	
Occupational prestige (SIOPS)			
-29	27	7.4	7.4
30 - 39	67	18.36	25.75
40 - 49	115	31.51	57.26
50 - 59	73	20	77.26
≥ 60	39	10.68	87.95
Missing	44	12.05	100
Total	365	100	
Importance of career			
Lower	101	27.67	27.67
Medium	186	50.96	78.63
Higher	66	18.08	96.71
Missing	12	3.29	100
Total	365	100	
Gender roles			
Egalitarian	182	49.86	49.86
Medium	98	26.85	76.71
Traditional	84	23.01	99.73
Missing	1	0.27	100
Total	365	100	
Age			
Up to 25 years	32	8.77	8.77
26 - 35 years	203	55.62	64.38
≥ 36 years	130	35.62	100
Total	365	100	
Age of the partner			
Up to 25 years	76	20.82	20.82
26 - 35 years	210	57.53	78.36
≥ 36 years	38	10.41	88.77
Missing	41	11.23	100
Total	365	100	
Relative age			
Younger than partner	12	3.29	3.29
About the same age	199	54.52	57.81
Older than partner	113	30.96	88.77
Missing	41	11.23	100
Total	365	100	
Birth cohort			
1971-73	149	40.82	40.82
1981-83	197	53.97	94.79

*Table A1 continued Independent variables	absolute frequencies	relative frequencies	Cum
1991-93	19	5.21	100
Total	365	100	
Married			
No	174	47.67	47.67
Yes	176	48.22	95.89
Missing	15	4.11	100
Total	365	100	
Number of child			
First	211	57.81	57.81
Second	111	30.41	88.22
Third	43	11.78	100
Total	365	100	
EltengeldPlus received			
No	352	96.44	96.44
Yes	13	3.56	100
Total	365	100	

Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Appendix 2: Chi-square Test – Parental Leave

Table A2 Pearson's Chi-square test – parentale leave and independent variables

Variable	Pearson chi2	df	Pr	Cramér's V	n
income	13.07	5	0.023	0.2	335
education	9.93	2	0.007	0.17	353
occup_pres	19.38	4	0.001	0.25	321
gender_roles	7.74	2	0.021	0.15	364
imp_career	24.50	2	0.000	0.26	353
education_p	23.25	2	0.000	0.27	323
releduc	3.60	2	0.166	0.11	323
cat_age	7.75	2	0.021	0.15	365
cat_page	10.38	2	0.006	0.18	324
relage	2.10	2	0.349	0.08	324
cohort	8.88	2	0.012	0.16	365
married	9.91	1	0.002	0.17	350
num_ch	4.95	2	0.084	0.12	365

Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Table A3 Cross tables: Parental leave and independent variables

Parental leave	Variables						
	Monthly net income						
	-999	1000-1499	1500-1999	2000-2499	2500-2999	>=3000	Total
no	49	47	36	28	18	15	193
expected	39.2	42.1	39.8	30	21.9	20.2	193
%	25.3	24.35	18.65	14.51	9.33	7.77	100.0
yes	19	26	33	24	20	20	142
expected	28.8	30.9	29.2	22	16.1	14.8	142
%	13.38	18.31	23.24	16.90	14.08	14.08	100.00
Total	68	73	69	52	38	35	335
	68	73	69	52	38	35	335
	20.3	21.79	20.60	15.52	11.34	10.45	100

Parental leave	Educational level			
	lower	medium	Higher	Total
no	48	75	79	202
expected	39.5	69.8	92.7	202.0
%	23.76	37.13	39.11	100.00
yes	21	47	83	151
expected	29.5	52.2	69.3	151.0
%	13.91	31.13	54.97	100.00
Total	69	122	162	353
	69.0	122.0	162.0	353.0
	19.55	34.56	45.89	100.00

*Table A3 continued Parental leave	Variables					
	Occupational prestige - SIOPS					
Parental leave	- 29	30 - 39	40 - 49	50 - 59	≥ 60	Total
no	16	49	65	27	19	176
expected	14.8	36.7	63.1	40.0	21.4	176.0
%	9.09	27.84	36.93	15.34	10.80	100.00
yes	11	18	50	46	20	145
expected	12.2	30.3	51.9	33.0	17.6	145.0
%	7.59	12.41	34.48	31.72	13.79	100.00
Total	27	67	115	73	39	321
	27.0	67.0	115.0	73.0	39.0	321.0
	8.41	20.87	35.83	22.74	12.15	100.00

Parental leave	Gender roles egalitarian	medium	traditional	Total
no	93	63	56	212
expected	106.0	57.1	48.9	212.0
%	43.87	29.72	26.42	100.00
yes	89	35	28	152
expected	76.0	40.9	35.1	152.0
%	58.55	23.03	18.42	100.00
Total	182	98	84	364
	182.0	98.0	84.0	364.0
	50.00	26.92	23.08	100.00

	Importance of career Lower	Medium	Higher	Total
no	39	113	50	202
expected	57.8	106.4	37.8	202.0
%	19.31	55.94	24.75	100.00
yes	62	73	16	151
expected	43.2	79.6	28.2	151.0
%	41.06	48.34	10.60	100.00
Total	101	186	66	353
	101.0	186.0	66.0	353.0
	28.61	52.69	18.70	100.00

Parental leave	Educational level of the partner lower	medium	Higher	Total
no	36	61	84	181
expected	23.0	57.7	100.3	181.0
%	19.89	33.70	46.41	100.00
yes	5	42	95	142
expected	18.0	45.3	78.7	142.0
%	3.52	29.58	66.90	100.00
Total	41	103	179	323
	41.0	103.0	179.0	323.0
	12.69	31.89	55.42	100.00

Parental leave	Relative education Same level	Lower than partner	Higher than part-ner	Total
no	85	51	45	181
expected	89.1	53.8	38.1	181.0
%	46.96	28.18	24.86	100.00
yes	74	45	23	142
expected	69.9	42.2	29.9	142.0
%	52.11	31.69	16.20	100.00

*Table A3 continued Parental leave	Variables			
Total	159	96	68	323
	159.0	96.0	68.0	323.0
	49.23	29.72	21.05	100.00

Parental leave	Age of the Partner			
	-25	26-35	>35	Total
no	54	105	23	182
expected	42.7	118.0	75.5	182.0
%	29.67	57.69	12.64	100.00
yes	22	105	15	142
expected	33.3	92.0	16.7	142.0
%	15.49	73.94	10.56	100.00
Total	76	210	38	324
	76.0	210.0	38.0	324.0
	23.46	64.81	11.73	100.00
	Age of the Anchor			
	-25	26-35	>35	Total
no	26	114	72	212
expected	18.6	117.9	75.5	212.0
%	12.26	53.77	33.96	100.00
yes	6	89	58	153
expected	13.4	85.1	54.5	153.0
%	3.92	58.17	37.91	100.00
Total	32	203	130	365
	32.0	203.0	130.0	365.0
	8.77	55.62	35.62	100.00
	Relative age			
	younger	about the same age	older	Total
no	9	108	65	182
expected	6.7	111.8	63.5	182.0
%	4.95	59.34	35.71	100.00
yes	3	91	48	142
expected	5.3	87.2	49.5	142.0
%	2.11	64.08	33.80	100.00
Total	12	199	113	324
	12.0	199.0	113.0	324.0
	3.70	61.42	34.88	100.00
	Cohort			
	1971-73	1981-83	1991-93	Total
no	80	115	17	212
expected	86.5	114.4	11.0	212.0
%	37.74	54.25	8.02	100.00
yes	69	82	2	153
expected	62.5	82.6	8.0	135.0
%	45.10	53.59	1.31	100.00
Total	149	197	19	365
	149.0	197.0	10.0	
	40.82	53.97	5.21	100.00
	Married			
	not married	married		Total
no	114	86		200
expected	99.4	100.6		200.0
%	57.00	43.00		100.00

*Table A3 continued Parental leave	Variables			
yes	60	90		150
expected	74.6	75.4		150.0
%	40.00	60.00		100.00
Total	174	176		350
	174.0	176.0		350.0
	49.71	50.29		100.00
	Number of child			
	first	second	third	Total
no	113	69	30	212
expected	122.6	64.5	25.0	212.0
%	53.30	32.55	14.15	100.00
yes	98	42	13	153
expected	88.4	46.5	18.0	153.0
%	64.05	27.45	8.50	100.00
Total	211	111	43	365
	211.0	11.0	43.0	365.0
	57.81	30.41	11.78	100.00

Note. The table shows the results from the Chi-square cross tables. "expected" shows the expected frequencies. The cross-table for cohort and ElterngeldPlus are not shown, as the categories were too small.
Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Appendix 3: Chi-square Test Length of Parental Leave

Table A4 Pearson's Chi-square test – parentale leave and independent variables

Variable	Pearson chi2	df	Pr	Cramér's V	n
Income	15.52	10	0.114	0.16	320
Education	17.05	4	0.002	0.16	336
Occupational prestige	34.09	8	0.000	0.24	305
Gender roles	11.53	4	0.021	0.13	347
Importance of career	26.57	4	0.000	0.20	336
Education of the partner	24.97	4	0.000	0.20	309
Relative education	2.69	4	0.611	0.07	309
Age	9.85	4	0.043	0.12	348
Age of the partner	11.62	4	0.020	0.14	310
Relative age	8.29	4	0.082	0.12	310
Birth cohort	10.84	4	0.028	0.12	348
Married	9.05	2	0.011	0.16	334
Number of child	6.43	4	0.169	0.10	348

Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Table A5 Cross tables: Length of parental leave and independent variables

Length of parental leave	Variable						
	Monthly net income						
	-999	1000-1499	1500-1999	2000-2499	2500-2999	>=3000	Total
0 months	49	47	36	28	18	15	193
expected	39.2	42.2	40.4	30.2	21.1	19.9	193.0
%	25.39	24.35	18.65	14.51	9.33	7.77	100.00
1-2 months	10	18	25	17	14	15	99
expected	20.1	21.7	20.7	15.5	10.8	10.2	99.0
%	10.10	18.18	25.25	17.17	14.14	15.15	100.00
>2 months	6	5	6	5	3	3	28
expected	5.7	6.1	5.9	4.4	3.1	2.9	28.0
%	21.43	17.86	21.43	17.86	10.71	10.71	100.00
Total	65	70	67	50	35	33	320
	65.0	70.0	67.0	50.0	35.0	33.0	320.0
	20.31	21.88	20.94	15.62	10.94	10.31	100.0

*Table A5 continued Length of parental leave	Variable			
			Educational level	
	lower	medium	Higher	Total
0 months	48	75	79	202
expected	39.7	67.9	94.4	202.0
%	23.76	37.13	39.11	100.00
1-2 months	11	34	61	106
expected	20.8	35.6	49.5	106.0
%	10.38	32.08	57.55	100.00
>2 months	7	4	17	28
expected	5.5	9.4	13.1	28.0
%	25.00	14.29	60.71	100.00
Total	66	113	157	336
	66.0	113.0	157.0	336.0
	19.64	33.63	46.73	100.00

	Occupational prestige					
	-29	30-39	40-49	50-59	≥60	Total
0 months	16	49	65	27	19	176
expected	15.0	37.5	62.3	39.8	21.4	176.0
%	9.09	27.84	36.93	15.34	10.80	100.00
1-2 months	3	14	37	34	14	102
expected	8.7	21.7	36.1	23.1	12.4	102.0
%	2.94	13.73	36.27	33.33	13.73	100.00
>2 months	7	2	6	8	4	27
expected	2.3	5.8	9.6	6.1	3.3	27.0
%	25.93	7.41	22.22	29.63	14.81	100.00
Total	26	65	108	69	37	305
	26.0	65.0	108.0	69.0	37.0	305.0
	8.52	21.31	35.41	22.62	12.13	100.00

			Gender roles	
	egalitarian	medium	traditional	Total
0 months	93	63	56	212
expected	106.3	56.2	49.5	212.0
%	43.87	29.72	26.42	100.00
1-2 months	68	20	19	107
expected	53.7	28.4	25.0	107.0
%	63.55	18.69	17.76	100.00
>2 months	13	9	6	28
expected	14.0	7.4	6.5	28.0
%	46.43	32.14	21.43	100.00
Total	174	92	81	347
	174.0	92.0	81.0	347.0
	50.14	26.51	23.34	100.00

			Importance of career	
	Lower	Medium	Higher	Total
0 months	39	113	50	202
expected	57.7	105.8	38.5	202.0
%	19.31	55.94	24.75	100.00
1-2 months	47	47	12	106
expected	30.3	55.5	20.2	106.0
%	44.34	44.34	11.32	100.00
>2 months	10	16	2	28
expected	8.0	14.7	5.3	28.0
%	35.71	57.14	7.14	100.00
Total	96	176	64	336
	96.0	176.0	64.0	336.0
	28.57	52.38	19.05	100.00

*Table A5 continued Length of parental leave	Variable			
		Relative education		
	Same level	Lower than partner	Higher than partner	Total
0 months	85	51	45	181
expected	88.4	53.3	39.2	181.0
%	46.96	28.18	24.86	100.00
1-2 months	52	32	18	102
expected	49.8	30.0	22.1	102.0
%	50.98	31.37	17.65	100.00
>2 months	14	8	4	26
expected	12.7	7.7	5.6	26.0
%	53.85	30.77	15.38	100.00
Total	151	91	67	309
	151.0	91.0	67.0	309.0
	48.87	29.45	21.68	100.00
		Education of the partner		
	lower	medium	Higher	Total
0 months	36	61	84	181
expected	23.4	56.8	100.8	181.0
%	19.89	33.70	46.41	100.00
1-2 months	3	31	68	102
expected	13.2	32.0	56.8	102.0
%	2.94	30.39	66.67	100.00
>2 months	1	5	20	26
expected	3.4	8.2	14.5	26.0
%	3.85	19.23	76.92	100.00
Total	40	97	172	309
	40.0	97.0	172.0	309.0
	12.94	31.39	55.66	100.00
		Age of the anchor		
	-25	26-35	>35	Total
0 months	26	114	72	212
expected	18.3	115.7	78.0	212.0
%	12.26	53.77	33.96	100.00
1-2 months	3	61	43	107
expected	9.2	58.4	39.4	107.0
%	2.80	57.01	40.19	100.00
>2 months	1	15	13	29
expected	2.5	15.8	10.7	29.0
%	3.45	51.72	44.83	100.00
Total	30	190	128	348
	30.0	190.0	128.0	348.0
	8.62	54.60	36.78	100.00

Note. The table shows the results from the Chi-square cross tables. “expected” shows the expected frequencies. The cross-table for cohort and ElterngeldPlus are not shown, as the categories were too small.
Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Appendix 4: Logistic Regression Models

Table A6 Logistic regression Model 2

parben_rec	Coef.	St.Err.	t-value	p-value	[95% Conf.	Interval]	Sig
Income							
- 999 (base)							
1000 - 1499	-0.199	0.458	-0.43	0.664	-1.10	0.70	
1500 - 1999	0.377	0.466	0.81	0.418	-0.54	1.29	
2000 - 2499	-0.021	0.494	-0.04	0.966	-0.99	0.95	
2500 – 2999	0.237	0.538	0.44	0.660	-0.82	1.29	
≥ 3000	0.503	0.591	0.85	0.395	-0.66	1.66	
Education							
Lower (base)							
Medium	0.001	0.383	0.00	0.997	-0.75	0.75	
Higher	-0.084	0.420	-0.20	0.841	-0.91	0.74	
Occupational prestige							
- 29 (base)							
30 - 39	-0.693	0.522	-1.33	0.184	-1.72	0.33	
40 -49	-0.188	0.495	-0.38	0.704	-1.16	0.78	
50 -59	0.734	0.549	1.34	0.181	-0.34	1.81	
≥ 60	0.229	0.604	0.38	0.705	-0.96	1.41	
Age							
- 25 (base)							
26 - 35	1.398	0.701	1.99	0.046	0.02	2.77	*
≥ 36	1.122	0.749	1.50	0.134	-0.35	2.59	
Married							
No (base)							
Yes	0.497	0.289	1.72	0.085	-0.07	1.06	†
Number of child							
First (base)							
Second	-0.614	0.304	-2.02	0.044	-1.21	-0.02	*
Third	-0.632	0.458	-1.38	0.168	-1.53	0.27	
Constant	-1.527	0.782	-1.95	0.051	-3.06	0.01	†

Mean dependent var	0.449	SD dependent var	0.498
Pseudo r-squared	0.090	Number of obs	305.000
Chi-square	37.682	Prob > chi2	0.002
Akaike crit. (AIC)	415.982	Bayesian crit. (BIC)	479.227

**** p<0.001,** p<0.01, * p<0.05, † p<0.1*

Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Table A7 Logistic regression Model 3

parben_rec	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Income							
- 999 (base)							
1000 - 1499	-0.06	0.49	-0.13	0.896	-1.03	0.90	
1500 - 1999	0.42	0.50	0.84	0.403	-0.56	1.40	
2000 - 2499	0.09	0.54	0.16	0.873	-0.96	1.14	
2500 – 2999	0.66	0.61	1.09	0.276	-0.53	1.85	
≥ 3000	0.93	0.65	1.43	0.153	-0.35	2.20	
Education							
Lower (base)							
Medium	-0.16	0.41	-0.38	0.701	-0.95	0.64	
Higher	-0.27	0.46	-0.60	0.550	-1.17	0.62	
Occupational prestige							
- 29 (base)							
30 - 39	-0.88	0.55	-1.59	0.111	-1.96	0.20	
40 -49	-0.50	0.53	-0.95	0.344	-1.54	0.54	
50 -59	0.43	0.58	0.73	0.466	-0.72	1.57	
≥ 60	0.11	0.65	0.17	0.864	-1.16	1.38	
Gender roles							
Egalitarian (base)							
Medium	-1.26	0.60	-2.10	0.036	-2.43	-0.08	*
Traditional	-1.04	0.61	-1.70	0.090	-2.23	0.16	†
Importance of career							
Lower (base)							
Medium	-1.32	0.46	-2.86	0.004	-2.22	-0.42	**
Higher	-2.10	0.60	-3.51	0.000	-3.28	-0.93	***
Gender roles#Importance of career							
Medium#Medium	0.46	0.72	0.63	0.527	-0.96	1.88	
Medium#Higher	1.79	0.96	1.87	0.061	-0.08	3.66	†
Traditional#Medium	0.13	0.75	0.18	0.860	-1.34	1.61	
Traditional#Higher	0.09	1.40	0.06	0.951	-2.65	2.82	
Age							
- 25 (base)							
26 - 35	1.62	0.76	2.13	0.033	0.13	3.11	*
≥ 36	1.11	0.80	1.38	0.168	-0.47	2.68	
Married							
No (base)							
Yes	0.34	0.31	1.12	0.264	-0.26	0.95	
Number of child							
First (base)	-0.54	0.32	-1.67	0.095	-1.17	0.09	†
Second	-0.53	0.49	-1.07	0.285	-1.49	0.44	
Third	0.07	0.88	0.08	0.935	-1.65	1.79	
Constant							
Mean dependent var		0.45	SD dependent var			0.50	
Pseudo r-squared		0.16	Number of obs			304	
Chi-square		67.16	Prob > chi2			0.000	
Akaike crit. (AIC)		400.90	Bayesian crit. (BIC)			493.83	

**** p<0.001,** p<0.01, * p<0.05, † p<0.1*

Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Appendix 5: Predicted probabilities

Table A8 Predicted probabilities parental leave and gender roles

	Delta-method					
	Margin	Std.Err.	z	P>z	[95%Conf.	Interval]
gender_roles						
egalitarian	0.53	0.038	13.890	0.000	0.453	0.602
medium	0.39	0.051	7.600	0.000	0.286	0.485
traditional	0.35	0.053	6.550	0.000	0.245	0.454
Number of obs: 304						

Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).

Table A9 Predicted probabilities parental leave and importance of career

	Delta-method					
	Margin	Std.Err.	z	P>z	[95%Conf.	Interval]
imp_career						
Lower	0.626	0.047	13.200	0.000	0.533	0.718
Medium	0.389	0.036	10.750	0.000	0.318	0.460
Higher	0.309	0.066	4.680	0.000	0.179	0.438
Number of obs: 304						

Source. Own presentation, based on data from pairfam, release 10.0 (Brüderl et al. 2019).